30:2 BERKELEY TECHNOLOGY LAW JOURNAL

Fall 2015

Pages

1383

to

1686

Berkeley Technology Law Journal

Volume 30, Number 2

Production: Produced by members of the *Berkeley Technology Law Journal*.

All editing and layout done using Microsoft Word.

Printer: Joe Christensen, Inc., Lincoln, Nebraska.

Printed in the U.S.A.

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Library Materials, ANSI

Z39.48—1984.

Copyright © 2015 Regents of the University of California.

All Rights Reserved.

Berkeley Technology Law Journal University of California School of Law 3 Boalt Hall Berkeley, California 94720-7200 btlj@law.berkeley.edu http://www.btlj.org



BERKELEY TECHNOLOGY LAW JOURNAL

VOLUME 30 Number 2 **FALL 2015** TABLE OF CONTENTS ARTICLES WHEN DOES COPYRIGHT LAW REQUIRE TECHNOLOGY Yvette Joy Liebesman A Unified Framework for RAND and Other Reasonable ROYALTIES......1451 Jorge L. Contreras & Richard J. Gilbert Vanessa S. Browne-Barbour EX ANTE VERSUS EX POST APPROACHES TO NETWORK NEUTRALITY: A COMPARATIVE ASSESSMENT......1561 Rob Frieden INVENTORSHIP, DOUBLE PATENTING, AND THE AMERICA

N. Scott Pierce

SUBSCRIBER INFORMATION

The Berkeley Technology Law Journal (ISSN1086-3818), a continuation of the High Technology Law Journal effective Volume 11, is edited by the students of the University of California, Berkeley, School of Law (Boalt Hall) and is published in print three times each year (March, September, December), with a fourth issue published online only (July), by the Regents of the University of California, Berkeley. Periodicals Postage Rate Paid at Berkeley, CA 94704-9998, and at additional mailing offices. POSTMASTER: Send address changes to Journal Publications, University of California, Berkeley Law—Library, LL123 Boalt Hall—South Addition, Berkeley, CA 94720-7210.

Correspondence. Address all correspondence regarding subscriptions, address changes, claims for non-receipt, single copies, advertising, and permission to reprint to Journal Publications, University of California, Berkeley Law—Library, LL123 Boalt Hall—South Addition, Berkeley, CA 94705-7210; (510) 643-6600; JournalPublications@law.berkeley.edu. *Authors*: see section titled Information for Authors.

Subscriptions. Annual subscriptions are \$65.00 for individuals and \$85.00 for organizations. Single issues are \$30.00. Please allow two months for receipt of the first issue. Payment may be made by check, international money order, or credit card (MasterCard/Visa). Domestic claims for non-receipt of issues should be made within 90 days of the month of publication; overseas claims should be made within 180 days. Thereafter, the regular back issue rate (\$30.00) will be charged for replacement. Overseas delivery is not guaranteed.

Form. The text and citations in the *Journal* conform generally to the THE CHICAGO MANUAL OF STYLE (16th ed. 2010) and to THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION (Columbia Law Review Ass'n et al. eds., 19th ed. 2010). Please cite this issue of the *Berkeley Technology Law Journal* as 30 BERKELEY TECH. L.J. ___ (2015).

BTLJ ONLINE

The full text and abstracts of many previously published *Berkeley Technology Law Journal* articles can be found at http://www.btlj.org. Our site also contains a cumulative index, general information about the *Journal*, the *Bolt*, a collection of short comments and updates about new developments in law and technology written by BTLJ members, and *BTLJ Commentaries*, an exclusively online publication for pieces that are especially time-sensitive and shorter than typical law review articles.

.

INFORMATION FOR AUTHORS

The Editorial Board of the *Berkeley Technology Law Journal* invites the submission of unsolicited manuscripts. Submissions may include previously unpublished articles, essays, book reviews, case notes, or comments concerning any aspect of the relationship between technology and the law. If any portion of a manuscript has been previously published, the author should so indicate.

Format. Submissions are accepted in electronic format through the ExpressO online submission system. Authors should include a curriculum vitae and resume when submitting articles, including his or her full name, credentials, degrees earned, academic or professional affiliations, and citations to all previously published legal articles. The ExpressO submission website can be found at http://law.bepress.com/expresso.

Citations. All citations should conform to THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION (Columbia Law Review Ass'n et al. eds., 19th ed. 2010).

Copyrighted Material. If a manuscript contains any copyrighted table, chart, graph, illustration, photograph, or more than eight lines of text, the author must obtain written permission from the copyright holder for use of the material.

DONORS

The *Berkeley Technology Law Journal* and the Berkeley Center for Law & Technology acknowledge the following generous donors to Berkeley Law's Law and Technology Program:

Partners

COOLEY LLP FENWICK & WEST LLP

COVINGTON & BURLING LLP ORRICK, HERRINGTON &

SUTCLIFFE LLP

Benefactors

FISH & RICHARDSON P.C. SKADDEN, ARPS, SLATE,

MEAGHER & FLOM LLP &

KASOWITZ BENSON TORRES &

AFFILIATES FRIEDMAN LLP

Weil, Gotshal & Manges LLP

KIRKLAND & ELLIS LLP

WHITE & CASE LLP LATHAM & WATKINS LLP

WILMER CUTLER PICKERING

MCDERMOTT WILL & EMERY

HALE AND DORR LLP

MORRISON & FOERSTER LLP
WILSON SONSINI

GOODRICH & ROSATI

WINSTON & STRAWN LLP

Members

ALSTON & BIRD LLP KEKER & VAN NEST LLP

BAKER BOTTS LLP KILPATRICK TOWNSEND &

STOCKTON LLP BAKER & MCKENZIE LLP

BINGHAM MCCUTCHEN LLP

KNOBBE MARTENS
OLSON & BEAR LLP

DURIE TANGRI LLP

MUNGER, TOLLES & OLSON LLP

GILLIN JACOBSON ELLIS LARSEN &
O'MELVENY & MYERS LLP
LUCEY

PAUL HASTINGS LLP
GTC LAW GROUP LLP &

AFFILIATES

ROPES & GRAY LLP

GUNDERSON DETTMER STOUGH SIDLEY AUSTIN LLP
VILLENEUVE FRANKLIN &

HACHIGIAN, LLP

SIMPSON THACHER & BARTLETT

LLP

HAYNES AND BOONE, LLP

TURNER BOYD LLP

HICKMAN PALERMO TRUONG
VAN PELT, YI & JAMES LLP
BECKER BINGHAM WONG, LLP

WEAVER AUSTIN VILLENEUVE &

SAMPSON, LLP

IRELL & MANELLA LLP

BOARD OF EDITORS 2014–2015

	Executive Committee					
	Editor-in-Chief JOSEPH D. MORNIN					
Managing Editor EMILY LY	Senior Articles Editors Dallas Bullard Maissa Chouraki Mark Zambarda	Senior Executive Editor SIENA CARUSO				
Senior Scholarship Editor ANAGHA KRISHNAN	Senior Annual Review Editors MISA EIRITZ ALLISON SCHMITT	Senior Online Content Editor ALI MAHANI				
	Editorial Board					
Submissions Editors CAROLINA GARCIA ENEDA HOXHA	Production Editors ROXANA GUIDERO JENNA STOKES	Bluebook Editors DIANA OBRADOVICH SYDNEY RYAN DANIELA SPENCER				
Annual Review Editors ALLISON CHO LISA PATEL	Notes & Comments Editors Pratusha Erraballi Thaddeus Houston	Symposium Editors GINNY SCHOLTES EMMIE TRAN				
Commentaries Editors NOAH DRAKE KELLY VARGAS	Web & Technology Editors LEIGHANNA MIXTER STEVE SWANSON	External Relations Editor JOHN RUSSELL				
Member Relation. NATHAN ANDI		<i>Bolt Editor</i> .DA CALONGE				
RAVI ANTANI TOMMY BARCZYK ELIZABETH CAPEL SHELI DENOLA ZACH FLOOD	Articles Editors SIMONE FRIEDLANDER JOSH FURMAN MEREDITH HOUSE NICK HURT VANESSA KATZ	JING LUO JONATHAN MA MATT REAGAN MISHA TSUKERMAN LILY WANG				

MEMBERSHIP

Vol. 30 No. 2

1	• .	T 7.
Acce	ranto	Editors
Z I S S C	uuui	Luuus

WAQAS AKMAL
WILL BINKLEY
JOEL BROUSSARD
MARIBETH CHARVET
STEPHANIE CHENG
DAVID DERRICK
DANEILLE DEVLIN
ERICA FISHER
ZUBIN GAUTAM
YESOL HAN
CASSANDRA HAVENS

AMARELLE HAYES
JEFF HIRSCHEY
JENNIFER HSU
HANNAH JIAM
CHARLES JOHNSON
HILARY KRASE
SARAH KWON
JENNA LE
NEETIKA MUTREJA
ZACHARY NGUYEN
MICHAEL POON
SWAROOP POUDEL

CHRISTELLE PRIDE
LIDA RAMSEY
RACHAEL SHEN
MAXIMILIAN SLADEK
DE LA CAL
BARTEK SUDOL
JON TANAKA
FAYE WHISTON
PHILIP WISEMAN
WINNIE WONG
CHRISTOPHER YANDEL

Members

YASMINE AGELIDIS
ISRAEL BER
NORRIS BOOTHE
MARIO BORISOV
Jessica Brodsky
MARIA CANALES
GABRIELLE DORAIS
EVAN FERGUSON
FELIPE FERNANDEZ
Ari Fink
Anna Gassot
JAMES GATELY
Mark Gray
Maya Kaye
Kaia Kim
Мотоуа Кивота
CYNTHIA LEE

JINHYO LEE STELLA LEE RICARDO LEYVA BENJAMIN LI **MUQING LI** XINYI LI Yu Ju Lin PHILIP MERKSAMER NICK MILLER-STRATTON YAKOV MOLDAVSKIY ELI NESS PEGGY NI THOMAS NOLAN CHRIS NORTON JORDYN OSTROFF Dylan Peterson LEE REDFEARN JAMES RICE

ERIC RIEDEL ARIEL ROGERS SHINTARO SHIBA BILLIE SOLOMON MARIA SOUZA NATCHA SRIKAJON SAM SWARTZ YU TANEBE PAUL TISHER JANTIEN VAN RENTERGHEM KIRSTY WATKINS MEG WEBB JON WHITE YUNPENG XIONG SORIN ZAHARIA Yu Zhao Maya Ziv

BTLJ Advisory Board

JIM DEMPSEY

Executive Director of the
Berkeley Center for Law & Technology
U.C. Berkeley School of Law
Berkeley, California

ROBERT C. BERRING, JR.

Walter Perry Johnson Professor of Law
U.C. Berkeley School of Law
Berkeley, California

JESSE H. CHOPER

Earl Warren Professor of Public Law
U.C. Berkeley School of Law

Berkeley, California

PETER S. MENELL

Professor of Law and Faculty Director of the Berkeley Center for Law & Technology U.C. Berkeley School of Law Berkeley, California

ROBERT P. MERGES

Wilson Sonsini Goodrich & Rosati Professor of
Law and Faculty Director of the Berkeley
Center for Law & Technology
U.C. Berkeley School of Law
Berkeley, California

REGIS MCKENNA Chairman and CEO Regis McKenna, Inc. Palo Alto, California

DEIRDRE K. MULLIGAN
Assistant Professor and Faculty Director of the
Berkeley Center for Law and Technology
U.C. Berkeley School of Information
Berkeley, California

JAMES POOLEY Deputy Director General of the

World Intellectual Property Organization
Washington, D.C.

MATTHEW D. POWERS Tensegrity Law Group, LLP Redwood Shores, California

PAMELA SAMUELSON

Professor of Law & Information and Faculty Director of the Berkeley Center for Law & Technology U.C. Berkeley School of Law Berkeley, California

> LIONEL S. SOBEL Visiting Professor of Law U.C.L.A. School of Law Los Angeles, California

LARRY W. SONSINI Wilson Sonsini Goodrich & Rosati Palo Alto, California

> MICHAEL STERN Cooley LLP Palo Alto, California

MICHAEL TRAYNOR
Cobalt LLP
Berkeley, California

THOMAS F. VILLENEUVE Gunderson Dettmer Stough Villeneuve Franklin & Hachigian LLP Redwood City, California

BERKELEY CENTER FOR LAW & TECHNOLOGY 2014–2015

Executive Director
JIM DEMPSEY

Faculty Directors

KENNETH A. BAMBERGER ROBERT P. MERGES
PETER S. MENELL DEIRDRE MULLIGAN
PAMELA SAMUELSON

PAUL SCHWARTZ MOLLY S. VAN HOUWELING

Associate Director
LOUISE LEE

CHRIS JAY HOOFNAGLE

Affiliated Faculty
TALHA SYED

JENNIFER M. URBAN

In Memoriam
SUZANNE
SCOTCHMER
1950–2014

WHEN DOES COPYRIGHT LAW REQUIRE TECHNOLOGY BLINDNESS? AIKEN MEETS AEREO

Yvette Joy Liebesman[†]

ABSTRACT

Within the Copyright Act, innovation and technological advances are the bases for the enactment or amendment of many sections. Technology is often fundamental to the language of the section, and the underlying technology matters even when it is paired with a technology-neutral section. And because technology matters, how it functions could be essential in resolving a copyright infringement dispute.

One such provision, 17 U.S.C. § 110(5), allows small businesses to "publicly perform" copyrighted music via a radio, as long as certain conditions regarding the equipment used are met. Only small businesses are eligible, and the proprietors can only use systems that are commonly found in homes. In addition, the performance cannot be retransmitted to another location, and only a single receiving apparatus can be used. Known as the "Aiken" or "Homestyle" Exemption, when Congress codified the § 110(5) of the Copyright Act of 1976, these seemed like reasonable limitations. At the time, lawmakers did not contemplate or even envision the existence or commercialization of wireless speaker technology. Now, however, one can connect a cellphone, iPod, MP3 player, or other portable electronic device via Bluetooth, standard radio, or even the Internet, to a wireless speaker. When determining whether a system falls within the Homestyle Exemption, both Congress and the courts have stressed the importance of examining the underlying technology. Technology matters in the Copyright Act.

The Supreme Court's recent decision in *American Broadcasting Cos. v. Aereo, Inc.* has thrown the principle of "technology matters" into flux. The majority affirmatively construed the Transmit Clause as it related to several technology-specific sections of the Act in a technology-blind manner; indeed, it held that the underlying technological architecture of an allegedly infringing system was irrelevant. This decision may have wide-reaching effects, and cannot be viewed in a vacuum. When examined in relation to other sections of the Copyright Act of 1976, it behooves us to question whether this is what Congress intended.

DOI: http://dx.doi.org/10.15779/Z38BR9J

© 2015 Ývette Joy Liebesman.

† Associate Professor of Law, Saint Louis University School of Law. The author would like to thank Jorge Contreras, Sapna Kumar, Kristelia García, Brandi Karl, Matt Levy, Robert Heverly, and the members of her SLU Law coffee/writing group: Kerrin Kowach, Matthew Bodie, Chad Flanders, and Justin Hansford. She is also grateful to Kassandra Garrison and Alejandro Frank for their research assistance. Michael Bobelak was amazingly helpful in educating the author on the various forms of wireless speaker systems. The author also wants to acknowledge the valuable comments received at the fall 2014 George Washington University Law School's Intellectual Property Speaker Series and at the 2015 Internet Law Work in Progress Conference at Santa Clara Law. This Article was selected for presentation at the 2015 ABA-IPL 30th Annual Meeting's Scholarship Symposium session. This Article was also selected by the Institute for Intellectual Property & Information Law at the University of Houston Law Center as recipient of the 2015 Sponsored Scholarship Grant for the Legal Academy.

TABLE OF CONTENTS

I.	INT	TRODUCTION	1385
II.	CO	E <i>AIKEN</i> /HOMESTYLE EXEMPTION: ITS ORIGINS, DIFICATION, AND RELATION TO THE TRANSMIT	
	CLA	AUSE	1388
	А. В.	THE PUBLIC PERFORMANCE RIGHT BEFORE THE 1976 ACT DEVELOPMENT AND CODIFICATION OF THE HOMESTYLE	1389
		Exemption	1393
		1. Twentieth Century Fox Music Corporation v. Aiken	
		2. Codification into the Copyright Act of 1976	
		3. The Meaning of "Transmit"	
		4. Construing Exemptions	
	C.	THE WIRED SPEAKER SYSTEM ORIGINALLY ENVISIONED	1407
	D.	DIY: HOOKING UP WIRELESS SPEAKERS TO YOUR HOME	
		STEREO	1408
	E.	THE THREE ELEMENTS OF THE CURRENT	
		AIKEN/HOMESTYLE EXEMPTION TEST	
		1. The First Element: Commonly Found in a Home	1410
		2. The Second Element: The Quandary of Multiple Receivers	1415
		3. The Third Element: The Dilemma of the Second Transmitter	1415
III.	API	PLYING AIKENTO WIRELESS SPEAKERS	1416
	A.	MHz So Good: Traditional Wireless Likely Does	
		NOT QUALIFY FOR THE HOMESTYLE EXEMPTION	1418
	В.	YOUR IPHONE'S BLUETOOTH CONNECTION	
	C.	THE UNCERTAIN OUTCOME FOR PLAY-FI	
	D.	STREAMING MATTERS	1421
IV.	TEO	CHNOLOGY BLINDNESS	1423
	Α.	TECHNOLOGY BLINDNESS AND AEREO	1423
		1. The Aereo Decision	
		2. Is It Cable, or Is It Antenna?	
	В.	TECHNOLOGY BLINDNESS AND AIKEN	
	C.	TECHNOLOGY BLINDNESS BEYOND AIKEN AND AEREO	
v.	TEO	CHNOLOGY MATTERS	1439
	Α.	EXPANDING TECHNOLOGY IN TIME	1439
	В.	THE AEREO DISSENT	
	C.	FUTURE DISCUSSIONS	
VI.	FIN	IAL THOUGHTS	1446

I. INTRODUCTION

In many sections of the Copyright Act, the technology used by the relevant actors is germane both at its enactment and in later applications of the law. An examination of § 110(5)—the Homestyle Exemption—exemplifies this. Imagine we are walking past various shops in a mall. First we enter a clothing store, and through speakers on the wall we hear a local rock radio station. The second store—selling boots and hats—is playing music from a country-western station. The stereo system in both of these stores is comprised of speakers attached to a radio receiver via "speaker wire." Next, we enter a pet store, where soft, classical music is heard above the sweet yelping of puppies (all wanting us to take them home). The music is broadcast through a "boom box" (which contains a radio receiver and two speakers in a single device) behind the cashier's counter.

The proprietor of the fourth shop we visit also is playing radio music via a stereo system, similar to the other three. However, the owner of this establishment, when choosing among the variety of options at the local electronics store, fell in love with the new Polk® Audio home stereo wireless system, which consists of a radio with a built-in Bluetooth transmitter and two wireless speakers. The sound is amazing, and the installation costs were significantly less than drilling holes and running speaker wire. The fifth shop we pass is also using a wireless speaker system. This one consists of a standard Radio Frequency (RF) transmitter—the type common in transistor radios—attached to the stereo receiver base located in the storeroom. The RF transmitter broadcasts on a common frequency to two wireless speakers located on the sales floor.

We usually do not think much about the source of the music that we hear in these stores or the copyright implications of playing music for the enjoyment of customers and employees. If we did, we would know that, as discussed in detail *infra*,¹ even without obtaining a public performance license,² none of the first three stores are infringing on the composers' copyrights. Each of these enterprises is allowed to play this radio-broadcasted music based on a 1975 Supreme Court case and its subsequent codification in § 110(5)³ of the Copyright Act of 1976.⁴ This

^{1.} See infra Part II.

^{2. 17} U.S.C. § 106(4) (2012) ("[T]he owner of copyright under this title has the exclusive rights to do and to authorize any of the following: . . . (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly.").

^{3. 17} U.S.C. § 110(5) (2012).

^{4. 17} U.S.C. § 101 (2012).

exemption was originally known as the Aiken Exemption,5 but is now commonly called the Homestyle Exemption. Things get murkier with the fourth and fifth stores: even though the technologies used in the latter two stores may commonly be found in a home, store owners using this new technology may fail to qualify for the Homestyle Exemption. The use of wireless technology may not give these latter two storeowners a defense to infringement of the public performance right, and the copyright owners of the musical compositions that are broadcast may have a cause of action against the latter two storeowners. This depends on whether courts will be construing the Copyright Act's Homestyle Exemption in a "technology blind" manner. On the one hand, if the functional aspects of the devices used by an alleged infringer do matter, then the underlying technology involved in an infringement claim will be considered in a court's analysis. Conversely, the Copyright statute could be interpreted in a "technology blind" manner, whereby courts ignore how a particular system actually operates, and instead interpret the statutory language without consideration to how the underlying technology functions.

Determining if those two latter stereo systems also fall within the Homestyle Exemption illuminates the quandary created by the Supreme Court in *American Broadcasting Cos. v. Aereo, Inc.*:8 whether how the different wireless technologies operate should be taken into consideration. When the Homestyle Exemption to infringement of a copyright owner's public performance right was first pronounced and later codified, the justices and legislators based the Exemption on the technology present at the time, which did not account for the future popularity of wireless receivers—or even their existence at the consumer electronic level.

This Article argues that invoking "technology blindness" to resolve copyright issues—even when limited to those issues falling under the Transmit Clause—could result in a net harm. First, the Transmit Clause

^{5.} Twentieth Century Music Corp. v. Aiken (Aiken III), 422 U.S. 151 (1975).

^{6.} See, e.g., On the Fairness in Musical Licensing Act of 1997: Hearing on H.R. 789 Before the Subcomm. on Courts & Intellectual Prop. Comm. on the Judiciary, 105th Cong. 1 (1997) (statement of Marybeth Peters, Register of Copyrights) (noting that the proposed bill would expand "the existing 'homestyle' exemption in section 110(5)"). This Article will use these terms interchangeably.

^{7.} While direct copyright infringement liability—as well as secondary liability—may extend to the owner of the shopping mall, this is a tangential to the topic of this Article, and will not be discussed herein.

^{8.} Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014).

is rarely construed in a vacuum; the Homestyle Exemption is just one example where it is read in conjunction with another section of the Copyright Act. Second, when enacting these sections, Congress was clear that courts should examine the technology in use. While invoking technology blindness would help in the occasional situation where new technology might "look like" a form that falls within one of the Copyright Act's exemptions, it will more likely inhibit innovation when the new technology superficially "looks like" one which requires a license. By ignoring situations where the underlying "behind the scenes" technology would otherwise fall within the Act, innovators would be paralyzed, unable to rely on work-arounds with no guarantee that courts would find their inventions to be noninfringing. One can almost always find—among many options—that to some non-technology savvy end users, an innovation "looks like" it is an infringing device. In other words, technology matters.

As such, Part II of this Article provides the foundation and history behind the Homestyle Exemption to the public performance right, first through its pronouncement by the Supreme Court in Twentieth Century Music Corp. v. Aiken (Aiken III), and its later adoption, though based on a different rationale, by Congress in the Copyright Act of 1976.¹⁰ This Part also provides the "nuts and bolts" of how wired and wireless speaker systems operate and sets forth the test used in evaluating stereo systems under the Homestyle Exemption—a very technology-specific assessment. Part III applies the exemption to the three currently popular forms of wireless speaker technology, focusing on the multiple receivers and transmitters required for any wireless system. This Part also touches on the use of Internet radio as a source for performed content—yet another technological advancement not considered when the Homestyle Exemption was enacted. However, these earlier Parts are merely a prelude, providing background to a broader, more pertinent question: how far does the Supreme Court's construction of "technology blindness" in Aereo go? Thus, the first three Parts form a bridge to Part IV, which addresses the concept of "technology blindness" and the recent Supreme Court decision,

^{9.} See Aiken III, 422 U.S. at 162–64. The District Court decision, Twentieth Century Music Corp. v. Aiken, 356 F. Supp. 271 (W.D. Pa. 1973), will be referred to as Aiken I, and the Third Circuit's holding, Twentieth Century Fox Music Corp. v. Aiken, 500 F.2d 127 (3d Cir. 1974), will be referred to as Aiken II.

^{10.} See 17 U.S.C. § 110(5) (2012); see also H.R. REP. NO. 94-1476, at 5700-01 (1976), reprinted in 1976 U.S.C.C.A.N. 5659; infra Part II.B.2.

American Broadcasting Cos. v. Aereo, Inc.¹¹ The Court's reliance on the fallacy that Aereo's system of antennas "resemble" a cable company's transmission of a signal (and thus infringe on broadcasters' copyright rights) is used to interpret the wireless speaker system as "resembling" a wired system, without examining the differences in the technologies. Part IV examines how this "technology blind" approach would affect application of the Homestyle Exemption. This Article then contends that "technology blindness" is the wrong approach, and discusses its detrimental consequences. Part V asserts the importance of analyzing the Copyright Act in relation to the underlying technology at issue. This Article concludes that interpreting statutes without considering the behind the scenes technological architecture of a potentially infringing product can inhibit innovation and adversely disrupt courts, innovators, and anyone who abhors vagueness and uncertainty in the rule of law.

II. THE AIKEN/HOMESTYLE EXEMPTION: ITS ORIGINS, CODIFICATION, AND RELATION TO THE TRANSMIT CLAUSE

Historically, as technological innovations provided a greater audience for works, copyright rights have been asserted more broadly as well. Gramophones, and later on radios, allowed those with no musical skills to hear great works performed by accomplished musicians in the privacy of their own homes. Yet copyright owners were unable to stop others from financially benefiting from this new access to their works—the technology at issue had not been conferred copyright rights under then-applicable copyright law. This is because in earlier versions of the Copyright Act, the types of works covered were specifically delineated, with the list amended from time to time in order to bring new technology within its purview. For example, in *White-Smith Music Publishing Co. v. Apollo Co.*, the Supreme Court held that player piano rolls could not be "read" by a human, and thus those who produced "unauthorized" copies were not infringing on the music encoded in the rolls. Congress later remedied this

^{11. 134} S. Ct. 2498 (2014).

^{12.} For example, under the 1831 Act, only books, maps, charts, musical compositions, prints, cuts, and engravings were covered. An Act to Amend the Several Acts Respecting Copyrights, 4 Stat. 436 (1831).

^{13. 209} U.S. 1, 18 (1908).

in the 1909 Copyright Act by incorporating expanded language to cover mechanical performances.¹⁴

The Aiken (or Homestyle) Exemption is another example in the long history of technological advances at the heart of the enactment of a section in the Copyright Act. This exemption provides small businesses with a safe harbor by allowing them to broadcast music or a television program without infringing on the copyright owner's public performance rights. While the Supreme Court's rationale in Aiken III¹⁵ was rejected by Congress when the Copyright Act was revised, the exemption was nonetheless retained and codified in the 1976 Act, albeit on a different basis. Underlying this exemption was the increased availability of home listening devices and other technologies that brought music and dramatic entertainment out of theatres and public gatherings and into more diverse settings, such as stores, restaurants, and homes.

This Part begins with an overview of the public performance right prior to 1976, then details the Homestyle Exemption delineated in the three *Aiken* decisions—how it was developed and the intent behind providing this limitation to a copyright owner's public performance right. This Part then discusses its incorporation as the "Homestyle Exemption" into the Copyright Act of 1976, its relation to the "Transmit Clause" included in the definition of "public performance," and the impact of statutory interpretations of rights versus exemptions.

A. THE PUBLIC PERFORMANCE RIGHT BEFORE THE 1976 ACT

The public performance right was not among those originally granted in the first Copyright Act. The 1790 Act, as well as those preceding the 1856 Amendments, only provided rights "to print, reprint, publish and vend," and only for maps, charts, books, and books already printed. Congress first included public performance rights in copyrighted works in the 1856 Amendments—sixty-six years later—but only for dramatic

^{14.} Copyright Act of 1909, Pub. L. No. 60-349, § 1(e), 35 Stat. 1075.

^{15.} Twentieth Century Music Corp. v. Aiken (*Aiken III*), 422 U.S. 151, 160 (1975) (holding that Aiken did not "perform" the copyrighted works within the meaning of the Act).

^{16.} Copyright Act of 1790, 1 Stat. 124. In 1865, photographs were added to the list. Act of Mar. 3, 1865, 13 Stat. 540.

works.¹⁷ These rights were expanded to include musical compositions in the Copyright Act of 1897.¹⁸

At the time of the *Aiken* litigation, the 1909 Act was in force, with § 1 providing a public performance right for musical compositions.¹⁹ To enforce these rights, artists typically joined one of the musicians' rights organizations such as the American Society of Composers, Authors and Publishers (ASCAP),²⁰ Broadcast Music, Inc. (BMI),²¹ Harry Fox Music Publishing,²² or Twentieth Century Music Corporation. These organizations in turn licensed the public performance right on behalf of artists, collected the license fees, and distributed the proceeds to the rights owners.²³

17. The Act read:

Be it enacted by the Senate and House of Representatives of the United States of American in Congress assembled, [t]hat any copyright hereafter granted under the laws of the United States to the author or proprietor of any dramatic composition, designed or suited for public representation, shall be deemed and taken to confer upon the said author or proprietor, his heirs or assigned, along with the sole right to print and publish the said composition, the sole right also to act, perform, or represent the same, or cause it to be acted, performed, or represented, on any stage or public place during the whole period for which the copyright is obtained.

Act of Aug. 18, 1856, 11 Stat. 138.

- 18. Section 4966 of the 1897 Act provided that "[a]ny person publicly performing or representing any dramatic or musical composition for which a copyright has been obtained, without the consent of the proprietor of said dramatic or musical composition, or his heirs or assigns, shall be liable for damages therefor." Act of Jan. 6, 1897, 29 Stat. 481.
- 19. Copyright Act of 1909, Pub. L. No. 60-349, § 1(e), 35 Stat. 1075 ("[A]ny person entitled thereto, upon complying with provisions of this Act, shall have the exclusive right: . . . (e) To perform the copyrighted work publicly for profit if it be a musical composition and for the purpose of public performance for profit."). In the most recent iteration of federal copyright law, the Copyright Act of 1976, § 106 provides that the owner of a copyright in a musical work has the exclusive right to (or to authorize) the public performance of her copyrighted work. 17 U.S.C. § 106 (2012).
- 20. See THE AM. SOCY OF COMPOSERS, AUTHORS & PUBLISHERS, http://www.ascap.com (last visited Sept. 7, 2014).
 - 21. See BROADCAST MUSIC, INC., http://www.bmi.com (last visited July 22, 2014).
- 22. See THE HARRY FOX AGENCY, http://www.harryfox.com (last visited Dec. 30, 2014).
- 23. See, e.g., ASCAP Payment System: Introduction, ASCAP, http://www.ascap.com/members/payment.aspx (last visited Sept. 7, 2014). For example, ASCAP members who subscribe to "ASCAP OnStage" receive payment "for live performances at venues of any size." Id. ASCAP claims that through ASCAP OnStage composers can receive royalties

Two Supreme Court opinions defining the limits of the public performance right under the 1909 Act were relevant to the Court's Aiken decision. First, in Buck v. Jewell-Lasalle Realty,24 decided in 1931, Gene Buck, the then-president of ASCAP, sued the owner of the La Salle Hotel in Kansas City, Missouri for infringement of its members' public performance rights. The hotel had a radio receiver that was wired to speakers in both the hotel's common areas and private rooms. Programs received on this central radio receiver could then "be simultaneously heard throughout the building."25 The lower courts denied relief, "on the ground that [the hotel's] acts did not constitute a 'performance' within the Copyright Act."²⁶ The Supreme Court reversed, holding that when the hotel proprietor made available to his guests, through a "radio receiving set and loud speakers installed in his hotel and under his control and for the entertainment of his guests, the hearing of a copyrighted musical composition which has been broadcast from a radio transmitting station, [it] constitute[d] a performance of such composition within the meaning of 17 U.S.C Sec. 1(e)."27 The Court applied what was dubbed a "quantitative test," 28 so named because of "the quantitative performance standard employed... which can be defined as: 'How much did the infringer do to bring about the viewing and hearing of a copyrighted work?""29

Thirty-five years later, the Supreme Court decided Fortnightly Corp. v. United Artists Television, Inc., 30 a case involving an infringement action against cable television operators who transmitted TV signals into homes. In the 1960s, Fortnightly Corporation owned and operated a cable television (CATV) system in rural West Virginia, where the hilly terrain

when their music is performed live at venues of all sizes throughout the country. The composer provides the basic details of the performance and which songs were performed, and the artist will receive a payment for these live performances with their normal ASCAP distribution. *ASCAP OnStage*, ASCAP, http://www.ascap.com/members/onstage.aspx (last visited Sept. 7, 2014).

- 24. Buck v. Jewell-LaSalle Realty Co., 283 U.S. 191 (1931).
- 25. Id. at 195.
- 26. Id. (citing Buck v. Duncan, 32 F.2d 366 (W.D. Mo. 1929)).
- 27. *Id.* at 195–96.
- 28. Twentieth Century Fox Music Corp. v. Aiken (*Aiken II*), 500 F.2d 127, 133 (3d Cir. 1974).
 - 29. *Id.* at 133 n.14 (quotations and citations omitted.); cf. id. at 137.
- 30. Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390 (1968). In *Fortnightly*, the Court held that broadcasters are the performers of television transmissions, and that neither cable television operators nor viewers are "performers" under the 1909 Act. *Id.* The cable television systems merely aided the viewer's ability to receive the broadcasted signal. *Id.*

prevented most of the areas' residents from receiving over-the-air television broadcasts via an ordinary rooftop antenna.31 To solve this problem, Fortnightly sold subscriptions to its system, which consisted "of antennas located on hills... with connecting coaxial cables, strung on utility poles, to carry the signals received by the antennas to the home television sets of individual subscribers."32 United Artists Television sued for infringement of its public performance rights to its copyrighted works that were transmitted over Fortnightly's system. The lower courts held in favor of United Artists.33 On a grant of certiorari, the Supreme Court reversed. First, the Court discussed the growth of technology since the law's enactment, and how broadcasters and television viewers were analogized during the litigation. "Despite... deviations from the conventional situation contemplated by the framers of the Copyright Act [of 1909], broadcasters have been judicially treated as exhibitors, and viewers as members of a theater audience. Broadcasters perform. Viewers do not perform."34 The Court, noting the lack of control CATV operators had over the programming they transmitted, reversed the lower courts, holding that CATV operators were more like viewers who did not perform the programs received.³⁵ The Court concluded that cable television "systems do not in fact broadcast or rebroadcast and that '... like viewers...do not perform the programs that they...carry."36 In the Court's view, neither the cable television operator nor the viewer was engaged in a public performance of the copyrighted work at issue.

The Court based its decision on the functional nature of the equipment used, comparing it to features of equipment found in homes.³⁷ Fortnightly's "functional test" is one which asks if "the basic function the

^{31.} *Id.* at 391.

^{32.} Id. at 392.

^{33.} United Artists Television, Inc. v. Fortnightly Corp., 255 F. Supp. 177 (S.D.N.Y. 1966), aff'd, 377 F.2d 872 (2d Cir. 1967) rev'd, 392 U.S. 390 (1968). The Second Circuit, in reaching its decision, relied on the quantitative test outlined in Jewell-LaSalle. Fortnightly, 392 U.S. at 396 ("The Court of Appeals thought that the controlling question in deciding whether the petitioner's CATV systems 'performed' the copyrighted works was: 'How much did the [petitioner] do to bring about the viewing and hearing of a copyrighted work?" (alteration in original)). 34. Fortnightly, 392 U.S. at 398.

^{35.} *Id.* at 400–01.

^{36.} Twentieth Century Music Corp. v. Aiken (Aiken I), 356 F. Supp. 271, 274 (W.D. Pa. 1973) (citing Fortnightly, 392 U.S. at 400-01) (omissions in original).

^{37.} Fortnightly, 392 U.S. at 406.

equipment serves is little different from that served by the equipment generally furnished by a television viewer."³⁸

Jewell-Lasalle and Fortnightly can be seen as early demonstrations of courts determining an infringement action could either based the underlying technology or viewed in a "technology blind" manner, with a rejection of "technology blindness" in favor of determining infringement based on the underlying technology.

B. DEVELOPMENT AND CODIFICATION OF THE HOMESTYLE EXEMPTION

George Aiken's attempt to provide radio-received music and news to his customers prompted the Court to decide whether *Jewell-Lasalle* or *Fortnightly* should control with regard to the public performance right and radio broadcasts in this setting. This Section first discusses *Twentieth Century Fox v. Aiken*,³⁹ Aiken's vindication by the Supreme Court; this resulted in the codification of an exemption for what would otherwise be infringing activities. Congress, however, rejected the Court's view that store owners who provide broadcasted music for their customers (*Aiken III*), and cable television operators who transmit television broadcasts to viewers in homes (*Fortnightly*), were not "performing." The addition of the "transmit" clause to the definition of the "public performance"⁴⁰ solidified Congress' rejection of the Court's rationale. This Section ends with explorations of how the Homestyle Exemption is impacted by its tie to the Transmit Clause, and whether the exemption should be narrowly or broadly construed.

1. Twentieth Century Fox Music Corporation v. Aiken

In 1972, several musicians' rights organizations sued George Aiken for failure to pay a public performance license.⁴¹ Aiken owned a chain of small take-out restaurants in the Pittsburgh area⁴² called "George Aiken's Chicken."⁴³ Each restaurant had seating for about 40 people, though the majority of the restaurant customers ordered their meals "take-out."⁴⁴

^{38.} Twentieth Century Music Corp. v. Aiken (*Aiken II*), 500 F.2d 127, 134 (3d Cir. 1974) *aff'd*, 422 U.S. 151 (1975).

^{39.} Twentieth Century Music Corp. v. Aiken (Aiken III), 422 U.S. 151, 153 (1975).

^{40. 17} U.S.C. § 101 (2012).

^{41.} Aiken III, 422 U.S. at 153.

^{42.} Twentieth Century Music Corp. v. Aiken (Aiken I), 356 F. Supp. 271, 272 (W.D. Pa. 1973).

^{43.} Aiken III, 422 U.S. at 152.

^{44.} Aiken I, 356 F. Supp. at 272.

Most customers stayed in the restaurant for about 10–15 minutes.⁴⁵ To give some "ambiance" to the establishment while clientele waited to pick up their order, Aiken installed a small transistor radio that was connected via wires to four speakers in the ceiling of the restaurant, from which customers and employees heard music and news from local radio stations.⁴⁶

After a bench trial, Judge Weis found Aiken liable for infringing on the public performance rights of two copyright owners: Mary M. Bourne, the owner of "Me and My Shadow," and Twentieth Century Music Corporation, the owner of the copyright to the musical composition of "The More I See You."⁴⁷ The District Court had to choose which of two competing Supreme Court decisions—*Jewell-Lasalle Realty*⁴⁸ or *Fortnightly*⁴⁹—was determinative.⁵⁰ The District Court concluded that Aiken's situation was more comparable to that of *Jewell-Lasalle*,⁵¹ a "technology blind" viewpoint.

Aiken appealed to the Third Circuit, which overturned the District Court ruling.⁵² Since the 1909 Act did not define "performance" (something remedied in the 1976 Act),⁵³ the plaintiffs had argued that Aiken had publicly performed the musical works "when he switched on his radio (with four loud speakers attached) and tuned to the station which was playing these compositions."⁵⁴ The Third Circuit, however, concluded that Aiken did not "perform" copyrighted musical compositions within the meaning of the 1909 Act.⁵⁵ The appellate court reiterated *Fortnightly's*

^{45.} Aiken III, 422 U.S. at 152.

^{46.} *Id*.

^{47.} Aiken I, 356 F. Supp. at 272. On March 11, 1972, both of these songs were broadcasted on WKJF-FM, a radio station out of Pittsburgh, PA, and heard in Aiken's restaurant. Id.

^{48.} Buck v. Jewell-LaSalle Realty Co., 283 U.S. 191 (1931).

^{49.} Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390 (1968).

^{50.} Aiken I, 356 F. Supp. at 272.

^{51.} Id. at 275. Damages of \$250 for each infringement were assessed to Aiken. Id.

^{52.} Twentieth Century Fox Music Corp. v. Aiken (Aiken II), 500 F.2d 127 (3d Cir. 1974) affd, 422 U.S. 151 (1975).

^{53.} *Id.* at 130. ("The District Court recognized, as do we, that the Act itself does not define 'performance.").

^{54.} *Id.* The Third Circuit also noted that, as a matter of policy, ASCAP did "not require[] a license where the commercial establishment ha[d] limited itself to a radio and one speaker." *Id.* at 129.

^{55.} *Id.* at 137 ("We hold, therefore, that mere extension of the range of audibility of a broadcast program as 'extended' here by the appellant Aiken, cannot be said to

pronouncement that "[b]roadcasters perform. Viewers do not perform. Thus, while both broadcaster and viewer play crucial roles in the total television process, a line is drawn between them. One is treated as an active performer; the other, as passive beneficiary."⁵⁶

The Third Circuit was able to distinguish Jewell-LaSalle from the facts in Aiken by utilizing Fortnightly's "functional" test.⁵⁷ In addition, it rejected Jewell-LaSalle's "quantitative test" based on quantifying the actions of the alleged infringer.⁵⁸ In Jewell-LaSalle, the broadcast was sent out to the many rooms in the hotel via a commercial stereo system; in Aiken, the broadcast was limited to a single room via a system commonly found in homes.⁵⁹

The Supreme Court affirmed the Third Circuit's holding that viewers (or listeners) do not perform, but rather are merely passive beneficiaries of the performance.⁶⁰ The Court did affirm its holding in *Jewell-LaSalle*, but found it factually distinguished from *Aiken*.⁶¹ In addition, "[a]s reinterpreted by the *Aiken* decision, the rule of Jewell-LaSalle applies only if the broadcast being re-transmitted was itself unlicensed."⁶² The Court

constitute a 'performance.'" (footnote omitted)). The Supreme Court held that the purpose of the exclusive right to perform a copyrighted work publicly for profit under the 1909 Act

was to prohibit unauthorized performances of copyrighted musical compositions in such public places as concert halls, theatres, restaurants, and cabarets.... An orchestra or individual instrumentalist or singer who performs a copyrighted musical composition in such a public place without a license is thus clearly an infringer under the statute.... But it was never contemplated that the members of the audience who heard the composition would themselves also be simultaneously 'performing' and thus also guilty of infringement.

Twentieth Century Fox Music Corp. v. Aiken (Aiken III), 422 U.S. 151, 157 (1975).

- 56. *Aiken III*, 422 U.S. at 161 (citing Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390, 398–99 (1968)).
- 57. Aiken II, 500 F.2d at 134–135; Fortnightly, 392 U.S. at 398–99; Aiken III, 422 U.S. at 161 ("Broadcasters perform. Viewers do not perform."); see also supra, notes 30–38 and accompanying text.
- 58. Aiken II, 500 F.2d at 133 n.14. For a brief description of Buck v. Jewell-LaSalle and its overall relevance to the public performance right, see *supra*, notes 24–29 and accompanying text.
 - 59. *Čf. Äiken II*, 500 F.2d at 137.
 - 60. Aiken III, 422 U.S. at 161, 164.
- 61. *Id.* at 160 ("We may assume for present purposes that the *Jewell-LaSalle* decision retains authoritative force in a factual situation like that in which it arose.").
- 62. H.R. REP. NO. 94-1476, at 87 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5700-01.

found the language in *Fortnightly* regarding the listener/viewer as not "performing" to be dispositive,⁶³ and emphasized that copyright does not grant its owner an absolute monopoly. "The Copyright Act [of 1909] does not give a copyright holder control over all uses of his copyrighted work. Instead, . . . the Act enumerates several 'rights' that are made 'exclusive' to the holder of the copyright."⁶⁴ Any use outside of these rights is not an infringing action.⁶⁵

As exemplified by *Aiken* and its related cases, questions before the Court continually revolve around whether actions that utilize technology that was not yet contemplated when the Act was written constitute infringement. The technological advancements that occurred during the tenure of the 1909 Act are breathtaking. Radio, motion pictures, and television all came of age; the Court had to determine how copyright law would apply to—and thus regulate—these technologies:

Although Congress did not revise the statutory language, copyright law was quick to adapt to prevent the exploitation of protected works through the new electronic technology.... It was soon established in the federal courts that the broadcast of a copyrighted musical composition by a commercial radio station was a public performance of that composition for profit—and thus an infringement of the copyright if not licensed.⁶⁶

A performance, in our judgment, is no less public because the listeners are unable to communicate with one another, or are not assembled within an inclosure [sic], or gathered together in some open stadium or park or other public place. Nor can a performance, in our judgment, be deemed private because each listener may enjoy it alone in the privacy of his home. Radio broadcasting is intended to, and in fact does, reach a very much larger number of the public at the moment of the rendition than any other medium of performance.

Id. at 158–59.

^{63.} Aiken III, 422 U.S. at 161 ("The language of the Court's opinion in the Fortnightly case could hardly be more explicitly dispositive of the question now before us.").

^{64.} *Id.* at 154–55.

^{65.} *Id.* at 155 (using the example of singing a copyrighted song in the shower as a noninfringing act that requires no license from the copyright owner).

^{66.} Id. at 158. The Court continued:

2. Codification into the Copyright Act of 1976

When Congress revised U.S. copyright law via the 1976 Act, it codified the substance of the *Aiken* Exemption in § 110(5) as follows:⁶⁷

Notwithstanding the provisions of section 106, the following are not infringements of copyright: except as provided in subparagraph (B), communication of a transmission embodying a performance or display of a work by the public reception of the transmission on a single receiving apparatus of a kind commonly used in private homes, unless (i) a direct charge is made to see or hear the transmission; or (ii) the transmission thus received is further transmitted to the public ⁶⁸

Congress was concerned with "rent seeking"⁶⁹ by copyright owners, especially when actions like George Aiken's were usually not subject to either royalties or litigation, and the copyright owners were already receiving value for their rights. Congress was also loath to turn the use of

^{67.} Later renumbered § 110(5)(A).

^{68. 17} U.S.C. § 110(5)(A) (2012). Section 106 of the Act enumerates six rights afforded to copyright owners: the (1) reproduction, (2) adaptation, (3) distribution, (4) public performance, (5) public display, and (6) digital broadcasts of sound recordings. The public performance right does not apply to any copyright in sound recordings (nor does the public display right); however, § 106(4) does apply to the copyright in the underlying musical composition. Thus, to broadcast/transmit a song over the radio, a license is needed from the copyright owner in the musical composition, but not from the owner of the copyright in the sound recording. See 17 U.S.C. § 106 (2012).

^{69. &}quot;Rent-seeking" can be defined "as the actions and decisions of political actors that result in wealth transfers which reduce the economic wellbeing of society." Thomas M. Murray, *The U.S.-French Dispute Over GATT Treatment of Audiovisual Products and the Limits of Public Choice Theory: How an Efficient Market Solution Was "Rent-Seeking,"* 21 MD. J. INT'L L. & TRADE 203, 203–04 (1997) (citing DANIEL A. FARBER & PHILIP P. FRICKEY, LAW AND PUBLIC CHOICE 34 (1991) ("When economists describe special interest legislation as 'rent-seeking,' they mean that the legislation is not justified on a cost-benefit basis: it costs the public more than it benefits the special interest, so society as a whole is worse off.")).

an "ordinary receiver" into a potentially infringing act⁷⁰ when there was no commercial advantage gained.⁷¹

The legislative history illustrates however, that while Congress agreed with the Supreme Court's holding in *Aiken*, it rejected the Court's rationale that Aiken, his customers, and his employees were passive listeners, and that Aiken's broadcast did not constitute public performance.⁷² Instead, the legislature chose to declare that while such use

70. H.R. REP. No. 94-1476, at 86 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5700.

The basic rationale of this clause is that the secondary use of the transmission by turning on an ordinary receiver in public is so remote and minimal that no further liability should be imposed. In the vast majority of these cases no royalties are collected today, and the exemption should be made explicit in the statute.

Id.

71. John Wilk, Seeing the Words and Hearing the Music: Contradictions in the Construction of 17 U.S.C. Section 110(5), 45 RUTGERS L. REV. 783, 831 (1993). Mr. Wilk believes that

[t]he legislative rationale of section 110(5) appears to be that, in some instances, commercial establishments were receiving commercial advantage from playing radio broadcasts and should, therefore, be subject to copyright infringement liability. The statutory and legislative factors of section 110(5) merely serve as a test to differentiate establishments that are receiving a commercial benefit from those that are not.

Id. at 831. Yet it is debatable as to whether this blanket statement is always true. Retail stores like The Gap or Claire's arguably attain no commercial advantage from playing music though a Homestyle-qualifying system versus a commercial system. For sports restaurants or bars, however, there may be a commercial advantage to using a professional sound system. Section 110(5)(B) seeks to differentiate between the types of business establishments and whether they qualify for the Exemption, but the underlying rationale remains what Wilk claims it is.

72. H.R. REP. NO. 94-1476, at 86–87 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5700.

The majority of the Supreme Court in the Aiken case based its decision on a narrow construction of the word 'perform' in the 1909 statute. This basis for the decision is completely overturned by the present bill and its broad definition of 'perform' in section 101. The Committee has adopted the language of section 110(5), with an amendment expressly denying the exemption in situations where 'the performance or display is further transmitted beyond the place where the receiving apparatus is located'; in doing so, it accepts the traditional, pre-Aiken, interpretation by means other than a home receiving set, or further transmission of a broadcast to the public, is considered an infringing act.

was a public performance, the newly enacted § 110(5) exempted such public performances from infringing on the exclusive right held by the copyright owner.⁷³

Congress also remedied the lack of a definition of "public performance" in the 1909 Act—the 1976 Act declares that a work is "performed publicly" when "it is at a place open to the public or at any place where a substantial number of persons outside of a normal circle of family and its social acquaintances is gathered, . . . [or a performance] transmit[ted] or otherwise communicate . . . to the public."⁷⁴ Thus, if there was no § 110(5) exemption, the performing of a musical work in a store or restaurant via a radio broadcast, without the permission of the copyright owner, would infringe on the copyright owner's public performance right.⁷⁵

Congress also made clear that this exemption applies to all performances—it removed the "for profit" language from the public performance right granted⁷⁶ in the 1909 Act.⁷⁷ When discussing the public

Id. at 87.

73. 17 U.S.C. § 110(5)(A) (2012) ("Not withstanding the provisions of section 106, the following are not infringements of copyright:... communication of a transmission embodying a performance... of a work by the public reception of the transmission on a single receiving apparatus of a kind commonly used in private homes.").

74. 17 U.S.C. § 101(1) (2012) (to perform or display a work "publicly"). Subsection (2) expands the definition of performing a work publicly to include the transmission of visual and audio signals, such as through radio and television broadcasts, as public performances. Specifically, it states:

To perform... a work "publicly" means... (2) to transmit or otherwise communicate a performance... to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

17 U.S.C. § 101(2).

75. 17 U.S.C. § 106(4) (2012) ("[T]he owner of copyright under this title has the exclusive rights to do and to authorize the following:... in the case of literary, musical, dramatic and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly.").

audiovisual works, to perform the copyrighted work publicly.").

76. Compare 17 U.S.C. § 106(4) ("[T]he owner of copyright under this title has the exclusive rights to do and to authorize . . . [anyone] to perform the copyrighted work publicly"), with Copyright Act of 1909, Pub. L. No. 60-349, § 1, 35 Stat. 1075 ("[A]ny person entitled thereto, upon complying with the provisions of this Act, shall have the exclusive right . . . [t]o perform the copyrighted work publicly for profit if it be a musical composition and for the purpose of public performance for profit." (emphasis added)).

77. H.R. REP. No. 94-1476, 86 (1976), reprinted in 1976 U.S.C.C.A.N. 5659,

5700. The statute notes that:

Unlike the first four clauses of section 110, clause (5) is not to any extent a counterpart of the 'for profit' limitation of the present statute.

performance right with regard to the Homestyle Exemption, Congress focused on "reception in public."⁷⁸ Congress was equally clear in whom they viewed as the recipients of their largess through the Homestyle Exemption, and where they drew its limits:

Under the particular fact situation in the *Aiken* case, assuming a small commercial establishment and the use of a home receiver with four ordinary loudspeakers grouped within a relatively narrow circumference from the set, it is intended that the performances would be exempt from clause (5). However, the Committee considers this fact situation to represent the outer limit of the exemption, and believes that the line should be drawn at that point. Thus, the clause would exempt small commercial establishments whose proprietors merely bring onto their premises standard radio or television equipment and turn it on for their customers' enjoyment, but it would impose liability where the proprietor has a commercial "sound system" installed or converts a standard home receiving apparatus (by augmenting it with sophisticated or extensive amplification equipment) into the equivalent of a commercial sound system.⁷⁹

Congress also rejected the safe harbor the Court gave to cable television operators⁸⁰ in *Fortnightly*⁸¹ (and *Teleprompter Corp. v. Columbia Broadcasting System, Inc.*).⁸² Section 110(5) did not provide an exemption

It applies to performances and displays of all types of works, and its purpose is to exempt from copyright liability anyone who merely turns on, in a public place, an ordinary radio or television receiving apparatus of a kind commonly sold to members of the public for private use.

Id.

- 78. *Id.* The section of the report relating to the Homestyle Exemption is titled "Mere reception in public." *Id.*
 - 79. Id. at 87, reprinted in 1976 U.S.C.C.A.N. 5659, 5701.
- 80. As noted *supra*, the Court's decisions in *Fortnightly Corp. v. United Artists Television*, *Inc.*, 392 U.S. 390 (1968) and *Buck v. Jewell–LaSalle Realty Co.*, 283 U.S. 191 (1931), distinguished between licensed and unlicensed transmissions to determine whether the recipient of the transmission was infringing on the copyright owner's public performance right.
 - 81. See 392 U.S. § 390 (1968).
 - 82. See 415 U.S. § 394 (1974).

When enacting Section 110(5), Congress noted that the Supreme Court based its decision in *Aiken* decision on two Supreme Court decisions dealing with cable television. In *Fortnightly* and again in *Teleprompter*, where the Court held "a CATV operator was not 'performing' within the meaning of the 1909 statute, when it picked up broadcast signals off the air and retransmitted them to subscribers by

for cable television retransmissions (in rebuttal to the Supreme Court), and commercializing a retransmitted broadcast continued to be what defined an infringing act (affirming the Court). 83 Congress did not, however—as illustrated by the technology-heavy language it used in creating the Homestyle Exemption—resort to a "technology blind" way of achieving this result.

3. The Meaning of "Transmit"

"Transmit" was not defined in the 1909 Act, and thus courts were left to define it, as well as to decide who transmitted and thus publicly performed a copyrighted work.⁸⁴ In the 1976 Act, Congress remedied this omission: "[t]o 'transmit' a performance... is to communicate it by any

cable." The Aiken decision extends this interpretation of the scope of the 1909 statute's right of 'public performance for profit' to a stipulation outside the CATV context and, without expressly overruling the decision in Buck v. Jewell-LaSalle Realty Co., 283 U.S. 191 (1931), effectively deprives it of much meaning under the present law. For more than forty years the Jewell-LaSalle rule was thought to require a business establishment to obtain copyright licenses before it could legally pick up any broadcasts off the air and retransmit them to its guests and patrons.

H.R. REP. NO. 94-1476, at 86–87 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5700–01.

83. H.R. REP. No. 94-1476, at 86 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5700 (stating that the Homestyle Exemption had "nothing to do with cable television systems and the exemptions would be denied in any case where the audience is charged directly to see or hear the transmission"). It should also be noted that the World Trade Organization (WTO) has concluded that the Homestyle Exemption is in violation of Trade Related Aspects of Intellectual Property Rights (TRIPs), an international treaty of which the United States is a signatory. See Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994). A WTO panel found that § 110(5), as amended by the FMLA 1998, was incompatible with Article 11bis(1)(iii) of the Berne Convention because it failed to meet the requirements of Article 11bis(2) of that Convention. Put differently, "since Section 110(5) did not provide authors and composers with at least an equitable remuneration, it was in breach of Article 11bis as incorporated in the TRIPs Agreement." See Makeen F. Makeen, The Reception in Public Dilemma Under U.S. Copyright Law, 58 J. COPYRIGHT SOC'Y U.S. 355, 395-418 (2011) (citing First Oral Statement of the European Communities, United States—Section 110(5) of the US Copyright Act, para. 51, WT/DS 160/R (Nov. 8, 1999); First Written Submission of the European Communities, United States—Section 110(5) of the US Copyright Act, ¶ 77, WT/DS 160/R (Oct. 5, 1999)). Prof. Makeen's article provides an in-depth analysis of the WTO's conclusions regarding how the Homestyle Exemption violates TRIPs.

84. Radio telegraphy was in its infancy, with only extremely limited, experimental use. *See, e.g., Invention of Radio*, WIKIPEDIA, http://en.wikipedia.org/wiki/Invention_of_radio#Wireless_Telegraphy_2 (last visited Apr. 10, 2015).

device or process whereby images or sounds are received beyond the place from which they are sent."85 Yet there are several relevant questions that still need to be addressed with regard to the Transmit Clause. First, while it appears to be facially "technology neutral," (that is, it contains no technology-specific language) the clause is rarely read in a vacuum, but rather is read in conjunction with another section of the 1976 Act that may be reliant on technology, such as the technology-dependent Homestyle Exemption. Second, it is necessary to determine whether "transmit" requires that the sound recording's signal actually be received and performed elsewhere, or whether merely "making the signal available" satisfies the definition. Must there be an actual "third party" recipient/broadcaster of the signal sent through the storeowner's wireless speaker system? Some guidance may be found in recent court interpretations of the Transmit Clause to include the potential audience for a performance, not merely the actual audience. In Cartoon Network LP v. CSC Holdings, Inc. (aka Cablevision),86 the Second Circuit held that the Transmit Clause required a court "to discern who is 'capable of receiving' the performance being transmitted" when "determining whether a transmission is made to the public."87

In that decision, CSC Holdings ("Cablevision") was the operator of a cable television system that allowed its customers to remotely record TV programs using a device called a Remote-Storage DVR (RS-DVR).⁸⁸ For customers who did not have stand-alone VCRs or DVD/DVR players,⁸⁹ this device allowed viewers to record programs in the same manner that these home devices did,⁹⁰ only at a remote location.⁹¹ Various copyright

^{85. 17} U.S.C. § 101 (2012).

^{86.} Cartoon Network LP v. CSC Holdings, Inc. (Cablevision), 536 F.3d 121 (2d Cir. 2008).

^{87.} Fox Television Stations, Inc. v. FilmOn X L.L.C., 966 F. Supp. 2d 30, 38 (D.D.C. 2013) (citing *Cablevision*, 536 F.3d at 134–35 (2d Cir. 2008)).

^{88.} *Cablevision*, 536 F.3d at 124 (2d Cir. 2008).

^{89.} Indeed, by the time Cablevision launched its RS-DVR service, "many cable companies... already offered their customers set-top boxes that added DVR functionality to their subscriptions, and none had been sued for doing so." Rebecca Giblin & Jane C. Ginsburg, We Need to Talk about Aereo: Copyright-Avoiding Business Models, Cloud Storage and a Principled Reading of the "Transmit" Clause 8 (Columbia Law & Economics Working Paper Grp., Paper No. 480, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2443595.

^{90.} Recording programs on a VCR had already been found to be a noninfringing use. See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984).

^{91.} *Cablevision*, 536 F.3d at 124.

owners sued Cablevision for infringement of their public performance rights, claiming that this RS-DVR would "directly infringe their exclusive rights to both reproduce and publicly perform their copyrighted works."92

The Second Circuit reversed the district court's grant of summary judgment against Cablevision, holding that under Sony v. Universal Pictures, 93 as well as National Football League v. PrimeTime 24 Joint Venture, 94 Cablevision's device did not directly infringe. 95 Included in the court's rationale96 was its conclusion that Cablevision's device did not directly infringe⁹⁷ because it was not publicly performing the copyrighted works; its conduct did not meet the definition of "transmit to the public" under the 1976 Act because "the RS-DVR playback... does not involve the transmission of a performance to the public."98 The court focused on determining who constituted the "potential audience" of a given transmission by an alleged infringer in order to evaluate whether the transmission was "to the public."99 It held that "because the RS-DVR system, as designed, only makes transmissions to one subscriber using a copy made by that subscriber... the universe of people capable of receiving an RS-DVR transmission is the single subscriber whose selfmade copy is used to create that transmission."100 Cablevision's activities therefore did not constitute a public performance.¹⁰¹

With regard to who constitutes the "potential audience" of a performance, there is very little guidance present in the case law or by Congress. One option is to look to the distribution right and how courts

^{92.} *Id*.

^{93. 464} U.S. 417 (1984).

^{94. 211} F.3d 10 (2d Cir. 2000).

^{95.} Cablevision, 536 F.3d at 123, 140.

^{96.} The court also provided a lengthy discussion regarding "volitional conduct"—that despite copyright infringement's strict liability standard, "there should still be some element of volition of causation"—it was the individual customer directing the recording and subsequent playback. *Id.* at 130.

^{97.} Cablevision, 536 F.3d at 140.

^{98.} *Id.* at 536 F.3d at 134–135 ("[E]ach RS-DVR transmission is made using a single unique copy of a work, made by an individual subscriber, one that can be decoded exclusively by that subscriber's cable box, only one subscriber is capable of receiving any given RS-DVR transmission.").

^{99.} Id. at 137.

^{100.} Id.

^{101.} *Id.* at 138 ("Given that each RS-DVR transmission is made to a given subscriber using a copy made by that subscriber, we conclude that such a transmission is not 'to the public.").

have construed the "making available" right, ¹⁰² though there is a split in the circuits. A court trying to analogize to "making available" could follow the Fourth and Second Circuits, which hold that making a copy available to the public is a public distribution, even if there is no evidence of someone actually receiving, requesting, or looking at the work. ¹⁰³ Alternatively, courts in the First, Ninth and Eighth Circuits hold that making an offer to distribute does not qualify as a distribution. ¹⁰⁴ Thus, using this latter rationale, a court could find that an actual transmission and infringing broadcast to an audience is required for there to be infringement, rather than merely making the transmission "available," or could find the opposite.

4. Construing Exemptions

While the link between the Transmit Clause and the Homestyle Exemption supports the argument that technology matters, any exemption from copyright infringement may also be limited based on statutory construction. Thus, how courts generally construe the statutory language of § 110(5) has a profound effect on whether a wireless speaker system falls within the Homestyle Exemption. The courts and Congress have provided some guidance beyond the general adage that rights should be construed broadly, and exemptions should be construed narrowly, as exemplified in *Bobbs-Merrill Co. v. Straus*:

[C]opyright statutes ought to be reasonably construed, with a view to effecting the purposes intended by Congress. They ought not to be unduly extended by judicial construction to include privileges not intended to be conferred, nor so narrowly construed as to deprive those entitled to their benefit of the rights Congress intended to grant.¹⁰⁵

^{102. 17} U.S.C. § 106(3) (2012) ("The owner of copyright under this title has the exclusive rights to do and to authorize any of the following: . . . to distribute copies . . . of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending.").

^{103.} See Hotaling v. Church of Jesus Christ of Latter-Day Saints, 118 F.3d 199, 201 (4th Cir. 1997); Elektra Entm't Grp., Inc. v. Barker, 551 F. Supp. 2d 234 (S.D.N.Y. 2008).

^{104.} See London-Sire Records, Inc. v. Doe 1, 542 F. Supp. 2d 153 (D. Mass. 2008); Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146 (9th Cir. 2007); Capitol Records, Inc. v. Thomas, 579 F. Supp. 2d 1210 (D. Minn. 2008).

^{105.} Bobbs-Merrill Co. v. Strauss, 210 U.S. 339, 346 (1908).

Congress emphatically delineated the Homestyle Exemption's outer limit, consigning the further determination of its boundaries to the judiciary. In addition, there is ample evidence that courts already narrowly construe the statutory exceptions to a copyright owner's rights. For example, in *Brilliance Audio, Inc. v. Haights Cross Communications, Inc.*, the Sixth Circuit construed the first sale doctrine narrowly with regard to sound recordings of musical works. In Ninth Circuit has declared that the computer program exception under "Section 117 [of the Copyright Act] defines a narrow category of copying that is lawful per se." And the Eleventh Circuit has held the § 119 exception enacted through the Satellite Home Viewer Act to be a narrow exception.

106. See supra notes 79-83 and accompanying text.

107. See Brilliance Audio, Inc. v. Haights Cross Comme'ns, Inc., 474 F.3d 365, 374 (6th Cir. 2007).

Thus, § 109(b)(1)(A) is best read as providing only a limited exception to the first-sale doctrine for sound recordings of musical works. When considered with the legislative history and the policy rationales underlying the Copyright Act, Congress's use of the phrase "and in the musical works embodied therein" limits the statute's application to only those sound recordings that contain musical works. The language of the statute does not unambiguously apply to audiobooks, and we have found no evidence that it should be so construed.

Id.; see also A&M Records, Inc. v. A.L.W., Ltd., 855 F.2d 368, 369 (7th Cir. 1988) ("Congress passed the Record Rental Amendment in 1984 as a narrow exception to the 'first sale doctrine,' which limits a copyright owner's exclusive right to distribute his copyrighted material to his first sale of that material.").

108. See Sega Enters., Ltd. v. Accolade, Inc., 977 F.2d 1510, 1521 (9th Cir. 1992). The Ninth Circuit affirmed in part and reversed in part the United States District Court for the Northern District of California, in a case involving the copying of a computer program. The lower court stated that § 117 was a narrow exception, a finding of law that was affirmed—albeit briefly—by the appellate court.

Section 117 allows an owner of a program to make a copy where the copy is an essential step in the utilization of the computer program in conjunction with a machine and it is used in no other manner. This narrow exception to the copyright act allows an owner of a program to load it into his computer for use, which involves making a copy in the machine memory.

Sega Enters., Ltd. v. Accolade, Inc., 785 F. Supp. 1392, 1399 (N.D. Cal. 1992) (quotations and citations omitted), aff d in part, rev'd in part, 977 F.2d 1510 (9th Cir. 1992).

109. See CBS, Inc. v. EchoStar Commc'n Corp., 265 F.3d 1193, 1209 (11th Cir. 2001) (holding that the Satellite Home Viewer Act "creates a narrow exception to the generally applicable, and constitutional, Copyright Act"). Other narrowly construed exceptions include the implied license as a defense to copyright infringement. See McIntosh v. N. Cal. Universal Enters. Co., 670 F. Supp. 2d 1069, 1090 (E.D. Cal. 2009) ("A 'narrow exception to the writing requirement' is an implied nonexclusive

Conversely, Congress's vagueness in drafting § 110(5) could support the argument that this section should be construed in a slightly broader manner; its "[l]egislative history is a proper guide in interpreting the somewhat ambiguous notion of a home-type system"¹¹⁰ that qualifies for the exemption. After all, Congress began its report on the 1976 Act by observing that

significant changes in technology have affected the operation of the copyright law. Motion pictures and sound recordings had just made their appearance in 1909, and radio and television were still in the early stages of their development. During the past half century a wide range of new techniques for capturing and communicating printed matter, visual images, and recorded sounds have come into use, and the increasing use of information storage and retrieval devices, communications satellites, and laser technology promises even greater changes in the near future. The technical advances have generated new industries and new methods for the reproduction and dissemination of copyrighted works, and the business relations between authors and users have evolved new patterns.¹¹¹

Thus, while the "outer boundary" language in the legislative history supports a narrowly defined construction of the Homestyle Exception, this

license to use the copyrighted work." (quoting Effects Assocs., Inc. v. Cohen, 908 F.2d 555, 558–559 (9th Cir. 1990)).

Authors are continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressive methods will take. The bill does not intend either to freeze the scope of copyrightable subject matter at the present stage of communications technology or to allow unlimited expansion into areas completely outside the present congressional intent. Section 102 implies neither that subject matter is unlimited nor that new forms of expression within that general area of subject matter would necessarily be unprotected. The historic expansion of copyright has also applied to forms of expression which, although in existence for generations or centuries, have only gradually come to be recognized as creative and worthy of protection.

H.R. REP. NO. 94-1476, at 51-52 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5665-64.

_ |i

^{110.} Broadcast Music, Inc. v. Claire's Boutiques, Inc., 949 F.2d 1482, 1493 (7th Cir. 1991).

^{111.} H.R. REP. No. 94-1476, at 47 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5660 (indicating that in determining what would be copyrightable in the future, Congress purposely chose broad language to encompass future mediums of expression with copyrightability of original works of authorship).

same legislative history also provides support for broadly construing § 110(5) to encompass technologies not anticipated at the time of its enactment.¹¹²

C. THE WIRED SPEAKER SYSTEM ORIGINALLY ENVISIONED

When Congress codified the *Aiken* Exemption into § 110(5) of the Copyright Act, the stereo system envisioned consisted of a radio receiver connected via wires to one or more speakers, either contained within the radio or attached to the radio receiver.

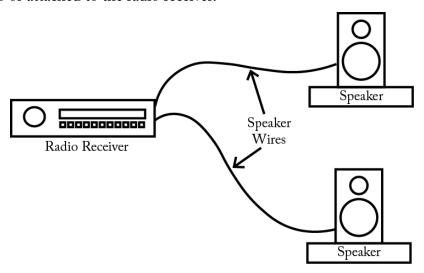


Figure 1: Basic Diagram of a Radio Receiver with Wired Speakers¹¹³

In this system depicted in Figure 1, when the signal broadcasted from the radio station reaches a radio receiver, it converts the signal into an electrical impulse.¹¹⁴ The receiver then sends this electrical impulse through an internal or external wire to the speaker or speakers. Finally, the speakers translate the electrical impulse into pulses that vibrate the speaker's woofer and tweeter, creating the sound we hear.

^{112.} In its legislative history, Congress was cognizant that unanticipated future technologies could be used to create copyrighted works, and did not want to constantly have to revisit the Act to expand what kinds of works should be covered.

^{113.} Adapted from U.S. Patent Application Serial No. 2008/0137879A1 fig. 1 (filed April 24, 2006).

^{114.} Tom Harris, *How Speakers Work*, HOW STUFF WORKS, http://electronics.howstuffworks.com/speaker5.htm (last visited Nov. 23, 2014).

D. DIY: HOOKING UP WIRELESS SPEAKERS TO YOUR HOME STEREO

As illustrated in Figure 2, a wireless speaker system consists of a transmitter that attaches to (or is part of) the radio receiver and wireless speakers. The wireless speakers are essentially combination radio receivers/speaker units. Rather than receiving the audio signal through audio cables like wired speakers, wireless speakers receive the audio signal through either open radio waves, a "Bluetooth" dedicated signal, or a wireless Ethernet system (e.g., Wi-Fi).¹¹⁵ The speakers then translate the signal into sound. "Wireless" refers to the lack of a wire that sends sound from the stereo receiver to the speaker, not a lack of all wires. Thus, while some wireless speakers have cords connecting the speaker to an electrical outlet (other speaker types are powered by batteries), these are still called "wireless." ¹¹⁶

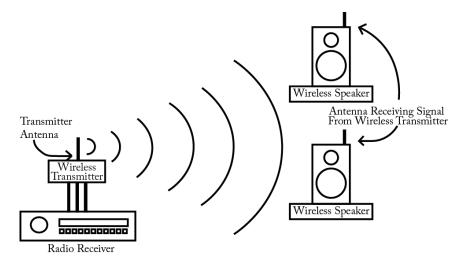


Figure 2: Basic Diagram of a Radio Receiver with wireless speakers¹¹⁷

Some newer audio receivers have built-in transmitters, while older models may be modified for wireless speakers by attaching a transmitter to

^{115.} Your Guide to Buying Wireless Home Theater Speakers, EBAY (June 9, 2014), http://www.ebay.com/gds/Your-Guide-to-Buying-Wireless-Home-Theater-Speakers-/ 10000000177632035/g.html (last visited Jan. 30, 2015).

^{116.} *Id*

^{117.} Adapted from U.S. Patent Application Serial No. 2008/0137879A1 fig. 1 (filed April 24, 2006).

the audio receiver. All wireless speakers contain built-in receivers that pick up the signal sent by the wireless transmitter. As discussed *infra*, deciphering what Congress meant with regard to both "receiving apparatus" and "further transmission" has a direct effect on whether a wireless speaker system falls within the Homestyle Exemption. These required features must be examined not in the abstract, but with regard to the specific technology used in each of the three types of wireless speaker systems.

E. THE THREE ELEMENTS OF THE CURRENT *AIKEN*/HOMESTYLE EXEMPTION TEST

As previously stated, Congress intended to "exempt small commercial establishments whose proprietors merely bring onto their premises standard radio or television equipment and turn it on for their customers' enjoyment." To successfully claim the § 110(5) exemption, courts require defendants to satisfy three technology-specific elements. First their system "must be of a kind commonly used in private homes." 120

118. H.R. REP. No. 94-1476, at 87–88 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5700-01.

119. See Hickory Grove Music v. Andrews, 749 F. Supp. 1031, 1037 (D. Mont. 1990) ("[D]efendants carry the burden of proving that their restaurant falls within the framework of the § 110(5) exemption.").

120. See id. (citing Int'l Korwin Corp. v. Kowalczyk, 855 F.2d. 375, 378 (7th Cir. 1988)). Through the enactment of the Fairness in Music Licensing Act (FIMLA) of 1998, § 110(5)(B) was added, and the former § 110(5) was recodified as § 110(5)(A). This new section was an attempt to expand and clarify the limits on the size of the eating/drinking establishment and the number of speakers and/or televisions that can be used based on the business's physical size. Section 110(5)(B) did not repeal the original Homestyle Exemption.

Rather, it add[ed] a new and additional exemption for performances of nondramatic musical works that is based not on the use of "homestyle" receiving equipment but rather on the size of the establishment and the number of speakers or television sets used to transmit the music. The FIMLA grants a blanket licensing exemption to retail establishments that are smaller than 2000 square feet and to food service or drinking establishments that are smaller than 3750 square feet.

Lawrence R. Helfer, World Music on a U.S. Stage: A Berne/TRIPs and Economic Analysis of the Fairness in Music Licensing Act, 80 B.U. L. REV. 93, 97 (2000). Section 110(5)(B) retains the proviso of "no transmission" of Section 110(5)(A). 17 U.S.C. § 110(5)(B)(iv) (2012). It states:

Notwithstanding the provisions of section 106, the following are not infringements of copyright: . . . communication by an establishment of a transmission or retransmission embodying a performance or display of a nondramatic musical work intended to be received by the general public, originated by a radio or television broadcast station licensed as

Second, it must have only a single receiving apparatus.¹²¹ And third, the performances cannot "be 'further transmitted' to the public."¹²²

1. The First Element: Commonly Found in a Home

The first element—that the system "must be of a kind commonly used in private homes"¹²³—has a dynamic demarcation line that moves with the state of the contemporary technology as innovations transition from commercial to home use. Congress attempted to provide courts with the following guidance:

Factors to consider... include the size, physical arrangement, and noise level of the areas within the establishment where the transmissions are made audible or visible, and the extent to which the receiving apparatus is altered or augmented for the purpose of improving the aural or visual quality of the performance for individual members of the public using those areas.¹²⁴

Congress clearly anticipated that courts would, and should, examine the technology at issue when making a determination regarding the Homestyle Exemption. Scholars have also noted Congress's awareness of this issue when it first proposed the exemption, and its refusal to address those who raised concerns that technological advances might undermine the protection based on the "homestyle receiving apparatus" language. The witnesses at the congressional hearings expressed concern that defining an exemption "in terms of a technological norm will fail to

such by the Federal Communications Commission, or, if an audiovisual transmission, by a cable system or satellite carrier, if . . . the transmission or retransmission is not further transmitted beyond the establishment where it is received.

Id. The intricacies of $\S 110(5)(B)$ are not pertinent to the focus of this Article. For further information regarding $\S 110(5)(B)$, see Helfer, *supra*.

^{121.} *Hickory Grove Music*, 749 F. Supp. at 1037 (citing Int'l Korwin Corp. v. Kowalczyk, 855 F.2d. 375, 378 (7th Cir. 1988)).

^{122.} See id.

^{123.} See id.

^{124.} H.R. REP. NO. 94-1476, at 87 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5701.

^{125.} See Wilk, supra note 71, at 785 (noting that "the standard is not stable, as advances in technology continually redefine the parameters of the homestyle equipment standard").

^{126.} Id. at 839–40 (citing Copyright Law Revision: Hearings on H.R. 4347, 5680, 6831, 6835 Before Subcomm. No. 3 of the H. Comm. on the Judiciary, 89th Cong. (1965)).

reflect the changes in that norm."¹²⁷ The legislative history¹²⁸ and use of the phrase in the 1976 Act "now known or later developed"¹²⁹ also intimates that Congress anticipated new technologies. This language in the 1976 Act has already allowed new technologies to be considered "tangible mediums of expression" without an act of Congress, unlike what was required to encompass new technologies under earlier versions of the Act.

Since Congress was highly cognizant of technological advancement and its effect on the proliferation of copyrightable subject matter, arguably the interpretation of § 110(5) should also expand to encompass new technologies based on their proliferation in residences. Indeed, historical applications of the Homestyle Exemption demonstrate that, as commercial uses found their way into homes, courts adjusted their holdings accordingly. Appellate courts, when weighing in on a § 110(5) exemption, are already keen as to whether the system installed in the business had been altered from a common residential/home system to a more commercial one. A "company may not claim the exemption if it configures and uses home-type components in a manner not commonly found in a home." ¹³⁰

For example, in *Broadcast Music, Inc. v. Claire's Boutiques*, when considering whether the receiving apparatus was one "commonly used in private homes," the Seventh Circuit examined whether "the company use[d] any non-home-type components in its stereo system" because such use would render the system "not home-type." The appellate court opined that in determining whether a home-style receiving apparatus has

^{127.} Id. (citing Copyright Law Revision: Hearings on H.R. 4347, 5680, 6831, 6835 Before Subcomm. No. 3 of the H. Comm. on the Judiciary, 89th Cong. (1965); David E. Shipley, Copyright Law and Your Neighborhood Bar and Grill: Recent Developments in Performance Rights and the Section 110(5) Exemption, 29 ARIZ. L. REV. 475, 481 (1987)). The congressional witnesses, however, viewed the exemption from the opposite side: that "establishments currently using commercial equipment and paying licensing fees will gradually become exempt as technological advances enable them to make use of homestyle equipment." Id.

^{128.} See infra note 79 and accompanying text.

^{129. 17} U.S.C. § 102(a) (2012) ("Copyright protection subsists... in original works of authorship fixed in any tangible medium of expression, *now known or later developed*, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." (emphasis added)).

^{130.} Broadcast Music, Inc. v. Claire's Boutiques, 949 F.2d 1482, 1493 (7th Cir. 1991) (citing Hickory Grove Music v. Andrews, 749 F. Supp. 1031, 1037 (D. Mont. 1990)).

^{131.} Id. at 1493.

been adapted into one for commercial use, the court needed to examine the system and whether it was equipped with additional components that expanded the receiver's normal capabilities.¹³²

In *Claire's*, the court analyzed a system where the receiver was located in the back room of each of the defendant's stores, with wires connecting it to speakers on the sales floor.¹³³ At issue was whether the receiving apparatus used in each of the Claire's shops was one "commonly used in private homes."¹³⁴ The court examined whether "the company use[d] any non-home-type components in its stereo system," or augmented a homestyle stereo system¹³⁵ because such use would render the system "not home-type."¹³⁶ A determination on these facts would be dispositive to the court's holding because a company "may not claim the exemption if it configures and uses home-type components in a manner not commonly found in a home."¹³⁷ Based on the facts presented, the appellate court affirmed the lower court's finding that the defendant's systems used in the stores fell within the Homestyle Exemption.¹³⁸

There are also many examples of different courts reaching opposite conclusions about the same technology. In 1988, when in-wall speaker wires were not commonly found in homes, Judge Prado in the Western District of Texas found that having in-wall wiring for speakers and locating the stereo receiver in a separate room was "commercial in nature." Yet, in 1991, the internal wiring used in the Claire's Boutiques

^{132.} Id. at 1495.

^{133.} Id.

^{134.} *Id* at 1492–94.

^{135.} See Sailor Music v. Gap Stores, Inc., 516 F. Supp. 923 (S.D.N.Y. 1981), aff'd, 668 F.2d. 84 (2d Cir. 1981). In Sailor Music, the district court found that the defendant's stores were very big—over 3500 square feet—and thus were not the "small commercial establishment" envisioned by Congress. The court further found that the stores had augmented the homestyle stereo system to accommodate the large size, converting them "into the equivalent of a commercial sound system," thus failing two of the three elements required for a successful Aiken Exemption defense. Id.

^{136.} Broadcast Music, 949 F.2d at 1493.

^{137.} *Id.* (citing Hickory Grove Music v. Andrews, 749 F. Supp. 1031, 1037 (D. Mont. 1990)).

^{138.} Id. at 1495.

^{139.} Merrill v. Bill Miller's Bar-B-Q Enters., Inc., 688 F. Supp. 1172, 1175 (W.D. Tex. 1988); see also Hickory Grove, 749 F. Supp. at 1038. Twenty-five years ago, courts determined that "recessed ceiling speakers attached to a receiving apparatus by a substantial length of hidden wiring do not constitute 'home-type' systems." Hickory Grove, 749 F. Supp. at 1038 (citing Int'l Korwin Corp. v. Kowalczyck, 855 F.2d 375, 378 (7th Cir. 1988)). Yet today, these setups are commonly found in residences, and are often

stores was afforded "minimal weight."¹⁴⁰ The court reasoned that, while such wired systems might not be prevalent in homes,¹⁴¹ the system bore a striking resemblance to the four speakers installed by Aiken, which Congress declared as the "outer limit."¹⁴² Courts have been dynamic in their holdings as specific technological advancements become more widely available; there is ample evidence that they do not maintain a static view of technology's proliferation from commercial settings to home use.

Today, because many homes contain internally wired stereo systems—often installed during the home's construction—a store's in-wall stereo wires would likely fall within the Exemption. Just as high-quality, digital, single-lens reflex cameras (now so easy to use that even a monkey can take great "selfies" and flat screen televisions formerly were out of reach for most consumers, their now-widespread adoption has moved them from "business only" to general use. Likewise, internally wired speaker systems and high-end digital receivers now fall under the Homestyle Exemption's umbrella.

installed while a home is being built. See, e.g., Running the Wires for Structured Wiring, STRUCTURED HOME WIRING, http://www.structuredhomewiring.com/Structured Wiring.aspx (last visited Nov. 23, 2014).

- 140. Broadcast Music, 949 F.2d at 1494.
- 141. *Id.* It seems that in the 1990s, people living in the Seventh Circuit were more likely to have familiarity with these stereo systems than people living in Montana.
- 142. *Id.* The Seventh Circuit also noted that "if Congress wanted the rule to be that the receiver must be in the same room as the speaker for the exemption to apply, it could have easily said so." *Id.* at 1495.
- 143. Jordan Weissmann, If a Monkey Takes a Selfie, Who Owns the Copyright?, SLATE (Aug. 6, 2014), http://www.slate.com/blogs/moneybox/2014/08/06/monkey_selfie_who _owns_the_copyright.html (last visited Aug. 31, 2014). In its recently released, updated Compendium draft, the Copyright Office responded to this query:

The copyright law only protects "the fruits of intellectual labor" that "are founded in the creative powers of the mind." Because copyright law is limited to "original intellectual conceptions of the author," the Office will refuse to register a claim if it determines that a human being did not create the work.... The Office will not register works produced by nature, animals, or plants. Likewise, the Office cannot register a work purportedly created by divine or supernatural beings, although the Office may register a work where the application or the deposit copy(ies) state that the work was inspired by a divine spirit.

U.S. Copyright Office, § 306 The Human Authorship Requirement, in COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES 54 (public draft Aug. 19, 2014) (citations omitted), available at http://copyright.gov/comp3/docs/compendium.pdf; U.S. Copyright Office, § 313.2 Works That Lack Human Authorship, in COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES 54 (public draft Aug. 19, 2014) (citations omitted), available at http://copyright.gov/comp3/docs/compendium-full.pdf.

Similarly, while once rare, wireless receiver/audio/stereo systems are now very common in homes. All of the major audio manufacturers and distributors extensively market wireless speakers (some of which are made to adapt existing wired systems), as well as entire home entertainment systems that rely exclusively on wireless speakers.¹⁴⁴ That there are currently three separate forms of technology in competition in the wireless stereo market is itself an indication of their growth and adoption by audiophile consumers. Some contemporary receiving apparatuses have built-in transmitters for use with compatible wireless speakers and are commonly sold for home use. 145 Other wireless speaker systems have been developed to adapt to a standard stereo receiver using a transmitter attached to the receiver, which then transmits the signal to the speakers. 146 One should question whether it matters if the system is added to an older receiver or if it is integrated. Or is this the wrong inquiry—should the threshold instead be whether the device is available and commonly used by consumers?

Thus, the movement of technology from purely commercial settings into homes is of utmost importance when evaluating a stereo system for compliance with the Homestyle Exemption. To be blind to either technological advancement or its proliferation would be a mistake for any court when issuing a finding of fact or conclusion at law with regard to a § 110(5) defense. While some systems would fit within this element's *Aiken* safe harbor, ¹⁴⁷ there is still the matter of the explicit language in the statute regarding a "single receiving apparatus" and the prohibition on "retransmission" beyond what courts have allowed—that is, allowing the receiver and speakers to be located in adjoining rooms, connected via inwall wires.

^{144.} See, e.g., Press Release, Sonos, Introducing the Sonos PLAY:1 (Oct. 14, 2013), available at http://www.sonos.com/press/press-releases/introducing-sonos-play-1; Press Release, Bose, Bose Introduces New SoundLink Mini Bluetooth Speaker II (June 4, 2014), available at http://globalpressroom.bose.com/us-en/pressrelease/view/1509.

^{145.} See, e.g., Sonos Connect, SONOS, http://www.sonos.com/shop/connect (last visited Sept. 1, 2015).

^{146.} Šee, e.g., Bose Bluetooth Audio Adapter, BOSE, http://www.bose.com/products/speaker_accessories/bose-bluetooth-audio-adapter.html (last visited Sept. 1, 2015).

^{147.} As noted *supra* in note 119, a defendant must demonstrate that (1) the receiving apparatus is a kind commonly used in private homes; (2) the broadcast cannot be further transmitted to the public; and (3) the defendant's business is a small commercial establishment. Hickory Grove Music v. Andrews, 749 F. Supp. 1031, 1037 (D. Mont. 1990) (citing Int'l Korwin Corp. v. Kowalczyk, 855 F.2d 375, 378 (7th Cir. 1988)).

2. The Second Element: The Quandary of Multiple Receivers

The second element to satisfy for the Homestyle Exemption requires that the system have a "single receiving apparatus." Because wireless systems are, by their nature, composed of multiple receivers—the base that receives the radio broadcast signal and the receivers located in each speaker that receive signals from the base—they could be ineligible for the Homestyle Exemption. This will depend on whether a court construes "a single receiving apparatus" to strictly mean just the receiver component, or more broadly to encompass the entire stereo receiving system. Under a strict construction of the statute, wireless systems likely fall beyond the Homestyle Exemption's outer limits, even though the additional receivers are merely substitutes for speaker wires.

Alternatively, a court could interpret the receivers in wireless speakers as part of a "single receiving apparatus." *Claire's Boutiques* defines "receiving apparatus" as encompassing "the receiver, speakers, antenna and wiring." The Seventh Circuit concluded that this was the proper definition Congress intended, because

Congress could have, as it does in the legislative history, simply used the word "receiver" if it had wanted to limit the analysis. In addition, "apparatus" is defined as "the totality of means by which a designated function is performed * * * [or] a group of machines used together * * * to accomplish a task. A stereo system fits neatly into this definition of apparatus; it uses all its components to perform the task of converting radio waves into audible sound waves.¹⁵¹

3. The Third Element: The Dilemma of the Second Transmitter

Finally, § 110(5) requires that there be no retransmission of the radio signal. A retransmission—even one that merely goes from the receiver

^{148.} Id. at 1037.

^{149. 17} U.S.C. § 110(5)(A) (2012) ("Notwithstanding the provisions of section 106, the following are not infringements of copyright: communication of a transmission embodying a performance... of a work by the public reception of the transmission on a single receiving apparatus of a kind commonly used in private homes..." (emphasis added)).

^{150.} Broadcast Music, Inc. v. Claire's Boutiques, Inc., 949 F.2d 1482, 1493 (7th Cir. 1991).

^{151.} Id. (citations omitted) (modifications in original).

^{152. 17} U.S.C. § 110(5)(A)(ii) (stating that the exception does not apply if "the transmission thus received is further transmitted to the public"); Hickory Grove Music v. Andrews, 749 F. Supp. 1031, 1037 (D. Mont. 1990) (citing Int'l Korwin Corp. v. Kowalczyk, 855 F.2d. 375, 378 (7th Cir. 1988)).

to the speaker—could render the Homestyle Exemption inapplicable. Yet such a retransmission is a key feature of any type of wireless speaker system currently available. For a wireless speaker system to function, the sound signal must be retransmitted from the stereo base to the speaker's receiver. Thus, the Seventh Circuit's holding in *Claire's Boutiques*, defining further transmission as using "some device or process that expands the normal limits of the receiver's capabilities," could be a fatal blow for wireless systems.

This final element also illustrates how the Transmit Clause and technology may be irretrievably linked, and how the clause is open to different interpretations. Is a transmission that can be heard on speakers located outside the store's system (i.e., an "open" system) what Congress intended to prohibit? Or is transmission within a "closed" system—whereby the radio signal is limited to the store's speakers—also within the intended definition of "transmit" with regard to a public performance right, and thus a deal-breaker for the Homestyle Exemption? If Congress intended that there could be no retransmission outside of a closed system, then we need to address whether there must be an actual recipient of the signal who intercepts and broadcasts the signal in a nearby store. If not—that is, if "transmit" does not require that a potential audience be capable of receiving the signal—then the form of wireless speakers also matters. The next Part discusses these issues.

III. APPLYING AIKENTO WIRELESS SPEAKERS

Regardless of whether they are built-in or added-on, contemporary wireless systems come in three forms. First, there are those that transmit over a standard radio frequency (RF). A second type also transmits an RF signal, but in a closed system, such as Bluetooth. Finally, there are those

^{153.} See infra notes 162–175 and accompanying text.

^{154.} See Your Guide to Buying Wireless Home Theater Speakers, EBAY (June 9, 2014), http://www.ebay.com/gds/Your-Guide-to-Buying-Wireless-Home-Theater-Speakers-/1000000177632035/g.html (last visited Jan. 30, 2015); see also J.D. Biersdorfer, Wirelessly Moving Music from Gadgets to the Stereo, N.Y. TIMES (Sept. 24, 2008), http://www.nytimes.com/2008/09/25/technology/personaltech/25basics.html.

^{155.} Broadcast Music, Inc. v. Claire's Boutiques, 949 F.2d 1482, 1495 (7th Cir.

^{156.} Generally, Bluetooth is a communications system that "exchanges data over short distances using radio transmissions." *Welcome to Bluetooth Technology 101*, BLUETOOTH, http://www.bluetooth.com/Pages/Fast-Facts.aspx (last visited Oct. 2, 2014). The transmission distance for a Bluetooth signal is much shorter than that used in

that transmit through an internal intranet Wi-Fi¹⁵⁷ system, dubbed by the consumer electronics industry as "Play-Fi."¹⁵⁸ While they can be generalized as systems where a transmitter sends a signal to receivers located in wireless speakers, all three work in very different ways that could affect how a court views their eligibility for the Homestyle Exemption. Merely relying on radio signals does not make them the same as traditional radio signals used by AM and FM radio stations to transmit their broadcasts. To treat them as such through "technology blindness" ignores fundamental differences—based on how the exemption is construed—that could otherwise find the equipment within the exemption's safe harbor. Thus, for each of the three forms of wireless speaker systems, we must examine whether this transmission from the receiver to the wireless speakers can be seen otherwise than constituting a prohibited retransmission.¹⁵⁹

For many courts, one particularly relevant characteristic of wireless systems is whether the system is technologically "open" or "closed." In a

mobile phones, television, or FM radio signals. *Id.* For a more detailed discussion, see *infra* notes 166–168 and accompanying text. *See also* IEEE STANDARD FOR INFORMATION TECHNOLOGY 802.15.1-2005 (2005); *Specification Adopted Documents*, BLUETOOTH, https://www.bluetooth.org/en-us/specification/adopted-specifications (last visited Sept. 1, 2015).

157. According to "How Stuff Works," Wi-Fi is a wireless network that uses radio waves, just like cell phones, televisions and radios do. . . .

. . .

- 1. A computer's wireless adapter translates data into a radio signal and transmits it using an antenna.
- 2. A wireless router receives the signal and decodes it. The router sends the information to the Internet using a physical, wired Ethernet connection.

The process also works in reverse, with the router receiving information from the Internet, translating it into a radio signal and sending it to the computer's wireless adapter.

Marshall Brain, Tracy V. Wilson & Bernadette Johnson, *How Wi-Fi Works*, HOW STUFF WORKS, http://computer.howstuffworks.com/wireless-network1.htm (last visited Sept. 7, 2014); *see also* IEEE STANDARD FOR INFORMATION TECHNOLOGY 802.11-2012 (2012); *Wi-Fi*, WIKIPEDIA, http://en.wikipedia.org/wiki/Wi-Fi (last visited Sept. 7, 2014).

158. Ty Pendlebury, Streaming-Audio App Play-Fi Takes on Sonos and AirPlay, CNET (Sept. 24, 2013, 11:15 AM), http://www.cnet.com/news/streaming-audio-app-play-fi-takes-on-sonos-and-airplay. For a complete explanation of Play-Fi, see *infra* notes 172–175 and accompanying text.

159. 17 U.S.C. § 101 (2012) ("To 'transmit' a performance... is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent.").

closed system, the transmitter specifically limits which speakers can receive the data. In contrast, an open system indiscriminately provides information that can be received both by the intended speakers and by others nearby.

Wired systems, by nature, are "closed" systems, and this feature could lead a court to conclude that it is the "closed" nature of wired systems should be considered when analyzing wireless speaker technologies. As discussed supra, a closed system's potential audience is limited to customers in the store. While Bluetooth and encrypted Play-Fi system speakers operate via a closed system, traditional RF and unencrypted Play-Fi are "open"; the potential audience is much broader, and includes whoever can locate a speaker to capture and perform the musical work/sound recording. And whether courts will consider the difference between open and closed systems in applying the Homestyle Exemption depends on whether courts take technology into consideration. Based on the above discussions, courts should examine each of the three systems using the following assumptions: (1) that Congress intended there be no retransmission outside a closed system, and (2) that "making the transmission available" meets the definition of retransmission, that is, no actual interception and broadcast by another party is necessary for there to be a "retransmission." 161

A. MHZ SO GOOD: TRADITIONAL WIRELESS LIKELY DOES NOT QUALIFY FOR THE HOMESTYLE EXEMPTION

The oldest form of wireless speakers relies on standard radio waves to transmit the signal from the base receiver to the wireless speakers. It is comprised of a Radio Frequency (RF) transmitter unit and speakers containing radio receivers to capture the signal. The transmitter can either be integrated in the stereo receiver, or can be a separate attached unit, and typically operates at a frequency near 900 MHz or 2.4 GHz, within one of the ISM frequency bands reserved for industrial, scientific, medical, and consumer use. The signal "can be transmitted over a range of 150 to 300

^{160.} In Am. Broad. Cos. v. Aereo, Inc., the Supreme Court did not discuss or dispute this holding by the Second Circuit. 134 S. Ct. 2498, 2504–07 (2014).

^{161.} See supra notes 86–103 and accompanying text.

^{162.} ISM band frequencies were set aside by the FCC to prevent industrial and scientific instruments such as microwave ovens and RF heaters from interfering with AM/FM radio and other FCC regulated frequency transmissions. These unregulated bands are also used for consumer devices such as Wi-Fi LAN routers, cordless phones,

feet and is not obstructed by walls, ceilings, or floors."¹⁶³ It is an "open" system: the radio signal is not exclusively sent to the speakers in the store where the receiver is located. Use of these standard, non-dedicated radio frequencies means that there can be interference and interception of the signal reception from other wireless devices. ¹⁶⁴ Any traditional wireless speaker within range of the transmission can pick up the signal and play the sound. There is a reason that modern cell phone signals are encrypted—just ask Tom Cruise, whose conversations with his then-wife Nicole Kidman were intercepted in the early days of cellphone technology. ¹⁶⁵

Not only is the signal quality poor and the sound quality equally so in this first generation of wireless speaker technology, but it is also the system least likely to comply with the Homestyle Exemption. Anyone with a similar speaker in a location within range can intercept and hear the retransmitted signal, such as the store next door's owner. Courts can interpret this kind of "retransmission to the public" to be one that requires a license, as unauthorized use is a very real possibility with this system. It is highly unlikely that a court would find this antiquated technology compliant with the Homestyle Exemption.

B. YOUR IPHONE'S BLUETOOTH CONNECTION

The second form of wireless speaker systems uses "Bluetooth" technology. Bluetooth also transmits via an RF signal;¹⁶⁶ however, there are important differences between the traditional system and a Bluetooth system. One key distinction is that the Bluetooth transmitter and speakers form a "closed network," meaning there is a single "pairing" between the

and wireless speakers, so that consumers do not need to license frequency spectrum to make a phone call. See FCC 47 C.F.R. 18 (2007); JOE DICHOSO, FCC CHIEF OF EQUIPMENT AUTHORIZATION BRANCH, FCC BASICS OF UNLICENSED TRANSMITTERS (2007), available at https://transition.fcc.gov/oet/ea/presentations/files/oct07/Oct_07-Basics_of_Unlicensed_Trans-JD.pdf; see also Conversation with Mike Bobelak, Heartland Field Sales Specialist, Polk Definitive Technology (May 8, 2014) (notes on file with author).

163. Your Guide to Buying Wireless Home Theater Speakers, EBAY (June 9, 2014), http://www.ebay.com/gds/Your-Guide-to-Buying-Wireless-Home-Theater-Speakers-/10000000177632035/g.html (last visited Jan. 30, 2015).

164. Id.

165. David Rosenzweig, *Paparazzo Indicted in Interception of Cruise-Kidman Telephone Call*, L.A. TIMES (Dec. 11, 1998), http://articles.latimes.com/1998/dec/11/local/me-52989.

166. How Does Bluetooth Work?, SCIENTIFIC AM., http://www.scientificamerican.com/article/experts-how-does-bluetooth-work (Nov. 5, 2007); Bluetooth, WIKIPEDIA, http://en.wikipedia.org/wiki/Bluetooth (last visited Sept. 7, 2014).

wireless transmitter and the speaker. The system's user links the receiver's wireless transmitter signal to a specific speaker, and only those speakers with this "permission" (i.e., those paired with the transmitter) can emit the sounds sent from the system's base. Usually, these systems have one speaker containing a receiver (the "master") and a second "slave" speaker attached to the "master" via a wire. The master speaker receives the signal from the base, and the second speaker receives the sound signal from the master speaker in the same manner a wired speaker does. The same manner a wired speaker does.

This is unlike the RF traditional wireless speaker system, because with Bluetooth no speakers other than those "paired" with the transmitter are able to receive the signal. Because the user controls the system and the pairing process, the signal cannot be used outside of the closed system. Thus a store next door cannot use its own "unpaired" speakers to capture the signal and then broadcast the signal in its store. Another distinction is the range of a Bluetooth system. Bluetooth operates using shortwavelength, ultra-high frequency (UHF) radio waves that are much shorter than the traditional RF wireless systems. These hallmarks of Bluetooth make it the wireless speaker system most likely to fall within the Homestyle Exemption. A court analyzing this technology with regard to the public performance right is unlikely to find that the broadcast is capable of being "retransmitted to the public." Bluetooth's technological limitations are likely its regulatory savior.

C. THE UNCERTAIN OUTCOME FOR PLAY-FI

"Play-Fi"¹⁷¹ is the industry term for using a wireless "intranet" network—a dedicated local "Wi-Fi" wireless router in the home—for transmitting and receiving the sound signal from the stereo receiver to the wireless speakers, respectively.¹⁷² The Play-Fi transmitter (attached to the

^{167.} In a Bluetooth system, the transmitter sends a compressed data file, which is translated into sound upon reaching the speaker. *See How Does Bluetooth Work?*, SCIENTIFIC AM. (Nov. 5, 2007), http://www.scientificamerican.com/article/experts-how-does-bluetooth-work.

^{168.} There are a few rare systems that operate using a matched pair of speakers, whereby the signal is split between that pair. *See* Bobelak, *supra* note 162.

^{169.} *Id.*

^{170.} See Welcome to Bluetooth Technology 101, BLUETOOTH, http://www.bluetooth.com/Pages/Fast-Facts.aspx (last visited Oct. 2, 2014).

^{171.} See Pendlebury, supra note 158.

^{172.} Bobelak, *supra* note 162; *see also* Mike Giffin, *DTS Play-Fi Wireless Audio Explained*, WREN SOUND, http://wrensound.com/dts-play-fi-wireless-audio-explained

receiver base) first sends out a signal through the intranet network router into the home's Wi-Fi system to establish a "hand shake" between it and the wireless speaker. Once the connection has been established, the base receiver's transmitter sends a radio signal to the intranet Wi-Fi and onward to any speakers connected to the network for translation into sound. This system has the advantage of mobility—users can control the music station through a smart phone or other mobile computing device. If the Wi-Fi network used is encrypted or password protected, then only those who have access to the network will be able to broadcast the signal on their compatible wireless speakers. If it is an "open" network—meaning the network is not encrypted and no password is needed to access the system and to pick up the transmission signal—then any compatible speaker within range of the system's router can translate and "perform" the copyrighted work sent through the system.

The determination whether a Play-Fi system falls within the exemption is not as straightforward as either the traditional RF or the Bluetooth systems. The unencrypted signal more closely resembles the traditional RF system, while the encrypted intranet look like a Bluetooth receiving apparatus system. Thus, to have a chance of falling within the Homestyle Exemption, a storeowner should use an encrypted signal.

D. STREAMING MATTERS

Another challenge for courts interpreting § 110(5) is whether to extend the statute to cover streaming broadcasts. As technology for receiving radio broadcasts has evolved, so has the debate over copyright infringement and exemptions. Suppose one of the businesses in our Introduction chooses to "perform" music in its store via an Internet radio or audiovisual streaming site. Because streaming audio is a "digital broadcast" transmission, in addition to owners of the rights to musical compositions under § 106(4), owners of the performance rights to sound

⁽last visited Jan. 30, 2015) ("The Play-Fi protocol uses WiFi as its wireless communication path."). A common use of Play-Fi, streaming content from an online music account, would not qualify for the Homestyle Exemption, which only applies to broadcast radio stations. *See infra*, Section III.D.

^{173.} Bobelak, supra note 162.

^{174.} *Id*.

^{175.} *Id.*; see also DTS, INC., DTS PLAY-FITM: MULTIROOM WIRELESS STREAMING ENABLES A NEW HOME AUDIO ECOSYSTEM 4–5 (2013), available at http://www.dts.com/~/media/7cd1fbdd3663497f9608f7a220bcd1ae/9302K76100A_WP_DTS_PlayFi.pdf.

recordings would have § 106(6)176 rights. TV While the work is "intended to be received by the general public," or at least those who have an Internet connection, it is less clear whether using an Internet radio station as the source of the transmission would fall within the safe harbor of § 110(5).178 "Live streaming" from a service such as Pandora (using either a computer or another device as the "receiving apparatus") requires examination of how this technology fits under the law.¹⁷⁹ It is now common to listen to music via a digital audio transmission through one's smartphone. Section 110(5) does not contemplate the use of digital audio transmissions—even § 110(5)(B) limits its use to over-the-air radio and television broadcasts, and cable/satellite non-broadcast transmissions. 180 Congress could not have imagined the existence of the streaming audio and video either in 1976, when § 110(5)(A) was enacted, or in 1998 when it added § 110(5)(B) via the Fairness in Music Licensing Act. 181 Section 110(5) merely states, "notwithstanding the provisions of section 106, the following are not infringements of copyright."182 This would thus appear to include the public performance rights granted in both § 106(4) and § 106(6). This is another dimension to consider when determining if a business owner needs a license to perform the streaming music signal in her store, or whether the Homestyle Exemption covers digital public performance rights.

^{176. 17} U.S.C. § 106(6) (2012) ("[T]he owner of copyright under this title has the exclusive rights to do and to authorize any of the following: in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.").

^{177.} See supra notes 164–171 and accompanying text. While § 110(5)(A) does not specify that the communication of the performance by the public be via an over-the-air radio or television broadcast, § 110(5)(B) does specify the types of public performance transmissions that fall within its exemption.

^{178. § 110(5)(}B).

^{179.} Live Streaming is defined as "transmit[ing] or receive[ing] live video and audio coverage of (an event) over the Internet." *Live Streaming Definition*, OXFORD DICTIONARY, http://www.oxforddictionaries.com/us/definition/american_english/live-stream (last visited Oct. 5, 2014).

^{180. 17} U.S.C. § 110(5)(B) (2012) (limiting the Homestyle Exemption to "communication by an establishment of a transmission or retransmission embodying a performance... [of a] work intended to be received by the general public, originated by a radio or television broadcast station..., or, if an audiovisual transmission, by a cable system or satellite carrier").

^{181.} See Fairness in Music Licensing Act, Pub. L. No. 105-298, 112 Stat. 2827 (1998).

^{182. 17} U.S.C. § 110.

Consequently, all three forms of wireless technology have significant similarities and differences which affect the traditional analysis under the Homestyle Exemption. While using a technology-blind approach as prescribed in *Aereo* to determine whether streaming signals fall within this safe harbor may or may not affect a court's finding under § 110(5), it would be the wrong way to analyze these systems.

IV. TECHNOLOGY BLINDNESS

There is a larger issue at stake than whether wireless speaker systems fall within the Homestyle Exemption, and whether courts should consider the technology underlying these systems when making an assessment. What is at stake here is whether courts generally should examine an underlying technology when construing laws and making legal assessments.

In order to make current copyright law applicable to technological advancements, should courts summarily find that new technology falls outside antiquated definitions, and thus beyond what is acceptable? Should courts examine the technology at issue based on its purpose and the congressional intent behind the relevant statute, or look for outward similarities to technologies covered under the law, regardless of the underlying mechanics? It is vital that we thoroughly consider the implications of a judicial philosophy whereby courts ignore the underlying mechanisms at play and instead focus strictly on how new technology "looks" to the end user. That is to say, whether the underlying technology involved in an infringement claim should be considered, or whether courts should read the Copyright statute in a "technology-blind" manner is a particularly important issue.

This Part discusses the implications of the Supreme Court's recent *Aereo* decision. It then illustrates how technology blindness would affect the analysis of wireless technology under the Homestyle Exemption and examines other unintended results of a technology-blind approach.

A. TECHNOLOGY BLINDNESS AND AEREO

The recent Supreme Court decision in *Aereo* gives significant weight to the concept of "technology blindness." And as alluded to in Justice Scalia's dissent, ignoring technology can have overreaching and

unintended negative consequences that can ultimately stifle competition and hinder innovation.¹⁸⁴

1. The Aereo Decision

Aereo was a company that developed an antenna system to meet the needs of people who lived in locations where their home lacked the direct line-of-sight vantage point to receive free, over-the-air television broadcasts and who did not want to pay for a cable television subscription. Aereo's system can be analogized to asking your next door neighbor, who lives in a ten-story house—which affords her better reception—if you can place a television antenna on her roof and run the antenna cable from her home to your two-story home. Your neighbor agrees, but rather than stringing an ugly wire between your homes, she suggests instead that you access your antenna through the Internet. Aereo used an "economy of scale" to provide this service to many people—it

^{184.} See infra notes 257-264 and accompanying text.

^{185.} See, e.g., Jeremy Sheff, A Personal Take on Aereo, JEREMY SHEFF (June 26, 2014), http://jeremysheff.com/2014/06/26/a-personal-take-on-aereo-with-some-philosophical -ruminations ("[T]his system can be seen as analogous to a homeowner putting their TV antenna on the roof of their house to get better reception. There's a bit more to Aereo than that, but truly, that's all my family wanted: an antenna in a more suitable location than our living room, with a wire connecting it to our TV."); see also Tim Wu, The Supreme Court Thinks You Are Better Off Paying \$150/Month for Cable, NEW REPUBLIC (June 25, 2014), http://www.newrepublic.com/article/118390/supreme-court-aereodecision-wet-kiss-cable-tv ("Free, over-the-air TV is available to anyone willing to put up an antenna. Aereo's idea was to lease tiny antennas to its customers, and thereby make it easier for people to grab the signals and bring them home. In fact, you could easily duplicate Aereo's service by putting an antenna on your roof; Aereo's idea was just to make that task more convenient, by acting as a virtual antenna installation man."); Mark P. McKenna, The Limits of the Supreme Court's Technological Analogies: The Misguided Aereo Decision Shows Why Technical Details Matter, SLATE (June 25, 2014) http://www.slate.com/articles/technology/future_tense/2014/06/abc_v_aereo_ruling_the _supreme_court_s_terrible_technological_analogies.single.html. According to McKenna, one might view Aereo as "simply supplying a more convenient and technologically sophisticated substitute for putting an antenna on your roof.... It is therefore no different than the delivery of content from the antenna on your roof to the television set in your house." *Id.*

^{186.} This is known as "the longer cord argument—that there is no difference between a consumer's use of a rooftop antenna and her use of a remote antenna except the length of the cable." See Giblin & Ginsburg, supra note 89, at 23.

^{187. &}quot;Economies of scale" is a term used in microeconomics, whereby a business obtains a cost advantage due to "a reduction in the cost of producing something brought about especially by increased size of production facilities." *Economy of Scale*, MERRIAM-

was as if thousands of people ran virtual coaxial cables via the Internet from their homes to Aereo's facility, where their antennas were actually located. In this manner, "Aereo's system allow[ed] users to access free, over-the-air broadcast television through antennas and hard disks located at Aereo's facilities." ¹⁸⁸

When developing their novel system for providing customers with the ability to receive free, over-the-air broadcast transmissions, founders Chaitanya Kanojia¹⁸⁹ and Barry Diller¹⁹⁰ relied on the Second Circuit's decision in *Cartoon Network LP v. CSC Holdings, Inc.* (aka *Cablevision*).¹⁹¹ Based on the holding in *Cablevision*, they believed their system would not infringe on the copyrights of the free, over-the-air programs viewed by its subscribers.¹⁹²

Several portions of the court's rationale in *Cablevision* were relevant to Aereo's antenna system design. First, as in *Cablevision*, individual Aereo customers directed the recording and subsequent playback of content, which constituted "volitional conduct." Second, like in *Cablevision*, each

WEBSTER'S DICTIONARY, http://www.merriam-webster.com/dictionary/economy%20 of%20scale (last visited Mar. 20, 2015).

188. Am. Broad. Cos. v. Aereo, Inc. (*Aereo I*), 874 F. Supp. 2d 373, 376–77 (S.D.N.Y. 2012), *rev'd sub nom*. WNET, Thirteen v. Aereo, Inc., 712 F.3d 676 (2d Cir. 2013), *rev'd sub nom*. Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014).

189. Chaitanya Kanojia Profile, BLOOMBERG BUSINESS, http://www.bloomberg.com/Research/stocks/private/person.asp?personId=640878&privcapId=138725 (last visited Mar. 20, 2015).

190. Victor Luckerson, Aereo Backer Barry Diller: "It's Over Now," TIME (June 25, 2014), http://time.com/2921376/aereo-barry-diller.

191. Ĉartoon Network LP v. CSC Holdings, Inc. (*Cablevision*), 536 F.3d 121 (2d Cir. 2008). *See supra* text accompanying notes 85–100.

192. See Giblin & Ginsburg, supra note 89, at 7 ("Aereo built its system in reliance on the Second Circuit's interpretation of the Transmit Clause in Cartoon Networks v. CSC Holdings.").

193. See Cablevision, 536 F.3d at 133 ("[C]opies produced by the RS-DVR system are 'made' by the RS-DVR customer, and Cablevision's contribution to this reproduction by providing the system does not warrant the imposition of direct liability."); see also Giblin & Ginsburg, supra note 89, at 10 (noting that the Second Circuit in Cablevision analogized to the VCR at issue in Sony, reasoning "that, in the case of a VCR it would be 'the person who actually presses the button to make the recording... who supplies the necessary element of volition, not the person who manufactures, maintains or, if distinct from the operator, owns the machine." (quoting Cablevision, 536 F.3d at 131)).

194. "[D]espite copyright infringement's strict liability standard, 'there should still be some element of volition or causation..." Giblin & Ginsburg, *supra* note 89, at 9 (quoting Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., 907 F. Supp. 1361, 1370 (N.D. Cal 1995)). The *Netcom* court found that the element of volition "is lacking where a defendant's system is merely used to create a copy by a third party." *Netcom*, 907 F. Supp. at 1370.

potential audience for a transmission was a single subscriber, so this transmission did not meet the definition of "transmit to the public" under the 1976 Act. Buoyed by the *Cablevision* decision, Aereo moved forward with their business model, and in February of 2012, it began selling subscriptions in New York City. Customers rented equipment located in Aereo's warehouse that gave subscribers access to those local over-the-air broadcasts (for viewing via the Internet), which the consumers had the right to view without paying subscription fees or licenses to cable or satellite companies. 196

Aereo's system thus provides the functionality of three devices: a standard TV antenna, a DVR, and a Slingbox-like device. These devices allow one to watch live television with the antenna; pause and record live television and watch recorded programming using the DVR; and use the Slingbox to watch both live and recorded programs on internet-connected mobile devices.¹⁹⁷

Soon after Aereo's system went live, local New York City broadcasters filed complaints claiming copyright infringement and sought to enjoin Aereo from operating. Initially, Aereo's argument—that its system was not infringing under the holding of *Cablevision*—was successful; the District Court for the Southern District of New York, 198 and the Second

^{195.} Cablevision, 536 F.3d at 135 ("[E]ach RS-DVR transmission is made using a single unique copy of a work, made by an individual subscriber, one that can be decoded exclusively by that subscriber's cable box, only one subscriber is capable of receiving any given RS-DVR transmission.").

^{196.} Am. Broad. Cos. v. Aereo, Inc. (Aereo I), 874 F. Supp. 2d 373, 382 (S.D.N.Y. 2012) ("Aereo argues that as in Cablevision it effectively rents to its users remote equipment comparable to what these users could install at home."), rev'd sub nom. WNET, Thirteen v. Aereo, Inc. (Aereo II), 712 F.3d 676 (2d Cir. 2013), rev'd sub nom. Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014). It is important to note that the television broadcasts at issue were not those that are only transmitted via cable or satellite, but rather solely for those over-the-air broadcasts from local television stations, such as the local affiliates for ABC, CBS, NBC, Univision, and PBS as well as independent local-only television stations. Aereo limited the stations one could receive based on the zip code of the subscriber. Aereo II, 712 F.3d at 680 ("Aereo is currently limited to subscribers in New York City and offers only New York area channels.").

^{197.} Aereo II, 712 F.3d at 682. The Slingbox, developed by Sling Media, transmits a television signal (after it has been received in a home) over the Internet, so that a person can watch programs available on her home television on her computer. See generally Discovering Slingbox, SLINGBOX, http://www.slingbox.com/DiscoverSling.aspx (last visited Mar. 20, 2015).

^{198.} Aereo I, 874 F. Supp. 2d at 405.

Circuit¹⁹⁹ both ruled in its favor. In finding that Aereo did not infringe, the District Court compared Aereo's system of mini-antennas to the RS-DVR system in *Cablevision*.²⁰⁰ First, the court pointed out that "from the user's perspective, Aereo's system is similar in operation to that of a digital video recorder (DVR), particularly a remotely located DVR, although Aereo users access their programming over the Internet rather than through a cable connection."²⁰¹ Second, like in *Cablevision*, there is no sharing of the performances between users.²⁰² The District Court devoted a large portion of its opinion to the technical function of Aereo's system and how Aereo's operations comported with a finding that its system did not transmit "to the public."²⁰³ Ultimately, the court held that because Aereo's transmission was not public, it did not infringe the plaintiffs' copyrights.²⁰⁴

In affirming the lower court, the Second Circuit also focused on how Aereo's system worked "behind the scenes." The appellate court noted that the copies made for later viewing by Aereo's system were not infringing under *Cablevision*. The court focused on two dispositive

Cablevision's transmissions of programs recorded with its RS-DVR system were not public performances [based on] two essential facts: First, the RS-DVR system created unique copies of every program a Cablevision customer wished to record. Second, the RS-DVR's transmission of the recorded program to a particular customer was generated from that unique copy; no other customer could view a transmission created by that copy. Given these two features, the potential audience of every RS-DVR transmission was only a single Cablevision subscriber . . . And because the potential audience of the

^{199.} Aereo II, 712 F.3d at 696.

^{200.} Aereo I, 874 F. Supp. 2d at 385 ("[T]he copies Aereo's system creates are not materially distinguishable from those in Cablevision, which found that the transmission was made from those copies rather than from the incoming signal."); see also id. at 386 ("As in Cablevision, the functionality of Aereo's system from the user's perspective substantially mirrors that available using devices such as a DVR or Slingbox, which allow users to access free, over-the-air broadcast television on mobile internet devices of their choosing.").

^{201.} *Id.* at 377 (citations omitted).

^{202.} *Id.* at 378, 382–85 ("[J]ust as the antennas are not shared when they are in use, the data obtained by a particular antenna while allocated to a particular user is not shared with or accessible by any other Aereo user." (internal quotations omitted)).

^{203.} Id. at 377-81, 388.

^{204.} *Id.* at 405.

^{205.} WNET, Thirteen v. Aereo, Inc. (*Aereo II*), 712 F.3d 676, 680–83 (2d Cir. 2013), rev'd sub nom. Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014).

^{206.} *Id.* at 689–90. In applying the holding in *Cablevision*, the appellate court noted that:

features from *Cablevision*: (1) the unique copies made by each subscriber and (2) the limited potential audience of each transmission to an audience of one.²⁰⁷ As both features were present in the Aereo system,²⁰⁸ the court affirmed that Aereo's transmissions were not public.²⁰⁹

The Second Circuit recognized both the right of viewers to receive over-the-air broadcasts and that Aereo merely facilitated this right for those with a limited ability to install an adequate antenna:

It is beyond dispute that the transmission of a broadcast TV program received by an individual's rooftop antenna to the TV in his living room is private, because only that individual can receive the transmission from that antenna, ensuring that the potential audience of that transmission is only one person. Plaintiffs have presented no reason why the result should be any different when that rooftop antenna is rented from Aereo and its signals transmitted over the internet: it remains the case that only one person can receive that antenna's transmissions.²¹⁰

The appellate court also stressed that it was not uncommon for entrepreneurs to develop innovative technology in order to avoid infringing another's copyright—often by relying on legal precedence for direction.²¹¹

Aereo's luck ran out, however, when the Supreme Court took a different view of its antenna array. The Supreme Court focused on how Aereo's antenna array appeared to function to the unassuming end user; in doing so, it also choose a different end user perspective from the district

transmission was only one Cablevision subscriber, the transmission was not made "to the public."

Id. (citations omitted).

207. *Id.* at 693 ("Aereo's system would not be creating public performances, since the entire chain of transmission from the time a signal is first received by Aereo to the time it generates an image the Aereo user sees has a potential audience of only one Aereo customer.").

208. Id. at 690 ("The same two features are present in Aereo's system.").

209. *Id.* at 691 ("[T]he relevant inquiry under the Transmit Clause is the potential audience of a particular transmission, not the potential audience for the underlying work or the particular performance of that work being transmitted.").

210. *Id.*

211. *Id.* at 694 ("Aereo is not the first to design systems to avoid copyright liability.... Nor is Aereo alone in designing its system around *Cablevision*, as many cloud computing services, such as internet music lockers... appear to have done the same.").

court,²¹² which compared Aereo's playback function to the home DVD player.²¹³ Writing for the 6–3 majority, Justice Breyer explained that when viewed from the point of an end user, the defendant's activities looked like a cable system.²¹⁴

Justice Breyer implied that the Court's characterization of the technology as perceived by the consumer was what mattered, giving no weight to other possible ways a consumer might view the technology, nor how the underlying technology itself functioned. By doing so, he created a quandary: how does a court determine which among several competing technology-blind points of view is the "end user's perspective" that it should use? How does an innovator, worried that her new technology might lead to an infringement suit, know which point of view a court would choose?

Even though he chose a technology-blind approach, Breyer acknowledged the differences between how Aereo and cable television operated—specifically that each performance transmitted through Aereo's antenna array was only capable of being received by a single subscriber.²¹⁵

In terms of the Act's purposes, these differences do not distinguish Aereo's system from cable systems, which do perform "publicly." Viewed in terms of Congress' regulatory objectives, why should any of these technological differences matter? They concern the behind-the-scenes way in which Aereo delivers television programming to its viewers' screens. They do not render Aereo's commercial objective any different from that of cable companies. Nor do they significantly alter the viewing experience of Aereo's subscribers. Why should subscriber who wishes to watch a television show care much whether images and sounds are delivered to his screen via a large multisubscriber antenna or one small dedicated antenna, whether they arrive

^{212.} Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498, 2508–09 (2014). On November 21, 2014, Aereo filed for Chapter 11 Bankruptcy protection. Emily Steel, *Aereo Concedes Defeat and Files for Bankruptcy*, N.Y. TIMES (Nov. 22, 2014), http://www.nytimes.com/2014/11/22/business/aereo-files-for-bankruptcy.html?smid=pl-share.

^{213.} Am. Broad. Cos. v. Aereo, Inc. (*Aereo I*), 874 F. Supp. 2d 373, 377 (S.D.N.Y. 2012) ("[F]rom the user's perspective, Aereo's system is similar in operation to that of a digital video recorder."), *rev'd sub nom.* WNET, Thirteen v. Aereo, Inc., 712 F.3d 676 (2d Cir. 2013), *rev'd sub nom.* Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014).

^{214.} Aereo, 134 S. Ct. at 2508-09.

^{215.} Id. at 2508.

instantaneously or after a few seconds' delay, or whether they are transmitted directly or after a personal copy is made?²¹⁶

Consequently, Breyer discounted the differences in the technological architectures. While the Court acknowledged the differences between Aereo's and cable television operations, held that "[i]n terms of the Act's purposes, these differences [did] not distinguish Aereo's system from cable systems, which do perform 'publicly." This is reminiscent of the rationale used in *Jewell–Lasalle*. By ignoring a key "behind the scenes" difference between Aereo's system and cable television's, Breyer was able to claim that, if Aereo's system did not infringe,

could not modern CATV systems simply continue the same commercial and consumer-oriented activities, free of copyright restrictions, provided they substitute such new technologies for old? Congress would as much have intended to protect a copyright holder from the unlicensed activities of Aereo as from those cable companies.²¹⁹

On the surface it does appear that Aereo's system would provide a work-around for the traditional cable television stations (especially when viewed through a "technology-blind" lens) however, the underlying technological architecture can be distinguished in a significant way. Aereo's system is one where each user has her own antenna—a one-to-one match—and is in control as to what is received by that antenna.²²⁰ Cable television, on the other hand—whether when it was in its infancy or in its modern form—is a "one to many" system.²²¹ The cable television operator receives the signals and then rebroadcasts them indiscriminately en-mass. Subscribers receive all programs, and then choose which program to view. Under this "one-to-many" system of secondary transmissions, CATV

^{216.} *Id.* at 2508–09.

^{217.} Id. at 2508.

^{218.} Buck v. Jewell-LaSalle Realty Co., 283 U.S. 191 (1931); see supra notes 24–29 and accompanying text.

^{219.} Aereo, 134 S. Ct. at 2509.

^{220.} See Eriq Gardner, Supreme Court Hands Broadcasters Huge Win in Aereo Battle, HOLLYWOOD REP (June 25, 2014), http://www.hollywoodreporter.com/thr-esq/aereo-ruling-supreme-court-hands-711333.

^{221.} See A. Michael Noll, The Evolution of Media 4 (2007) ("Such communication from one to many is called broadcast" (emphasis omitted)); see also Gordon Greb & Mike Adams, Charles Herrold, Inventor of Radio Broadcasting 220 (2003) (discussing early "broadcasting of entertainment and information, pre-announced, and directed toward a known audience," in comparison to the "radiotelephone").

operators are required to license the broadcast stations (via compulsory licenses under Sections 111 and 119 of the Copyright Act).²²² In addition, the hundreds of channels transmitted solely by television networks are not broadcast over-the-air and require separate, negotiated licenses—essentially every channel except for the local broadcast stations, such as New York affiliates of ABC, NBC, CBS, PBS, as well as the local-only broadcast stations such as WPIX fall under the latter.²²³ Today, the typical cable operator retransmits over 200 channels, almost all of which are unavailable for reception through over-the-air broadcast antenna capture.²²⁴ As discussed *infra*, this technological difference should result in a significant legal consequence.

The Supreme Court also justified its opinion by claiming that its viewpoint was most in line with congressional intent underlying the Transmit Clause.²²⁵ The majority leapt to the conclusion that since Congress sought to use the Transmit Clause to overturn two Court decisions that found cable television transmissions were not public performances, this also meant that Congress intended the clause to apply to "an entity that acts like a CATV system..., even when it simply enhances viewers' ability to receive broadcast television signals." Under this brutally broad interpretation, all manufacturers and sellers of rooftop antennas are also acting like cable television systems and are thus equally performing and infringing because they, too, enhance a viewer's ability to receive broadcast television signals.

2. Is It Cable, or Is It Antenna?

By assuming that consumers viewing programming via Aereo would think they were watching cable television, the Court took a technology-

^{222. 17} U.S.C. § 111(d) (2012) (titled "Statutory License for Secondary Transmissions by Cable Systems"); see also Evolution of Cable Television, FCC.GOV, http://www.fcc.gov/encyclopedia/evolution-cable-television (last updated March 14, 2012) ("The Copyright Act requires cable operators to obtain a compulsory license for the carriage of programming.").

^{223.} See, e.g., Peter Burrows, Lucas Shaw and Gerry Smith, Apple Said to Delay Live TV Service to 2016 as Negotiations Stall, BLOOMBERG (AUG. 13, 2015), http://www.bloomberg.com/news/articles/2015-08-13/apple-said-to-delay-tv-service-to-2016-as-negotiations-stall (discussing licensing negotiations between Apple and numerous broadcasting companies).

^{224.} See, e.g., Your Greenville, Laurens, Anderson & Spartanburg, SC Channel Lineup, GOUPSTATE.COM, http://www.goupstate.com/assets/pdf/SJ17941825.pdf (last visited Nov. 6, 2014) (channel lineup for Charter Communications).

^{225.} Aereo, 134 S. Ct. at 2509.

^{226.} Id. at 2506.

blind approach: without referencing any evidence in support of its assumption, the Court made a factual conclusion that consumers watching television via Aereo would naturally think that it was a cable television transmission.²²⁷

This approach is muddled further by the possibility that more than one technology-blind viewpoint could serve as the reference point for the consumer's perspective and illustrates a major flaw to this approach. Justice Breyer could just have easily decided that, to the viewer, Aereo's system looked like a home antenna. Why—despite the obvious comparison to a home antenna—wasn't the home antenna the "technology blindness" vantage point used by the Supreme Court? In fact, to the viewer, Aereo's antenna array more closely resembles home antenna reception than it does cable television for several obvious reasons. First, cable television gives a wide array of programming with hundreds of available channels, and non-broadcast stations transmit programming that is only accessible via cable or satellite television.²²⁸ By contrast, a home antenna is limited to local broadcast stations—usually between four and twelve total.²²⁹ To a viewer

227. This is disturbingly reminiscent of the Court's decision in *Gonzales v. Carhart*, 550 U.S. 124 (2007), to uphold the Partial-Birth Abortion Ban Act of 2003, a federal law which prohibited a medical procedure that anti-choice politicians labeled "partial birth abortions." Writing for a 5–4 majority, Justice Kennedy declared he knew how women must feel about terminating a pregnancy when he wrote that the choice of "[w]hether to have an abortion requires a difficult and painful moral decision. *While we find no reliable data to measure the phenomenon*, it seems unexceptionable to conclude some women come to regret their choice to abort the infant life they once created and sustained." *Id.* at 159 (emphasis added).

228. Glossary of Terms, NIELSEN MEDIA, http://www.nielsenmedia.com/glossary/terms/C/ (last visited Nov. 23, 2014) (defining a Cable TV System as "[a] non-broadcast facility which distributes signals of one or more television stations and non-broadcast services to subscribers"); Compulsory License, FCC Regulations and Retransmission Consent—Rube Goldberg Would Be Proud!: Hearing Before the Subcomm. on Courts, IP and the Internet of the H. Comm. on the Judiciary, 113th Cong. 3 (2013) (testimony of Preston Padden) ("[T]the programs on more than 500 non-broadcast channels—channels like Discovery, History Channel, ESPN, and HBO—are NOT subject to compulsory licensing, retransmission consent and associated FCC regulations. The programs on these non-broadcast channels are distributed... through free market negotiations." Mr. Padden further testified: "When licensing programs for its channel, the non-broadcast channel owner simply secures from the program owner he right to sublicense the program to the cable and satellite distributors that carry the channel."), available at http://judiciary. house.gov/_files/hearings/113th/09102013/Padden%20testimony%20091013.pdf.

229. Though an expensive home antenna located in a large metropolitan area, such as Baltimore, Maryland, could receive up to forty local broadcasts from the nearby markets, many would be redundant stations. See, e.g., Mike Snider, Cutting the Cord: Antennas Let

perusing the available channels via Aereo, they would appear no different than those available through an antenna. Thus, any television viewer who is limited to local broadcast stations—and understands that to receive more stations, one needs a cable television subscription—is more likely to believe that the channels received through Aereo to be via an antenna, not via cable TV. Second, cable television charges significantly higher fees than Aereo did. Aereo's pricing was a large selling point,²³⁰ and the Court is mistaken if it believes that consumers cannot recognize this difference. Third, Aereo subscribers were fully aware how the system worked. This information was readily available on Aereo's website, and consumers could consciously decide to purchase an Aereo subscription with this knowledge. To view the consumer as oblivious to the underlying technology behind Aereo insults the consumer's intelligence.

By comparing the Aereo system to a rooftop antenna, even a technology-blind Court would have a solid basis for its decision, based on Congress's very specific intent to give television viewers the right to receive free, over-the-air television broadcasts. Title 47 of the Code of Federal Regulations stipulates that licensed broadcast "stations must... transmit at least one over-the-air video program signal at no direct charge," 231 and

You Tune in TV for Free, USA TODAY (Apr. 19, 2014, 9:44 AM), http://www.usatoday.com/story/tech/personal/2014/04/19/cutting-the-cord-antennas/7870817.

230. See, e.g., Sheff, supra note 185; Wu, supra note 185.

231. 47 C.F.R. § 73.624(b) (2014). This requirement applies to both "Class A" television stations and digital television (DTV) broadcast stations:

DTV "broadcast station permittees or licensees must transmit at least one over-the-air video program signal at no direct charge to viewers on the DTV channel. Until such time as a DTV station permittee or licensee ceases analog transmissions and returns that spectrum to the Commission, and except as provided in paragraph (b)(1) of this section, at any time that a DTV broadcast station permittee or licensee transmits a video program signal on its analog television channel, it must also transmit at least one over-the-air video program signal on the DTV channel. The DTV service that is provided pursuant to this paragraph must be at least comparable in resolution to the analog television station programming transmitted to viewers on the analog channel.

47 C.F.R. § 73.624(b). Class A stations are low powered television stations (a.k.a. local community access channels). Class A Television Service, WIKIPEDIA, http://en.wikipedia.org/wiki/Class_A_television_service (last visited Nov. 2, 2014); Marshall Brain, How Digital Television Works, HOW STUFF WORKS, http://electronics.howstuffworks.com/dtv3.htm (last visited Nov. 2, 2014). In 2009, the United States completed the transition from analog television to digital television to allow for other uses in the analog TV radio spectrum, via section 3002(a)(1)(B) of the Digital Television Transition and Public Safety Act of 2005, Digital Television Transition and Public Safety Act of 2005,

section 15 of that Title requires that all televisions imported into or sold in the United States be capable of receiving these stations.²³² In spite of the Court holding in *Aereo* that viewers "perform,"²³³ viewing programs on one's own private television does not infringe on the public performance copyright right delineated in the Act.²³⁴

It should be equally non-infringing for someone who—unable to receive signals because it is impossible to string an antenna for reception of locally available broadcast signals—chooses to rent a remote antenna within her viewing area that is situated at a better vantage point. As long as control of the antenna is by the customer, it is no different than the customer accessing her rooftop antenna, and neither the antenna owner nor its lessee would be infringing. Rather, both would be acting within the confines and expectations of FCC regulations. Nothing in the law limits what the viewer may use as a conduit to receive these stations.

Thus, the Court's "looks like" test is problematic because there may be several reasonable alternative technologies that could serve as a comparison point. A trier of fact may have difficulty choosing which, among several reasonable alternatives (some infringing, some not), the consumer thinks is the source of the broadcast. The "looks like" method may lead jurists to arrive at divergent findings of fact about future technologies; this will cause further conflict and have an unsettling effect on innovation.

B. TECHNOLOGY BLINDNESS AND AIKEN

A technology blind approach would affect a court's analysis of the Homestyle Exemption. To a customer going from store to store in our Introduction, there is no difference between the two methods of reception

Pub. L. No. 109-171. Generally, digital television "is the transmission of audio and video by digitally processed and multiplexed signal, in contrast to the totally analog and channel separated signals used by analog television. Digital TV can support more than one program in the same channel bandwidth." *Digital Television*, WIKIPEDIA, http://en.wikipedia.org/wiki/Digital_television (last visited Nov. 2, 2014); *Digital vs. Analog*, PBS, http://www.pbs.org/opb/crashcourse/digital_v_analog/ (last visited Mar. 20, 2015).

^{232. 47} C.F.R. § 15.117(b) (2013) ("TV broadcast receivers shall be capable of adequately receiving all channels allocated by the Commission to the television broadcast service.").

^{233.} Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498, 2500 (2014) ("[B]oth the broadcaster and the viewer 'perform,' because they both show a television program's images and make audible the program's sounds." (emphasis in original)).

^{234. 17} U.S.C. § 106(4) (2012) ("to perform the copyrighted work publicly"). Here, the viewer's "performance" is not "public." *See id.*

(wired or wireless) with regard to the music she hears; she does not know or care whether she is hearing music that emanated from an over-the-air radio station, an Internet radio station, or from a simultaneous live-stream of an over-the-air radio station over the Internet.

To store owners who want to use wireless speaker technology without having to pay for a public performance license, the holding in Aereo seems to provide a path out of the quandary of whether these systems could be installed without being subject to the license requirement or facing infringement actions. As discussed *supra*, ²³⁵ the Court in *Aereo* relied on the concept of "resembling" a cable company's transmission of a signal, citing (1) Congress' decision to legislatively overturn the Court's Fortnightly and Teleprompter decisions, 236 and (2) how, from the consumer's standpoint, Aereo's system resembles that of a cable television company, and thus was infringing on the plaintiffs' copyright.²³⁷ Analogizing this to the storefront using wireless speakers, from the consumer's vantage the broadcast she hears is no different than if it had been performed via a wired speaker system. Both systems are commonly used in homes, and as long as there was no modification of the wireless system so that it more closely resembled a commercial one, then by applying the technology-blind approach of Aereo, the Homestyle Exemption would provide a safe harbor for the storeowner. Thus, if wireless speakers are viewed as being the same as a wired system from the point of view of the customer in the store (the audience), then by applying "technology blindness," a court would find that such a system resemble wired speakers, and would thus be noninfringing. The behind-the-scenes technology would not matter, wireless and wired speakers look the same to the consumer, and therefore should be treated the same under the Homestyle Exemption. Yet this is not how the courts have been instructed to make the Homestyle Exemption determination. Rather, which mechanism is used may play a dispositive role in determining the outcome.²³⁸ This Article's discussion of the Homestyle Exemption illustrates that Congress is very cognizant of the need for courts to

^{235.} See supra note 212 and accompanying text.

^{236.} Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390 (1968); Teleprompter Corp. v. Columbia Broad. Sys., Inc., 415 U.S. 394 (1974); Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498, 2505 (2014) ("In 1976 Congress amended the Copyright Act in large part to reject the Court's holdings in *Fortnightly* and *Teleprompter.*").

^{237.} *Id.* at 2508–09, 2511.

^{238.} See supra Section II.E.

examine the underlying technology when determining infringement of the public performance right.

To require that applications of the Transmit Clause be read in a technology-blind manner, especially when read in conjunction with other sections of the Act, can easily conflict with the language of those other sections.²³⁹ Further, there is no indication or guidance from Congress that this should be the case. In many sections, such as the Homestyle Exemption, the technological design of the sound system must be considered in the factual determination of infringement. If we applied this "how does it look to the consumer?" analysis to our storefronts, it would conflict with the legislative intent as well as the language of § 110(5). Thus, a technology-blind approach would ignore the plain language of § 110(5). As discussed *supra*, unlike the wired systems contemplated when § 110(5) was enacted, wireless speakers, by their very nature, require both a transmitter that retransmits the radio signal, as well as a receiver in each of the speakers, both of which on their face do not fall within the statutory requirements for an exemption to the public performance right under § 110(5)(A). Rather than throw up our hands, despondent over this predicament, courts can rely on congressional intent to construe the existing law in such a way as to effectuate the purpose of the law. Especially with regard to copyright law, the 1976 Act language, on its face, illustrates that Congress did not want it to be confined to the technology that existed when it was enacted, but rather wanted it to accommodate future innovations that would be subject to the Act. As previously discussed by this Author²⁴⁰ and others,²⁴¹ Congress is aware that

^{239.} See, e.g., supra notes 124–138 and accompanying text.

^{240.} See Yvette Joy Liebesman, Downstream Copyright Infringers, 60 KAN. L. REV. 1, 32 (2011) [hereinafter Liebesman, Downstream Copyright] (discussing generally a legislative solution to innocent downstream infringing); Yvette Joy Liebesman, The Wisdom of Legislating for Anticipated Technological Advancements, 10 J. MARSHALL REV. INTELL. PROP. L. 154, 156 (2010) [hereinafter Liebesman, Legislating] ("At various times, Congress has chosen to wait and see if a scientific advancement adapts sufficiently under current law, and in other instances has tried to anticipate how technology will affect society.").

^{241.} See, e.g., Wilk, supra note 71, at 785 (discussing, in part, how the standard set forth in Section 110(5) "is not stable, as advances in technology continually redefine the parameters of the homestyle equipment standard"); Jessica D. Litman, Copyright Legislation and Technological Change, 68 OR. L. REV. 275 (1989) (exploring and critiquing Congress's method of creating of copyright legislation by negotiating with affected private parties, industries, and others with vested interests, thus illustrating the historical

when it is attempting to accommodate technological advancements into copyright law, it is perpetually lagging behind the innovations. Slow updates to § 110(5) are merely another example of this lag.

In addition, there is no guarantee that the Supreme Court would apply "technology blindness" broadly to find a safe harbor from infringement via the Homestyle Exemption, even though it has adopted the approach elsewhere. As discussed *supra*, in *Aereo* the Court used "technology blindness" to find a comparable apparatus based on what the viewer thinks the technology resembles. Absent a licensing agreement or falling within the exceptions of § 111,242 performance by a system that resembled an infringing technology would constitute infringement. Using this cognitive framework, the small antenna system created by Aereo was transmitting an unauthorized broadcast.²⁴³ For the Homestyle Exemption, however, a court would be comparing wired versus wireless speakers to find whether the latter method of converting radio waves into audible sound waves is similar enough to qualify as a safe harbor against the copyright owner's public performance or transmission rights. Additionally, courts could treat the "looks like to the consumer" test differently for an infringement determination than an exemption analysis. That is, adopting technology blindness when determining infringement does not guarantee that a court will construe exemptions in the same fashion. Indeed, to do so would be contrary to the practice of construing rights broadly and exemptions narrowly.244

If rights and exemptions are both subject to "technology blindness," courts could find that a wireless speaker system "resembles" a wired system without examining the differences in the technologies. Courts could thus conclude that a safe harbor from infringement of the public performance right exists, without even considering the commercial or home nature of the system. Since the wireless system looks no different to the consumer in any of the five stores in our Introduction, the Supreme Court's holding in *Aereo* and the Second Circuit's decision in *Cablevision* could be used to expand the Homestyle Exemption to encompass wireless speaker technology. But this would be reaching the correct conclusion using the

dilemmas that Congress has always faced in adapting copyright law to sometimes fast-moving technological advancements).

^{242. 17} U.S.C. § 111 (2006) (providing exceptions that include secondary transmissions within a hotel or where statutory licenses are paid).

^{243.} Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498, 2511 (2014).

^{244.} See supra notes 104 and accompanying text.

wrong analysis, and on a larger scale, is not the correct way to approach these kinds of issues.

C. TECHNOLOGY BLINDNESS BEYOND AIKEN AND AEREO

The adoption of "technology blindness" has a strong chance of inhibiting innovation and investment in new businesses and technologies, all for the sake of preserving the current media content distributors' paradigm.²⁴⁵ Yet just as the catastrophic prophecies of the movie industry's doom if Sony won back in 1984²⁴⁶ did not come to pass, a holding in favor of Aereo is unlikely to have led to the destruction of copyright owners' rights, and instead could have led to further innovative methods of disseminating media.

After Aereo, the Court has made it impossible for an innovator to adequately determine how courts will interpret her new technological advancement in an infringement action, if the technology itself is not a determining factor. Technological work-arounds to avoid infringement are

245. Professors Ginsburg and Giblin—in an article published prior to the Aereo decision, asserted that "technology blindness" is the correct position for courts to take, because otherwise it would wreak havoc on copyright owners' rights. Giblin & Ginsburg, supra note 89, at 19-22. The authors argue that "it is undesirable for legal outcomes to depend so heavily on technical design" and seem to think that technology blindness can be read into the copyright statute "without discouraging technological innovation." Id. at 3. The professors are concerned that if Aereo had prevailed, cable companies would adapt their technology and provide each person with their own individual transmissions to avoid paying royalties under § 111. Id. at 19-21. This would cause havoc with the economic remuneration for copyright owners. Id. ("[P]laintiff broadcasters have claimed that Time Warner Cable has already 'threatened to develop its own Aereo-like system to avoid compensating copyright owners and broadcasters for the use of their programming."). The professors claim that a decision in favor of the broadcasters will not discourage innovation of technology that mimics the "longer cord" argument, and while Aereo failed at this, others may be more successful. Id. at 23 ("Absent any way of making a principled distinction between consumers transmitting performances to themselves from their own antenna on their roof, and the antenna they rent in a remote array, businesses may potentially be able to retransmit television signals without license even without any time-shifted copies."). "The key would simply be to ensure that their system architecture mimics rooftop antennae sufficiently closely." Id. at 23. Yet Aereo attempted to closely model their system's architecture to that of a rooftop antenna; the professors claim that one which somehow modeled this even "closer" could be sufficient to pass muster, but provide no guidance as to how—or even if—this could happen.

246. See Sony Corporation of America v. Universal City Studios, Inc., 464 U.S. 417 (1984).

hallmarks of innovation and industry growth.²⁴⁷ Viewed either as merely renting equipment, or as the volitional transmission by a single viewer (not to the public), Aereo was using an innovative method to comply with the Transmit Clause as previously interpreted by the courts.²⁴⁸ Accordingly, the rationale behind the majority in *Aereo*—that is, its technology-blind approach—is wrong and problematic.

V. TECHNOLOGY MATTERS

Courts should continue to evaluate copyright litigation in light of the technology at issue in the case. This Part first briefly discusses the historical foundation of this argument, then discusses Justice Scalia's dissent in *Aereo*. It then posits future related discussions that are beyond the scope of the Article.

A. EXPANDING TECHNOLOGY IN TIME

Scrutinizing technology in copyright decisions is not new. Early examples include *Burrow–Giles Lithographic v. Sarony* in 1884, where the Court upheld the constitutionality of including photographs as copyrightable subject matter under the Copyright Act of 1831.²⁴⁹ In *White–Smith Music Publishing Co. v. Apollo Co.*, in 1908, the Court examined the technology of player piano rolls to determine if it was

247. Cf. Gen. Elec. Co. v. Wabash Appliance Corp., 304 U.S. 364, 369 (1938) ("The limits of a patent must be known for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject of the patent will be dedicated ultimately to the public."); cf. Lorelei Ritchie de Larena, What Copyright Teaches Patent Law About "Fair Use" and Why Universities Are Ignoring the Lesson, 84 OR. L. REV. 779, 786 (2005) (noting that a statutorily-created fair use exemption in patent law would incentivize universities, research institutions, and companies "to investigate existing technology so that they could truly innovate, including innovations aimed at creating patentable improvements and noninfringing 'work-around' inventions").

248. As Judge Chin noted in his Second Circuit dissent, Aereo's system employs thousands of individual dime-sized antennas, but there is no technologically sound reason to use a multitude of tiny individual antennas rather than one central antenna; indeed, the system is a Rube Goldberg-like contrivance, over-engineered in an attempt to avoid the reach of the Copyright Act and to take advantage of a perceived loophole in the law.

WNET, Thirteen v. Aereo, Inc. (Aereo II), 712 F.3d 676, 697 (2d Cir. 2013) (Chin, J., dissenting), rev'd sub nom. Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014). Yet one person's loophole and sham is another person's work-around for the purpose of complying with the law.

249. See Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884).

subject matter under the Act.²⁵⁰ More recently, in 1995, the First Circuit used a technology analogy in *Lotus Development Corp. v. Borland International, Inc.*²⁵¹ In that case, the court held that the menus at the top of the screen of a computer spreadsheet program were a method of operation and therefore not copyrightable subject matter under § 102 of the 1976 Act.²⁵² In dicta, the court compared this user interface to the Play and Stop buttons on a VCR,²⁵³ noting that "[h]ighlighting the 'Print' command on the screen, or typing the letter 'P,' [was] analogous to pressing a VCR button labeled 'Play."²⁵⁴

Thus, from the expansion of technologies covered under the older copyright acts²⁵⁵ to the current phrasing of "now known or later developed" in the present Act, Copyright Law is based in innovation. Technology matters, and it is meant to be inclusive. It is the role of Congress, not the courts, to decide where an innovation should be excluded from rights and exemptions afforded under the Copyright Act. The Second Circuit recognized in both *Cablevision* and *Aereo* that, when applying the Transmit Clause, technical architecture matters.²⁵⁶

B. The Aereo Dissent

In his dissent in *Aereo*, Justice Scalia understood that interpreting statutes without considering advances in technology will result in more uncertainty, inhibit innovation, and deny innovators the freedom to look for new ways to follow the law. To Scalia and his fellow dissenters,²⁵⁷

- 250. 209 U.S. 1 (1908).
- 251. 49 F.3d 807 (1st Cir. 1995), affd, 516 U.S. 233 (1996).
- 252. *Id.* at 816–17.
- 253. *Id.* at 817 ("In many ways, the Lotus menu command hierarchy is like... a [VCR].... Users operate VCRs by pressing a series of buttons that are typically labeled [sic] 'Record, Play, Reverse, Fast Forward, Pause, Stop/Eject." With a VCR, the way "the buttons are arranged and labeled does not make them a 'literary work,' nor does it make them an 'expression' of the abstract 'method of operating' a VCR via a set of labeled buttons. Instead, the buttons are themselves the 'method of operating' the VCR.").
- 254. *Id.* The First Circuit provided no guidance as to whether this is a situation where the court examined the underlying technology or how it appears to the end user.
- 255. As noted in note 16 *supra*, the first Copyright Act of 1790 only covered books, charts and maps. Over time, the list of fixed media was expanded to cover other forms of technology, such as photographs, motion pictures, and sound recording.
- 256. WNET, Thirteen v. Aereo, Inc. (*Aereo II*), 712 F.3d 676, 694 (2d Cir. 2013), rev'd sub nom. Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014).
- 257. Justices Thomas and Alito joined Justice Scalia. *Aereo*, 134 S. Ct. at 2511 (Scalia, J., dissenting).

technology does matter. His introduction succinctly states his problem with the majority's opinion:

Petitioners... broadcast copyrighted programs on the public airwaves for all to see. Aereo... operates an automated system that allows subscribers to receive, on Internet-connected devices, programs that they select, including the Networks' copyrighted programs. The Networks sued Aereo [for violating] the Networks' "exclusive right" to "perform" their programs "publicly." That claim fails at the very outset because Aereo does not "perform" at all. The Court manages to reach the opposite conclusion only by disregarding widely accepted rules for service-provider liability and adopting in their place an improvised standard ("looks-like-cable-TV") that will sow confusion for years to come.²⁵⁸

Rather than relying on the amorphous and confusing "what does it look like to the end user?" test to determine whether Aereo publicly "performed," both Justice Scalia and the Second Circuit differentiated between direct and indirect infringement, and the long-held reliance on the "volitional conduct" test for direct infringement as described in Religious Technology Center v. Netcom On-Line Communication Services, Inc. (Netcom). In Netcom, Judge Whyte of the Northern District of California found that "despite copyright infringement's strict liability standard, 'there should still be some element of volition or causation, which is lacking where a defendant's system is merely used to create a copy by a third party." Thus, the person who owns the machine is not necessarily the person who possesses it, uses it, or has access to it. Absent some volitional conduct by an equipment owner like Aereo, courts should not impose liability for direct infringement. Aereo

Justice Scalia also recognized that the majority's opinion will result in an inhibition of innovation: "It will take years, perhaps decades, to

^{258.} Id. at 2511-12.

^{259. 907} F. Supp. 1361 (N.D. Cal. 1995); Aereo, 134 S. Ct. at 2514 (Scalia, J., dissenting).

^{260.} Giblin & Ginsburg, supra note 89, at 9–10 (citing Netcom, 907 F. Supp. at 1370).

^{261.} See Cartoon Network LP v. CSC Holdings, Inc. (Cablevision), 536 F.3d 121, 131 (2d Cir. 2008).

^{262.} See Aereo, 134 S. Ct. at 2514 (Scalia, J., dissenting) ("The distinction between direct and secondary liability would collapse if there were not a clear rule for determining whether the defendant committed the infringing act. The volitional-conduct requirement supplies that rule; its purpose is not to excuse defendants from accountability, but to channel the claims against them into the correct analytical track.").

determine which... systems now in existence are governed by the traditional volitional-conduct test and which get the Aereo treatment (and . . . systems now in contemplation will have to take their chances)."263 The majority "provide[d] no criteria for determining when its cable-TVlook-alike rule applies,"264 whether it should be considered specific to cable television "look-alikes" or whether a broader "what does it look like to the consumer" test governing any technology that is affected by the 1976 Act, or if it is even broader than that, applying to any technology affecting any law. What Justice Scalia seems to suggest is that (1) without certainty, there will be less innovation and this is an anathema to the rule of law, and (2) developing technology that purports to comply with the law should not require prior congressional approval. Indeed, courts have long held that in spite of what could be "harsh and unintended consequence[s], judges should refrain from legislating from the bench."265 Scalia pointedly stated that it was "not the role of this Court to identify and plug loopholes [in the law]. It is the role of good lawyers to identify and exploit them, and the role of Congress to eliminate them if it wishes."266 The innovators at Aereo created a technology that, based on previous court decisions, they believed worked around broadcasters' public performance copyright right.

The fear expressed by scholars²⁶⁷—that a decision favoring Aereo would eviscerate the public performance right—ignores the fundamental difference between Aereo and cable television. Any loss of control is limited to programming over which the broadcasters already had limited rights. Indeed, systems like Aereo's actually would be a way to recapture rights that Congress had deemed copyright owners did not own. Aereo's

^{263.} Id. at 2517.

^{264.} Id. at 2516.

^{265.} Liebesman, *Downstream Copyright, supra* note 240, at 25 (citing Exxon Mobile Corp. v. Allapattah Servs., Inc., 545 U.S. 546, 565 (2005) ("It is up to Congress rather than the courts to fix" unintentional drafting gaps.); United States v. Hopkins, 427 U.S. 123, 125 (1976) (per curiam) ("[I]t is up to Congress to remedy this apparent harsh result. . . . [T]he court should refrain from legislating by judicial fiat." (second alteration in original) (quoting Keetz v. United States, 168 Ct. Cl. 205, 207 (1964) (per curiam), superseded by statute, Tucker Act Amendment of 1970, Pub. L. No. 91-350, 84 Stat. 449, as recognized in Slattery v. United States, 635 F.3d 1298, 1324 (Fed. Cir. 2011) (en banc))).

^{266.} *Id.* at 2517–18 (quoting Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 456 (1984) ("It may well be that Congress will take a fresh look at this new technology, just as it so often has examined other innovations in the past. But it is not our job to apply laws that have not yet been written.")).

^{267.} See, e.g., Giblin & Ginsburg, supra note 89.

system only gave viewers access to those few over-the-air broadcast stations that are freely available to all who can receive the signal through the airwaves, and that television viewers are legally entitled to watch without paying any additional fees. The majority of cable television viewers receive hundreds of channels, and the vast majority are not available for capture over-the-air. Cable television operators must negotiate licenses to receive and transmit those signals.²⁶⁸ There is no avoiding this, and workarounds such as Aereo's would not provide a refuge from infringement. As long as there are people who want to watch the NCAA Men's Basketball Tournament or Monday Night Football—both only available through cable television²⁶⁹ and with all of the retransmission prohibitions firmly attached—non-broadcast television will continue to thrive.

It is a bad precedent to outlaw third parties from facilitating the exercise of rights which viewers legally possess via the relabeling of that facilitating activity through judicial fiat. Based on this "looks like cable" perception, the legality of any device that sends a signal from one's home antenna into one's intranet may also be in jeopardy. For example, Nuvyyo²⁷⁰ and Simple.TV²⁷¹ sell equipment that sends television broadcast

^{268.} See, e.g., Alex Ben Block, Viacom Blackout Continues as Small Cable Company Takes Stand in Retrans Fight, HOLLYWOOD REP. (Apr. 2, 2014), http://www.hollywoodreporter.com/news/viacom-blackout-continues-as-small-693143.

^{269.} CBS/Turner Sports has contracted for the rights to broadcast the early rounds of the NCAA men's basketball tournament through 2024, and Monday Night Football is locked in with ESPN until 2021. See Thomas O'Toole, NCAA Reaches 14-Year Deal with CBS/Turner for Men's Basketball Tournament, Which Expands to 68 Teams For Now, USA TODAY (Apr. 22, 2010), http://content.usatoday.com/communities/campusrivalry/post/2010/04/ncaa-reaches-14-year-deal-with-cbsturner/1#.ViJ-1fkzaUl; Richard Sandomir, ESPN Extends Deal With N.F.L. for \$15 Billion, N.Y. TIMES (Sept. 8, 2011), http://www.nytimes.com/2011/09/09/sports/football/espn-extends-deal-with-nfl-for-15-billion.html (last visited Nov. 6, 2014).

^{270.} Nuvyyo sells a device called Tablo, marketed as "a DVR for TV antennas that targets this growing trend of mobile TV consumption and enables consumers to save thousands of dollars by canceling expensive cable and satellite TV contracts and replacing them with free Over-The-Air (OTA) HDTV." NUVYYO, http://nuvyyo.com (last visited Nov. 5, 2014). The Tablo box plugs into one's TV antenna and uses the home's Wi-Fi to transmit the signal to mobile devices and laptops. Nuvyyo describes Tablo as "a nextgeneration DVR that plugs into an HDTV antenna to capture free, local HDTV broadcast programs including news and sports within the US and Canada.... Tablo connects to your home network using Wi-Fi or Ethernet to stream content to any connected device inside your home or anywhere you have internet." *How Tablo Works*, TABLO TV, https://www.tablotv.com/how-tablo-works/ (last visited Nov. 5, 2014).

^{271.} Simple TV describes itself as "a lovely little box that sits on your home network, connects to an aerial antenna . . . and streams TV to your devices, plus records to storage

1444 BERKELEY TECHNOLOGY LAW JOURNAL [Vol. 30:2

signals received from a home antenna through the home's Wi-Fi, which is then watchable on a computer. Are these also rebroadcasts because the program is viewed on one's computer, rather than a standard television, and thus "appear" to be like cable? Simple.TV has a subscription option (like Aereo) for features beyond its basic system, such as pausing live TV and accessing it outside your home network.²⁷² Because there is a subscription fee, is this the tipping point for a court to find that this device "resembles cable television"? Or is it merely the viewing of the program on one's computer rather than a standard television? Where is the line to be drawn?

Perhaps instead the problem the Court sees with Aereo is one of commercialization. That is, receiving the free, over-the-air broadcast signal is fine, as long as no one other than the copyright owner has the ability to commercialize reception of the signal, even indirectly. There is no way of knowing—the Court's majority gave no guidance in its holding, leaving lower courts to navigate the quagmire.

With such uncertainty, inventors and entrepreneurs would risk infringement lawsuits and bankruptcy if they moved forward with an innovation that they otherwise believe to be noninfringing because their device or system "looked like" an infringing one from one possible—no matter how improbable—viewpoint of a technology-naïve audience. The risk would be too great, and innovative ideas would likely be inhibited from being actualized, for fear that the Court would hold that it did not approve of the new technology. This resulting inhibition is contrary to the ultimate goals of the Copyright Clause.²⁷³

C. FUTURE DISCUSSIONS

This Article illustrates just some examples of the problems associated with ignoring technology with regard to copyright litigation. In spite of the *Aereo* decision, courts—based on their ability to distinguish *Aereo* from the facts before them—will hold conflicting views on technology

that you attach." *Welcome to Simple.TV*, SIMPLE.TV, http://us.simple.tv/ (last visited Nov. 5, 2014).

^{272.} Kate Cox, You Can Make Your Own Aereo At Home, But Is It Worth It?, CONSUMERIST (May 31, 2014), http://consumerist.com/2014/05/31/you-can-make-your-own-aereo-at-home-but-is-it-worth-it/ (last visited Nov. 5, 2014).

^{273.} U.S. CONST., art. I, § 8, cl. 8. ("To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.").

blindness.²⁷⁴ Their disparate findings and their implications are worth further analysis; this and other issues raised extend beyond what may be discussed in a single article.

The formation of a unifying theory regarding the treatment of technology in copyright is a larger issue which is ripe for development. When courts should or should not consider technology in their deliberations extends beyond the Transmit Clause and the Homestyle Exemption. The question especially extends to matters where Congress is silent—though it also apparently arises even where Congress has spoken. Clauses that are silent on the subject are often read in conjunction with those that speak to it. For example, the Transmit Clause contains no technology-specific language, but it is often paired with sections that do. Further discussion is warranted regarding how judicial interpretation of the above discussed issues via objective principles of construction would influence their validity. Doctrines of statutory construction—touched on briefly in Part II—would influence a finder of fact who is deliberating an infringement claim, or the applicability of a safe harbor.

Furthermore, is a court truly being "technology blind" when it merely compares one form of technology another? As with *Aereo*, the court takes a superficial look at technology in its "looks like cable" attitude, but then states that it should not consider the underlying technology that is at the heart of the definitions of Transmit and Secondary Transmissions. Should it be an "all or nothing" proposition? While holding that Aereo was "like" a cable company for the purposes of the Transmit Clause, the majority also intimated that Aereo was not like a cable company with regard to § 111, and thus could not procure compulsory licenses under that section of the Copyright Act.²⁷⁵ How do such holdings comport with the legislative intent—as well as the language—of the applicable sections?

^{274.} See, e.g., CBS Broad. Inc. v. FilmOn.com, Inc., No. 10 CIV. 7532 NRB, 2014 WL 3702568 (S.D.N.Y. July 24, 2014) (holding that FilmOn's mini-antenna, Internet viewing broadcast television system was similar to Aereo's, based on the Supreme Court's analysis of the latter that it was "like cable"); see also Cartoon Network LP v. CSC Holdings, Inc. (Cablevision), 536 F.3d 121 (2d Cir. 2008) (holding that the underlying technology at issue is significant in determining whether it has substantial non-infringing uses).

^{275.} On remand before the district court Aereo pursued, and was denied, a theory of being treated as a cable company entitled to a compulsory license under § 111. Am. Broad. Cos. v. Aereo, Inc., No. 12-CV-1540, 2014 WL 5393867, at *2–6 (S.D.N.Y. Oct. 23, 2014) (noting that "not all entities that perform publicly in ways similar to cable systems are entitled to the § 111 license").

1446 BERKELEY TECHNOLOGY LAW JOURNAL [Vol. 30:2

Finally, further dialogue is warranted as to how technology blindness would hinder innovation beyond copyright law; investment in new technologies, venture capital, start-up and entrepreneurial risks, as well as patenting implications all need to be examined.

VI. FINAL THOUGHTS

In the years immediately following the enactment of the Homestyle Exemptions, scholars examined and prodded the statute, studying its flaws and whether it actually solved the problem it attempted to address—that is, providing small businesses an exemption to the public performance right of § 106(4).²⁷⁶ Congress was clear that copyright protection is not a rent-seeking vehicle, and that certain uses of another's copyrighted material would not require permission. It viewed the mere playing of a radio in a storefront as one of those exceptions. Yet the technological limits in § 110(5) were based on what was commonly found in homes in 1976.²⁷⁷ Were it a static statute, storefronts would be limited to the devices found in homes in 1976. Congress, however, made it clear that this was not the case, and new technologies in question must be examined based on contemporary findings of what is commonly found in homes. Legislators were clear that the underlying, "behind the scenes" technology did matter. Other sections of the 1976 Act also contemplate the actual technology in use,²⁷⁸ as do related statutes, such as the FCC sections discussed herein. Thus, courts have long been directed to interpret various sections of the 1976 Act based on new technology not yet envisioned when the law was

^{276.} See generally Shipley, supra note 127; Wilk, supra note 71; James B. MacDonald II, Defining the Limits of the Home-Type Receiver Exemption in 17 U.S.C. § 110(5): Cass County Music Co. v. Muedini, 4 VILL. SPORTS & ENT. L.J. 147 (1997); Makeen, supra note 83.

^{277.} The 1995 Act implementing § 110(5)(B) recognized technological advancements that happened between 1976 and 1995. H.R. REP. NO. 94-1476, at 47 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5660.

^{278.} The Copyright Act is full of examples where Congress uses technology-specific language, such as the Audio Home Recording Rights Act of 1992 and the Digital Performance Right in Sound Recording Act. Audio Home Recording Act of 1992, Pub. L. No. 102-563, 106 Stat. 4237; Digital Performance Right in Sound Recordings Act of 1995, Pub. L. No. 104-39, 109 Stat. 336. The latter provides great detail and technical specifications regarding licensing for digital broadcasts and limitations on the right. While there are some technology-neutral sections, these cannot be considered in a vacuum. Rather the language at issue should be addressed as a whole, including any incorporated technology-neutral sections, and should give relevance to the technology-specific language.

enacted. The finder of fact has at his or her disposal the ability to examine the facts and the technology, and to reach a conclusion based on how the actual technology fits within the law.

It is tempting to ignore technology that one does not understand. Sometimes it will not matter, and a court could achieve the same result either way. While there may be situations where ignoring technology provides a safe harbor for a would-be infringer—such as illustrated in this Article with wireless speaker technology—it will more likely lead to a stifling of innovation. As illustrated, courts have other avenues for conferring wireless speakers a safe harbor under the Homestyle Exemption without resorting to hand waving and declaring themselves technologically unsavvy. Deliberations do not require the use of a Sesame Street-resembling "one of these things is not like the others" exercise as to whether a new technology resembles others already in existence.²⁷⁹

This Article is not merely another example of the interaction between law and technology. Nor is it an additional illustration of how the law's failure to keep up with innovation might lead to unintended and undesired adverse consequences that were not contemplated when the Copyright Act was debated. Rather, as emphasized supra,280 there is a larger issue at stake—that the Court is setting a dangerous precedent for technology blindness when, against all evidence to the contrary, it held that underlying technology does not matter when construing infringement under the Transmit Clause in the Copyright Act of 1976. There are serious flaws and ramifications if courts instead feign technology ignorance and blind themselves to how innovations actually work when making these crucial holdings. To which technology do we compare it? As with Aereo, when examining an innovation that seeks to comply in a new way with an existing law, there may be more than one from which to choose. The Court's majority decision could lead to a change in the current paradigm of allowing innovation to flourish and then legislating when an invention adversely affects public policy,²⁸¹ instead playing into the hands of those seeking to protect their market from new players. Innovators would need to first have their inventions cleared as being "noninfringing" by Congress

^{279.} A well-known segment of Sesame Street is titled: "One of these things is not like the others." *See, e.g.*, Sesame Street, *Sesame Street: One of These Things*, YOUTUBE (July 16, 2010), http://www.youtube.com/watch?v=6b0ftfKFEJg.

^{280.} See supra Part IV.

^{281.} See generally Liebesman, Legislating, supra note 240.

1448 BERKELEY TECHNOLOGY LAW JOURNAL [Vol. 30:2

before moving forward.²⁸² This is contrary to Court precedent, and Congress has repeatedly shown itself capable of legislating for specific technology that it deems falls outside the bounds of the public policies it wishes to promote.283 This philosophy of "seeking permission first" has been long desired by rights holders who "claim that the sky is falling whenever a new technology threatens an existing business model."284 Such a policy would give undue influence to those who are already "players" attempting to protect their market share in an anticompetitive manner, thwart new entrants to the marketplace, and stifle innovation. But such fears are rarely brought to fruition. As stated by Professor Mark Lemley, "if you claim that the sky is falling whenever a new technology threatens an existing business model, the rest of the world can be forgiven for not believing you when you claim that this time around it's going to be different."285 While new technology usually alters an industry's business model, causing certain revenue streams to decline, it also opens up new opportunities.²⁸⁶

Justice Scalia notes in his *Aereo* dissent that the Court should wait for Congress to act, and not on its own create new law to encompass the new innovations the way it thinks the law should go.²⁸⁷ New technologies

^{282.} See, e.g., Brief for Ralph Oman, Former Register of Copyrights of the United States, as Amici Curiae Supporting Petitioners at 14, WNET, Thirteen v. Aereo, Inc., 712 F.3d 676 (2d Cir. Sept. 21, 2012) (Nos. 12-2786-cv, 12-2807-cv) (arguing that "[c]ommercial exploiters of new technologies should be required to convince Congress to sanction a new delivery system and/or exempt it from copyright liability").

^{283.} Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 500 (1984) (Blackmun, J., dissenting) ("Like so many other problems created by the interaction of copyright law with a new technology, there can be no really satisfactory solution to the problem presented here, until Congress acts...." Justice Blackmun contended that "[w]e must 'take the Copyright Act... as we find it,' and 'do as little damage as possible to traditional copyright principles... until the Congress legislates."). See generally Liebesman, Legislating, supra note 240, at 179 ("[L]egislation has attempted to fill in the gaps in copyright protection when, after the technology had reached an advanced level of development and public use, it concluded that further protection was needed.").

^{284.} Mark A. Lemley, *Is the Sky Falling on the Content Industries?*, 9 J. TELECOMM. & HIGH TECH. L. 125, 132 (2011).

^{285.} Id.

^{286.} *Id.*

^{287.} Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498, 2518 (2014) (Scalia, J., dissenting) ("[T]he proper course is not to bend and twist the Act's terms in an effort to produce a just outcome, but to apply the law as it stands and leave it to Congress the task of deciding whether the Copyright Act needs an upgrade." Justice Scalia went on to conclude, "as the Court concluded in *Sony*: It may well be that Congress will take a fresh

should not have the burden of proving their right to exist, yet this is exactly what this decision threatens to implement.²⁸⁸ This Author also has previously argued that Congress usually waits for technology to develop, then steps in if the technology operates against the policies that Congress wishes to support.²⁸⁹ If congressional intent is unclear, it is not up to the Court to play clairvoyant. Rather, Congress should step up and clarify the breadth of copyright owners rights encompassed as questions arise concerning new technology which cannot be reconciled under the current Act.

The Homestyle Exemption is just one example of how certain public performances are not within copyright owners' bundle of rights. Business owners who play radio and television programs for their customers' enjoyment are shielded from rent-seeking by content owners and providers. And in determining whether the exemption applies, the technology in use is glaringly key. This should be no less true for other exemptions, such as the right to receive free, over-the-air broadcast television performances in one's home.

Knowing the bounds of our rights through court decisions is not restricted to intellectual property. We abhor laws that are vague and fail to state boundaries that we cannot cross. If the courts are free to move these boundaries based on their own concept of what a technology "looks like," they are rejecting one of the central foundations of our legal system—confidence and certainty in the rule of law.²⁹⁰

look at this new technology, just as it so often has examined other innovations in the past. But it is not our job to apply laws that have not yet been written.").

^{288.} See, e.g., Lemley, supra note 284, at 133 ("[I]nnovation regimes in which no one can develop a new technology unless they get the collective permission of all the content owners whose content might be distributed with that technology are not going to work."); Peter S. Menell, Envisioning Copyright Law's Digital Future, 46 N.Y.L. SCH. L. REV. 63, 129 (2003) ("Even before the free flow of content in the Napster and post-Napster era, the content industries actively resisted the introduction of digital technologies and used the threat of such technologies as a basis for obtaining new legislation expanding rights and enforcement powers of copyright owners.").

^{289.} See Liebesman, Legislating, supra note 240, at 177.

^{290.} See, e.g., Liebesman, Downstream Copyright, supra note 240, at 29–30.

1450 BERKELEY TECHNOLOGY LAW JOURNAL [Vol. 30:2

A Unified Framework for RAND and Other Reasonable Royalties

Jorge L. Contreras[†] and Richard J. Gilbert^{††}

"One question that I have been asked is, 'What's so special about standard essential patents...?"

ABSTRACT

The framework for calculating "reasonable royalty" patent damages has evolved over the years to a point at which, today, it is viewed by many commentators as potentially misleading and untethered from its original purpose. We offer a proposal to modify the framework for determining reasonable patent royalties that is based on recent scholarly and judicial analyses of standard-essential patents that are subject to commitments to license on terms that are reasonable and non-discriminatory (RAND). Litigated cases have applied the traditional *Georgia-Pacific* factors to assess RAND royalty rates with modifications to account for the circumstances of the RAND commitment and the incremental value of allegedly infringed patents to the overall product offering. We propose that the reasonable royalty analysis should be conducted in essentially the same manner for all patents, whether or not they are encumbered by RAND commitments. We find considerable support for our approach in the historical development of U.S. patent law prior to the advent of the *Georgia-Pacific* test.

DOI: http://dx.doi.org/10.15779/Z38384R

© 2015 Jorge L. Contreras & Richard J. Gilbert.

† Jorge L. Contreras is an Associate Professor of Law at S.J. Quinney College of Law at the University of Utah.

†† Richard J. Gilbert is an Emeritus Professor of Economics and a Professor of the Graduate School at the University of California, Berkeley.

The authors served as members of the National Academy of Sciences' (NAS) Committee on IP in International Standards Setting, which produced the report PATENT CHALLENGES FOR STANDARD-SETTING IN THE GLOBAL ECONOMY (Keith Maskus & Stephen A. Merrill, eds. 2013). The views expressed in this Article are solely the authors' and do not reflect the views of the Committee or the NAS. We are grateful to Thomas Cotter, David Jones, Mark Lemley, Oskar Liivak, Amy Marasco, Peter Menell, Robert Merges, Carl Shapiro, Norman Siebrasse, and David Taylor for helpful discussion and suggestions. Professor Gilbert acknowledges partial support from the Competition Policy Center at the University of California, Berkeley.

1. FIONA M. SCOTT-MORTON, DEPUTY ASSISTANT ATTORNEY GEN. FOR ECONOMIC ANALYSIS, ANTITRUST DIVISION, U.S. DEP'T OF JUSTICE, THE ROLE OF STANDARDS IN THE CURRENT PATENT WARS 5 (2012), available at http://www.justice.gov/atr/speech/role-standards-current-patent-wars.

TABLE OF CONTENTS

INTRODUCTION			. 1453
I.		E HOLDERS OF RAND-ENCUMBERED PATENTS TITLED TO SEEK INJUNCTIVE RELIEF?	. 1460
II.	WHAT IS A REASONABLE ROYALTY?		. 1465
	A. B. C. D.	RAND AS A COMPROMISE BETWEEN LICENSORS AND LICENSES	. 1467 . 1471
III.	THE LAW OF PATENT DAMAGES IN THE U.S.		. 1473
	А. В.	HISTORICAL DEVELOPMENT OF LAW OF PATENT DAMAGES 1. Early History—The Need to Prove Actual Losses 2. The Emergence of Reasonable Royalty Damages 3. Georgia-Pacific and the Hypothetical Negotiation RAND IN THE COURTS	. 1475 . 1476 . 1479
IV.	THE CASE FOR A UNIFIED FRAMEWORK FOR		
	RE	ASONABLE ROYALTIES	. 1486
	Α.	PATENT HOLD-UP IS A RISK FOR BOTH SEPS AND NON- SEPS	
	В.	ROYALTY-STACKING IS NOT UNIQUE TO SEPS	. 1488
	C. D.	TIMING OF HYPOTHETICAL NEGOTIATIONS— CONVERGING ON THE RAND ANALYSISINCONSISTENT TREATMENT OF PATENT INFRINGEMENT	. 1491
		DAMAGES FOR SEPS AND NON-SEPS	. 1493
	Е.	Uniformity Encourages Participation in Standard- Setting	
	F.	IS RAND STILL RELEVANT?	. 1497
V.		LCULATING REASONABLE ROYALTIES: A NEW, D APPROACH TO PATENT DAMAGES	. 1498
	Α.	Incremental Value Redux	. 1499
	В.	NEXT BEST ALTERNATIVE	. 1502
VI.	CO	NCLUSION	. 1503

INTRODUCTION

Technical interoperability standards—known by familiar acronyms such as Wi-Fi, USB, HTTP, 3G and 4G—enable products manufactured by different vendors to interoperate in a manner that is transparent to the consumer. These standards were developed by groups of engineers employed by different firms and institutions who collaborate, either in person or virtually, at one or more standard-setting organizations (SSOs).² Many of these SSOs require owners of patents that are essential to practice a standard to license those patents on terms that are "reasonable and non-discriminatory" (RAND) or "fair, reasonable and non-discriminatory" (FRAND or F/RAND).³

For example, the Bylaws of the Institute of Electrical and Electronics Engineers Standards Association (IEEE)⁴ describe a typical RAND licensing requirement for owners of patents that include claims that would be infringed by products that comply with a standard.⁵ Owners of such patents must submit a letter of assurance to IEEE containing a statement

- 2. SSOs include a broad range of organizations, from large, well-established bodies that address the standardization needs of major industry segments (e.g., the European Telecommunications Standards Institute (ETSI) (mobile telecommunications), the Institute of Electrical and Electronics Engineers (IEEE), and the Internet Engineering Task Force (IETF) (Internet protocols)), to smaller groups often referred to as "consortia" that focus on one or a handful of related standards (e.g., the HDMI Forum, Bluetooth Special Interest Group). We use the acronym SSOs to refer to both standard-setting organizations and standards developing organizations (SDOs). See generally Brad Biddle et al., The Expanding Role and Importance of Standards in the Information and Communications Technology Industry, 52 JURIMETRICS 177 (2012) (describing the standards-development "ecosystem"); AM. BAR ASS'N, STANDARDS DEVELOPMENT PATENT POLICY MANUAL ix-xi (Jorge L. Contreras ed., 2007) [hereinafter ABA PATENT POLICY MANUAL] (describing organizations involved in standard-setting).
- 3. We also use the term "RAND" to encompass commitments to license patents on terms that are both "reasonable and non-discriminatory" and those labeled "fair, reasonable and non-discriminatory" (FRAND), as commentators and courts have largely treated these terms as synonymous. See U.S. DEP'T OF JUSTICE & U.S. PATENT & TRADEMARK OFFICE, POLICY STATEMENT ON REMEDIES FOR STANDARD-ESSENTIAL PATENTS SUBJECT TO VOLUNTARY F/RAND COMMITMENTS 1 n.2 (2013) [hereinafter DOJ/PTO POLICY STATEMENT], available at http://www.justice.gov/atr/public/guidelines/290994.pdf ("Commentators frequently use the terms "RAND" and "FRAND" interchangeably to denote the same substantive type of commitment.").
- 4. IEEE is a leading SSO that is responsible, among other things, for the ubiquitous 802.11 suite of wireless networking standards commonly referred to as "Wi-Fi." *See* IEEE STANDARDS ASSOCIATION, http://standards.ieee.org (last visited Mar. 4, 2015).
- 5. *IEEE-SA Standards Board Bylaws § 6.2*, IEEE, *available at* http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf [hereinafter IEEE Patent Policy].

that the patent owner will make available to all applicants a license for patent claims that are essential to the implementation of the standard either without compensation or under reasonable rates, with other reasonable terms and conditions that are demonstrably free of any unfair discrimination. We use the acronym SEP to refer to a standard-essential patent subject to a RAND commitment and non-SEP to refer to any other patent.

SSOs typically do not describe the specific terms of their RAND obligations and instead have largely deferred to their members, as well as the courts and competition enforcement agencies, to fill in the missing details.⁷ For the most part, the published opinions of enforcement agencies and scholars have focused on what makes SEPs different from other patents. In particular, they have addressed the following questions:

 What are reasonable and non-discriminatory licensing terms and conditions, and, in particular, what is a RAND royalty?⁸

^{6.} *Id*.

^{7.} Some standard-setting organizations require royalty-free licensing, while others require or allow patent holders to declare the maximum royalties and most restrictive licensing terms for their patents. For a description of the licensing commitments of a range of SSOs in the information and communications technologies (ICT) market, see RUDI BEKKERS & ANDREW UPDEGROVE, A STUDY OF IPR POLICIES AND PRACTICES OF A REPRESENTATIVE GROUP OF STANDARD SETTING ORGANIZATIONS Worldwide 27–30 (2012),available at http://sites.nationalacademies.org/ xpedio/groups/pgasite/documents/webpage/pga_072197.pdf (describing the policy commitment structures of ten major SDOs); Mark A. Lemley, Intellectual Property Rights and Standard-Setting Organizations, 90 CALIF. L. REV. 1889, 1925 (2002) (studying twenty-nine SSOs). The IEEE recently amended its patent policy to provide additional details regarding its interpretation of the RAND commitment contained in the policy. See News Releases: IEEE Statement Regarding Updating of its Standards-Related Patent Policy, IEEE (Feb. 8, 2015), http://www.ieee.org/about/news/2015/8_february _2015.html; see also Jorge L. Contreras, IEEE Amends its Patent (FRAND) Policy, PATENTLY-O (Feb. 9, 2015), http://patentlyo.com/patent/2015/02/amends-patent -policy.html.

^{8.} See, e.g., ABA PATENT POLICY MANUAL, supra note 2, at 47–62; Dennis W. Carlton & Allan L. Shampine, An Economic Interpretation of FRAND, 9 J. COMPETITION L. & ECON. 531 (2013); Richard J. Gilbert, Deal or No Deal? Licensing Negotiations in Standard-Setting Organizations, 77 ANTITRUST L.J. 855, 859 (2011); Anne Layne-Farrar, A. Jorge Padilla & Richard Schmalensee, Pricing Patents for Licensing in Standard-Setting Organizations: Making Sense of FRAND Commitments, 74 ANTITRUST L.J. 671 (2007); Doug Lichtman, Understanding the RAND Commitment, 47 HOUS. L. REV. 1023, 1033 (2010); Joseph Scott Miller, Standard Setting, Patents, and Access Lock-In: RAND Licensing and the Theory of the Firm, 40 IND. L. REV. 351, 360 (2007); J. Gregory Sidak, The Meaning of FRAND, Part I: Royalties, 9 J. COMPETITION L. & ECON. 931 (2013); Norman V. Siebrasse & Thomas F. Cotter, The Value of the

- Under what conditions, if any, does a RAND commitment allow a SEP owner to seek an injunction against infringement?⁹
- Does a RAND commitment travel with the patent if the patent is assigned or transferred to another party?¹⁰

Where standard-setting organizations do not specify the details of RAND commitments or state their intended purposes, courts, regulatory agencies, and numerous commentators have interpreted the RAND commitments as mitigating possible opportunistic conduct when firms and consumers make investments that are specific to a standard. For example, a joint statement by the U.S. Department of Justice (DOJ), Antitrust Division, and the U.S. Patent & Trademark Office (PTO) concluded that,

In an effort to reduce the occurrences of opportunistic conduct in the adoption of voluntary consensus standards, while encouraging participants to include the best available technology in standards, some SDOs have relied on voluntary licensing commitments by their participants, including commitments to

Standard (Univ. of Minn. Law School Legal Studies Research Paper Series, Research Paper No. 15-21, 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2636445; J. Daniel G. Swanson & William J. Baumol, Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power, 73 ANTITRUST L.J. 1 (2005).

9. See, e.g., DOJ/PTO POLICY STATEMENT, supra note 3; BRIAN T. YEH, CONG. RESEARCH SERV., R42705, AVAILABILITY OF INJUNCTIVE RELIEF FOR STANDARD-ESSENTIAL PATENT HOLDERS (2012), available at http://www.law.berkeley.edu/files/CRS_SEP_Report_9-2012.pdf; Colleen V. Chien & Mark A. Lemley, Patent Holdup, the ITC, and the Public Interest, 98 CORNELL L. REV. 1 (2012); Colleen V. Chien et al., RAND Patents and Exclusion Orders: Submission of 19 Economics and Law Professors to the International Trade Commission (Santa Clara Univ. Legal Studies Research Paper No. 07-12, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2102865; Joseph Farrell, John Hayes, Carl Shapiro & Theresa Sullivan, Standard Setting, Patents, and Hold-Up, 74 Antitrust L.J. 603, 616 (2007); Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 TEX. L. REV. 1991 (2007); Doug Lichtman, supra note 8, at 1023; Suzanne Michel, Bargaining for RAND Royalties in the Shadow of Patent Remedies Law, 77 Antitrust L.J. 889 (2011).

10. See, e.g., NAT'L RESEARCH COUNCIL, PATENT CHALLENGES FOR STANDARD-SETTING IN THE GLOBAL ECONOMY: LESSONS FROM INFORMATION AND COMMUNICATIONS TECHNOLOGY 52–69 (Keith Maskus & Stephen A. Merrill eds., 2013) [hereinafter NAS REPORT]; Jay P. Kesan & Carol M. Hayes, FRAND's Forever: Standards, Patent Transfers, and Licensing Commitments, 89 IND. L.J. 231 (2014).

license the patents they own that are essential to the standard on F/RAND terms.¹¹

The DOJ/PTO statement specifically references patent hold-up. When a standard becomes established in the marketplace, it can be prohibitively costly to switch to a different technology within the established standard or to a different standard. As a result, the owner of the patented technology may gain the economic power to charge high royalties or impose burdensome licensing terms "ex post," after firms and consumers have made investments that are specific to a standard. The term "patent hold-up" refers to this opportunistic conduct by the patent owner.¹²

The central theme of this Article is that features of patents with RAND commitments, such as the potential for hold-up, are not unique to those patents and the framework to assess reasonable licensing terms should be common to all patents. In recent opinions regarding standardessential patents with RAND commitments, courts have noted the obligations implicit in a RAND commitment and have modified generally accepted approaches to estimate infringement damages.¹³ Yet a unique analytical approach to patent damages for RAND-encumbered patents obscures the common ground that these patents share with other patents. Hold-up is a potential concern for all patents when technology users make investments that are specific to the patented technology, whether or not patents are standard-essential or encumbered by RAND commitments.¹⁴ Courts also have noted that it is necessary to apportion the value of products that infringe standard-essential patents to assess reasonable royalties. Apportionment is a relevant concern for all patents, whether standard-essential or not, if multiple patents or other assets are necessary to make, sell, or use a product.¹⁵

The ongoing debate over the meaning of a RAND commitment also addresses whether such a commitment provides an adequate return to

^{11.} DOJ/PTO POLICY STATEMENT, *supra* note 3, at 5. The term F/RAND captures both RAND and FRAND commitments.

^{12.} Id. at 4.

^{13.} See Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217, (W.D. Wash. Apr. 25, 2013); In re Innovatio IP Ventures, LLC Patent Litig., No. 11-C-9308, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013).

^{14.} See, e.g., Carl Shapiro, Injunctions, Hold-Up, and Patent Royalties, 12 Am. L. & ECON. REV. 280 (2010).

^{15.} See infra note 63 and accompanying text.

compensate innovators for their investments.¹⁶ Given that research and development is a sunk cost, proponents of low royalties may have latitude to interpret a RAND commitment to deny a reward to compensate these expenditures without inducing the patent owner to refuse to offer a license. Yet whether a reasonable royalty to remedy patent infringement is sufficient to cover the patent owner's costs is not a question that is unique to SEPs. The economic value of a patent is its incremental contribution relative to the next-best alternative. That economic value is the appropriate metric to evaluate a reasonable royalty for both SEPs and non-SEPs.

We argue that policy-makers and the courts have been searching for the key to assess patent infringement damages under the wrong lamppost. Rather than modify traditional approaches to assess infringement damages to account for the particular circumstances of SEPs with RAND commitments, the correct approach should account for relevant features of patented technologies regardless of whether the patents are SEPs or not.¹⁷

Outside the context of standard-setting, it is not uncommon for patent owners to make various commitments or "pledges" regarding their patents. These may include product and field of use restrictions, requirements that the licensee grant licenses back to the licensor for other patents, commitments not to assert under certain circumstances, commitments not to transfer patents to non-practicing entities, commitments not to seek injunctions against infringement, and commitments to treat licensees as most-favored customers. In this

^{16.} This is implicit in the concern over "hold-out," which refers to a situation in which a potential licensee refuses to accept a patent license on reasonable terms that the patent holder has offered (i.e., it holds out for a lower (and presumably unreasonable) royalty). This phenomenon has also been called "reverse hold-up." See generally Colleen V. Chien, "Holding Up" and "Holding Out," (Santa Clara Univ. Legal Studies Research Paper Series, Working Paper No. 19-13, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318648; Thomas F. Cotter, The Comparative Law and Economics of Standard-Essential Patents and FRAND Royalties, 22 TEX. INTELL. PROP. L.J. 311, 347 (2014).

^{17.} Note that not all patents that are essential to a standard necessarily have RAND commitments and not all patents with RAND commitments are necessarily essential to a standard. See Jorge L. Contreras, Patent Pledges, 47 ARIZ. ST. L.J. (forthcoming 2016), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2525947 (cataloging patent-based commitments both within and outside the standard-setting context).

^{18.} See generally id.

^{19.} For example, so-called "most-favored customer" terms require that the patent holder grant a particular licensee terms that are no less favorable than the terms granted to any other licensee. See, e.g., Cameron R. Sneddon, Licensee Beware: The Seventh Circuit Holds That A Patent License By Any Other Name Is Not The Same, 2 SEVENTH CIRCUIT

respect, a RAND commitment is simply one type of pledge that a patent holder may make with respect to his or her patents.²⁰ The existence of patent pledges other than RAND commitments does not require a different framework for the evaluation of a reasonable royalty. Similarly, the existence of a RAND pledge does not require a different framework for the determination of a reasonable royalty. Instead, a common framework for infringement damages should accommodate the constraints implied by a RAND pledge as well as other patent pledges.

For disputes in U.S. courts, no special analysis is required to assess if and when a RAND commitment permits the patentee to seek an injunction that prevents the manufacture, use, or sale of infringing products. The principles of equity enumerated by the Supreme Court in *eBay Inc. v. MercExchange*, *LLC* adequately describe the conditions under which every patent owner may be entitled to an injunction.²¹ These principles apply equally to SEPs and non-SEPs. Thus, while the existence of a RAND commitment may heavily weigh one or more *eBay* factors against granting an injunction, we show in Part I below that the four-part *eBay* analytical structure remains intact even for RAND-encumbered patents.²²

The RAND issue that has consumed the most ink and pixels lately, however, is the methodology for determining the "reasonable royalty" that may not be exceeded in licenses granted by the patent holder to implementers of the associated standard. Various commentators have offered different approaches regarding the determination of reasonableness and reasonable royalty levels in particular.²³ In this Article, we argue that if a patent owner is entitled to a reasonable royalty, the framework for the determination of "reasonable" should not differ for SEPs and non-SEPs, although that framework must account for the economic characteristics of patents that may give rise to opportunistic conduct.²⁴ Our conclusion finds support in a journey to the origins of patent damages law, which provides justification for a theory of reasonableness that is applicable to all patents

REV. 796 (2007) (addressing whether a settlement affects a patent license with a most-favored customer provision).

^{20.} A RAND pledge is a commitment to offer a license on reasonable terms, while other pledges may condition the terms in a license agreement. Nonetheless, both types of pledges are comparable in that they both constrain the conduct of the licensor.

^{21. 547} U.S. 388, 391 (2006).

^{22.} See infra Part I.

^{23.} See references cited at note 8, supra.

^{24.} Siebrasse & Cotter, *supra* note 8, also advocate a consistent approach to patent royalty calculations for SEPs and non-SEPs, though their approach differs from ours.

and is consistent with interpretations of RAND royalties advocated by enforcement agencies.²⁵

The law of patent damages evolved over many decades and important legal precedents for determining "reasonable" patent royalties were established long before standard setting organizations adopted RAND commitments. The prevailing approach to patent damages generally applies the fifteen factors described in Georgia-Pacific Corp. v. U.S. Plywood Corp. 26 This approach has not proven to be directly applicable to the assessment of reasonable royalties in RAND disputes. As a result, recent federal court opinions have modified the Georgia-Pacific factors to accommodate perceived unique characteristics of RAND commitments.²⁷ While we are sympathetic with these judicial attempts to utilize the Georgia-Pacific framework to the greatest extent feasible, despite its shortcomings, it is our view that the unstructured and ill-defined Georgia-Pacific analysis tends to obscure the key issue in the patent royalty determination: the incremental contribution of the patented technology to the infringing product. By returning to the roots of patent damages law, it is possible to develop a new framework for assessing patent damages that borrows from the extensive analysis and commentary that has arisen in response to the perceived problem of hold-up by standard-essential patents. Most importantly, we would extend this reasoning to all patents, whether or not standard-essential or encumbered by RAND commitments.

Our analysis proceeds in several steps. First, we join a growing consensus that there is no material difference between SEPs and non-SEPs in terms of the methodology used to determine the availability of injunctive relief. We extend this reasoning to show that there is no appreciable difference between SEPs and non-SEPs in terms of the appropriate analysis to assess a reasonable royalty payable with respect to each. With this in mind, we reason that the damages analysis for patents, in general, should be guided by recent analysis of RAND-encumbered patents, inasmuch as the point at which royalties should be computed is the time at which the infringer is able to choose between alternative infringing and non-infringing implementations, rather than at the time of

^{25.} See infra Section IV.A.

^{26. 318} F. Supp. 1116, 1120 (S.D.N.Y. 1970), modified and aff d, 446 F.2d 295 (2d Cir. 1971), cert. denied, 404 U.S. 870 (1971).

^{27.} See Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013); In re Innovatio IP Ventures, LLC, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013); see also infra Part IV.

infringement. Moreover, we join a growing chorus of commentators who have urged the courts to dispense with the *Georgia-Pacific* "hypothetical negotiation" framework.²⁸ We instead support the use of the tools of economic analysis to assess reasonable royalties based on the incremental value of the relevant patented technology.

Recent litigation to assess a reasonable royalty for alleged infringement of SEPs has focused on the incremental value of the patents and sought ways to measure that incremental value, including the need to apportion value when a standard embodies many SEPs. The courts have applied a framework that seeks to identify the incremental value of allegedly infringed SEPs, notwithstanding the empirical limitations of such a framework. The same should be done for all patents.

I. ARE HOLDERS OF RAND-ENCUMBERED PATENTS ENTITLED TO SEEK INJUNCTIVE RELIEF?

Returning to the IEEE patent policy, a typical RAND commitment is "A statement that a license . . . will be made available" on RAND terms.²⁹ Commentators have disputed whether such a commitment requires the patent owner merely to *offer* a license that its owner believes is on RAND terms, or whether a license must eventually be *granted* on RAND terms.³⁰ If it is only the former, some argue that the patent owner may seek an injunction if the initial "reasonable" offer is declined.³¹

Superficially, it may appear that a RAND commitment is special, because absent a RAND commitment, a patent owner has no obligation to offer a license on any terms. However, the Supreme Court laid this alleged distinction to rest in *eBay*. Without regard to whether a patent is

^{28.} See, e.g., Daralyn J. Durie & Mark A. Lemley, A Structured Approach To Calculating Reasonable Royalties, 14 LEWIS & CLARK L. REV. 627 (2010); Christopher B. Seaman, Reconsidering the Georgia-Pacific Standard for Reasonable Royalty Patent Damages, 2010 BYU L. REV. 1661 (2010); David O. Taylor, Using Reasonable Royalties to Value Patented Technology, 49 GA. L. REV. 79, 125–26 (2014).

^{29.} IEEE PATENT POLICY, supra note 6.

^{30.} Compare Janusz Ordover & Allan Shampine, Implementing the FRAND Commitment, 14 ANTITRUST SOURCE, no. 1, Oct. 2014, at 1 (noting that a FRAND commitment cannot be interpreted to require only "good faith" negotiations), with Roger G. Brooks & Damien Geradin, Interpreting and Enforcing the Voluntary FRAND Commitment, 9 INT'L J. IT STANDARDS & STANDARDIZATION RES. 1, 2 (2011) ("[T]he role of a court is not to determine what 'fair and reasonable' terms would be, but whether the terms offered . . . fall outside the range of reasonableness contemplated by the FRAND commitment.").

^{31.} See, e.g., Bo Vesterdorf, Antitrust Enforcement and Civil Rights: SEPs and FRAND Commitments, CPI ANTITRUST CHRONICLE, Aug. 2014, at 1.

subject to a RAND commitment or any other licensing pledge, the Supreme Court ruled that the decision to grant or deny an injunction is an act of equitable discretion, the test for which requires a plaintiff to demonstrate:

- (1) that it has suffered an irreparable injury;
- (2) that remedies available at law are inadequate to compensate for that injury;
- (3) that considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and
- (4) that the public interest would not be disserved by a permanent injunction.³²

Some argue that these factors are sufficient to deny injunctive relief to the holder of a RAND-encumbered patent.³³ The RAND commitment is a commitment to offer a license and therefore the patent owner has revealed that compensation is an adequate remedy for infringement. Moreover, an injunction likely would not serve the public interest if it allowed the owner of one or more essential patents to prevent the manufacture or sale of products that comply with a widely-adopted standard, as this would be contrary to the promotion of the social benefits accompanying broad usage of interoperability standards.

Yet reasonable people can disagree.³⁴ A patentee may suffer irreparable injury if an implementer enjoys the benefit of a patented technology yet refuses to negotiate in good faith over royalty terms. This scenario has been referred to as "reverse hold-up" or "hold-out."³⁵ The implementer may be a competitor of the patent owner and by stalling negotiations may obtain an irreversible advantage in the marketplace. Even if the patent owner ultimately can bring suit for damages, the implementer may not be

^{32.} eBay Inc. v. MercExchange, LLC, 547 U.S. 388 (2006).

^{33.} See, e.g., Brief of BSA as Amicus Curiae Supporting Plaintiff-Appellants, Apple Inc. v. Motorola, Inc., 757 F.3d 1286 (Fed. Cir. 2014) (No. 2012-1548), 2013 WL 1151023.

^{34.} See, e.g., Douglas H. Ginsburg, Taylor M. Owings & Joshua D. Wright, Enjoining Injunctions: The Case Against Antitrust Liability for Standard Essential Patent Holders Who Seek Injunctions, ANTITRUST SOURCE, Oct. 2014, at 1.

^{35.} See, e.g., Gregor Langus, Vilen Lipatov & Damien Neven, Standard-Essential Patents: Who Is Really Holding Up (And When)?, 9 J. COMP. L. & ECON. 253 (2013); Joshua D. Wright, Comm'r, Fed. Trade Comm'n, SSOs, FRAND, and Antitrust: Lessons from the Economics of Incomplete Contracts, Address at The Center for the Protection of Intellectual Property Inaugural Academic Conference (Sept. 12, 2013), in 21 GEO. MASON L. REV. 791 (2014).

able to make the patent owner whole for the costs imposed by its recalcitrance. An injunction may be necessary in such circumstances to bring the implementer to the bargaining table.

The scenarios in which continued infringement of a RAND-encumbered patent may or may not cause irreparable harm are complex. The key point is that courts, *informed by the patent owner's RAND commitment*, can take these special circumstances into account and apply the *eBay* factors to determine when an injunction is warranted. Special instructions from antitrust enforcement agencies and academic commentators are unnecessary.

Standard-essential patents with RAND commitments do not require a unique framework to evaluate infringement claims. The eBay factors apply to all patents. Suppose a patent is essential to comply with a standard, but the patent is not burdened with a RAND commitment. Patents that are essential to practice a standard embody concerns that justify RAND commitments, even if their owners have not made commitments to offer licenses on RAND terms. Would the test described in eBay permit an injunction to prevent the infringement of a standard-essential patent that lacks a RAND commitment? Although application of the eBay factors is less certain in this situation, it is still the case that an injunction would allow the patent owner to prevent the manufacture or sale of products that comply with the standard. The consequence of an injunction would depend on many factors, including the existence of close substitutes for products that implement the standard. However, if the failure to license a patent that is essential to a standard would allow its owner to hold up firms and consumers that are locked in to the standard with serious negative consequences for economic welfare, it would not require a delicate balancing of equities for a court to conclude that injunctive relief should not be available, regardless of whether the patent is subject to a RAND licensing commitment.

In *Apple Inc. v. Motorola, Inc.* the Federal Circuit considered Motorola's request for an injunction seeking to prevent Apple's sale of products allegedly infringing RAND-encumbered patents essential to certain wireless telecommunications standards.³⁶ The trial court (Judge Posner, sitting by designation) denied Motorola's request, reasoning that a patent holder making a RAND commitment, by definition, has acknowledged that a monetary royalty would be adequate compensation

for a license to the patent, thereby eliminating any argument that the infringement would cause the patent holder irreparable harm under *eBay*.³⁷

The Federal Circuit upheld Judge Posner's denial of Motorola's request for an injunction, but offered different reasoning. Though the panel was divided on several issues, all three judges concurred in Judge Reyna's statement in the majority opinion that "[t]o the extent that the district court applied a *per se* rule that injunctions are unavailable for SEPs, it erred." Judge Reyna reasons that the *eBay* framework for analyzing injunctive relief "provides ample strength and flexibility for analyzing FRAND committed patents and industry standards in general," and finds no reason to create "a separate rule or analytical framework for addressing injunctions for FRAND-committed patents."

Judge Reyna explains that under the *eBay* framework, "a patentee subject to FRAND commitments may have difficulty establishing irreparable harm." However, "an injunction may be justified where an infringer unilaterally refuses a FRAND royalty or unreasonably delays negotiations to the same effect." With this in mind, he then goes on to apply the *eBay* "irreparable harm" test to Motorola's request and agrees with the district court that Motorola was not entitled to an injunction, given its commitment to license the patents in question on RAND terms. ⁴²

Of course the Supreme Court's precedent in eBay does not apply directly to administrative proceedings at the International Trade

^{37.} Apple Inc. v. Motorola, Inc., 869 F. Supp. 2d 901, 913–14 (N.D. Ill. 2012), aff d in part, 757 F.3d 1286 (Fed. Cir. 2014).

^{38.} Apple, 757 F.3d at 1331.

^{39.} *Id.* at 1331–32.

^{40.} Id. at 1332.

^{41.} *Id.* (citing DOJ/PTO POLICY STATEMENT, *supra* note 3, at 7–8).

^{42.} It is in this last respect that the panel parted ways. Chief Judge Rader, dissenting-in-part, argued that a genuine issue of material fact existed regarding Apple's conduct with respect to the acceptance of a FRAND license from Motorola, and would have remanded the case for further fact finding on this issue. *Id.* at 1333–34 (Rader, C.J., dissenting-in-part). Judge Prost, concurring-in-part and dissenting-in-part, disagreed with the majority's suggestion that an alleged infringer's refusal to negotiate a license could serve as a basis for issuing an injunction on a FRAND-encumbered patent. *Id.* at 1342 (Prost, J., concurring-in-part and dissenting-in-part). She reasons that while a potential licensee's bad faith negotiation might justify an award of enhanced damages, the *eBay* "irreparable harm" test would nevertheless militate against granting an injunction on a FRAND-encumbered patent. *Id.* However, she concedes that an injunction might be appropriate if the patentee is unable to collect the damages to which it is entitled, for example, if the potential licensee refuses to pay a court-ordered damage award or is judgment-proof. *Id.* at 1343.

Commission (ITC), the situs of much recent patent litigation. Nevertheless, the ITC is required, in determining whether to issue an exclusion order preventing the importation of an infringing product, to assess whether such an order would harm the public interest.⁴³ In making this determination, the ITC is required to consider the effect of the order on "the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers."

Both the Federal Trade Commission and academic commentators have urged the ITC to consider exclusions based on infringement of SEPs to be contrary to the public interest under this provision.⁴⁵ Recently, the Obama administration has also indicated that it disfavors ITC exclusion orders for SEPs when the orders do not hew to the analysis that would otherwise be conducted under *eBay*.⁴⁶ In this regard, we do not view the administration's recent disapproval of the ITC's exclusion order against Apple to represent a case of SEP exceptionalism, but a mere indication that the application of *eBay*-like considerations to the ITC's "public interest" test weighs against the issuance of exclusion orders involving RAND-encumbered patents. Again, SEPs and non-SEPs should be treated on an equal footing.

It is likewise the case that U.S. precedent does not constrain decisions made in foreign jurisdictions. For these venues, arguments raised by various commentators regarding the appropriate circumstances for injunctive relief may have persuasive value. But the existence of these other venues does not justify a special framework to evaluate whether injunctive relief is appropriate for litigation of RAND-encumbered patents in U.S. courts.

^{43. 19} U.S.C. § 1337(d)(1) (2012).

^{44.} *Id.*

^{45.} See Third Party United States Federal Trade Commission's Statement on the Public Interest, Certain Gaming and Entertainment Consoles, Inv. No. 337-TA-752 (June 6, 2012); RAND Patents and Exclusion Orders: Submission of 19 Economics and Law Professors to the International Trade Commission, Certain Wireless Communications Devices, Inv. No. 337-TA-745 (July 9, 2012) (the authors were signatories to this submission).

^{46.} See Letter from Michael B. G. Froman, Ambassador, U.S. Trade Rep., to Irving A. Williamson, Chairman, U.S. Int'l Trade Comm'n (Aug. 3, 2013), available at http://ustr.gov/sites/default/files/08032013%20Letter_1.PDF (filed in Certain Electronic Devices, Inv. No. 337-TA-794 (Aug. 5, 2013)).

II. WHAT IS A REASONABLE ROYALTY?

Interpretations abound over the meaning of the RAND commitment.⁴⁷ To address this question it is useful to distinguish economic concepts of fair and reasonable license terms from interpretations that can be inferred from the objectives of the participants in standard setting organizations that impose RAND licensing requirements. The latter interpretation derives from the political economy of standard setting in which the goal of consensus in the choice of a standard may extend to interpret a RAND commitment as a compromise between technology licensors and licensees.⁴⁸ Economic concepts include the incremental value contributed by the patented technology and the bargaining that may take place ex post between licensors and licensees.⁴⁹ In a sense, an important distinction for the various approaches is between what a RAND commitment "should" mean and what it "does" mean, and whether there is a relationship between the two.

A. RAND AS A COMPROMISE BETWEEN LICENSORS AND LICENSEES

In the standard-setting context, RAND commitments arise through voluntary private interactions among firms. They are imposed through SSO membership agreements, policies, bylaws, letters of assurance, and a variety of other private ordering mechanisms.⁵⁰ Notably, however, RAND commitments do not arise, in the first instance, through statute or regulation. They are the results of private interactions, and thus the meaning of the term "reasonable" as a matter of the law of contract, promissory estoppel, or whatever other legal theory may exist to render such commitments enforceable may be said to be whatever the relevant parties ascribed to that term at the time the commitment was made.

^{47.} Compare Roger G. Brooks & Damien Geradin, Interpreting and Enforcing the Voluntary FRAND Commitment, 9 INT'L J. IT STANDARDS & STANDARDIZATION RES. 1 (2011) (stating that a FRAND obligation leaves wide latitude to private parties negotiating a license), with Farrell et al., supra note 9 (standing for the rule that the reasonable royalty is the incremental value of the patented technology).

^{48.} See NAS REPORT, supra note 10, at 28.

^{49.} See id. at 61-62.

^{50.} For a detailed breakdown of the mechanisms by which FRAND commitments and other patent pledges are made, see Jorge L. Contreras, *A Market Reliance Theory for FRAND Commitments and Other Patent Pledges*, 2015 UTAH L. REV. 479.

The literal interpretation of a RAND commitment as a contract⁵¹ leads some authors to conclude that the commitment is defined by the intent of the parties to the commitment as well as the stated policies of the applicable SSO.⁵² This is no simple task as patent owners and implementers of standards in products often have different business perspectives and are likely to reach contrasting conclusions about the quantification of a reasonable patent royalty. Generally speaking, patent owners seek a return on their initial research and development investments, while implementers want low costs for manufacturing and selling standards-compliant products. If SSO members were required to specify the meaning of a RAND royalty, any compromise that the organization might reach likely would depend, *inter alia*, on the distribution of members according to their ownership shares of SEPs and their expected shares of sales of standard-complaint products, as well as the rules of the SSO for establishing consensus.⁵³

Members of SSOs are likely to differ dramatically in their desired royalties and therefore in their assessments of royalty terms that are reasonable. For example, members who hold patents but do not sell standard-compliant products may desire high patent royalties to maximize their return on research and development investments, while those who primarily sell products may desire low royalties in order to maximize product sales.⁵⁴ Accommodating the concerns of both patent owners and implementers requires delicate diplomacy. It is no surprise that a key element of this diplomacy is to defer to others to determine the intricate details of a RAND commitment.

^{51.} There are reasons to question the broad application of common law contract theory to RAND and other patent pledges. *See id.* at 503–517 (noting the lack of formal attributes of contract accompanying many SSO RAND commitments, the indefiniteness of these commitments and the difficulty of applying the third party beneficiary doctrine in such settings).

^{52.} See, e.g., Brooks & Geradin, supra note 9; Joanna Tsai & Joshua D. Wright, Standard Setting, Intellectual Property Rights, and the Role of Antitrust in Regulating Incomplete Contracts, 80 ANTITRUST L.J. 157 (2015).

^{53.} Admittedly, some SSO members may have one foot in each camp, as the division between patent holders and implementers is a fuzzy one. Many product manufacturers also contribute substantial resources to the development of new technology and accumulate significant patent portfolios. Nonetheless, these differing business perspectives persist if implementers are mostly technology users and if innovators are mostly technology sellers.

^{54.} See Jorge L. Contreras, *Technical Standards and* Ex Ante *Disclosure: Results and Analysis of an Empirical Study*, 53 JURIMETRICS 163, 206–07 (2013) (pointing out different motivations between "patent-centric" and "product-centric" firms).

Thus an interpretative approach based on assumed private interactions of members of SSOs is likely to fail. As noted above, neither firms nor SSOs typically memorialize their specific intentions when RAND commitments are made. Moreover, it is questionable whether many of the patent owners making RAND commitments actually have specific intentions regarding the royalty rates that they intend to charge after the standard is adopted, as many contingencies and uncertainties surround every new standard and unproven technology. To make matters worse, it is not even clear whose intentions should be assessed when seeking to pinpoint the meaning of a patent owner's RAND commitment: the firm making the commitment, potential licensees, the SSO entity, other SSO members, or the technical community as a whole? There are reasons to support the views of each of these potential interpreters of "reasonable." Finally, it has become painfully apparent that when asked after the fact (e.g., when a dispute arises), each of these parties will claim intentions and recollections that are wildly at odds with one another, whether through opportunism or genuine disagreement.⁵⁶ Thus, seeking to discern the intentions that parties may have had when a RAND commitment was made may be seeking to know the unknowable.

Nevertheless, disputes regarding RAND commitments arise and must be adjudicated. A key issue in such disputes is often whether, and to what degree, a patent holder has violated its commitment to offer or grant a license on RAND terms. Given the difficulty of discerning a party's *actual* intentions regarding the meaning of a RAND commitment at the time it was made, courts adjudicating this issue have had no choice but to apply extrinsic factors to place *some* meaning on the term "reasonable," if nothing else to determine whether the patent holder has breached its commitment.

B. INCREMENTAL VALUE

Incremental value is the contribution of a patented technology to the value of a product that employs the technology. Economists who have

^{55.} See, e.g., Anne Layne-Farrar, Business Models and the Standard Setting Process, in KONKURRENSVERKET [SWEDISH COMPETITION AUTHORITY], THE PROS AND CONS OF STANDARD SETTING 34 (2010), available at http://www.konkurrensverket.se/globalassets/english/publications-and-decisions/the-pros-and-cons-of-standard-setting.pdf.

^{56.} See Microsoft Corp. v. Motorola, Inc., No. C10-1823, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013) (noting that parties' initial assessments of "reasonable" royalties on two common technology standards differed by approximately a factor of 1000).

studied standard setting often distinguish between "ex ante" and "ex post" patent values.⁵⁷ The ex ante value is the anticipated contribution of a patent to the standard before the standard has been issued and firms and consumers have made irreversible commitments. The ex post value is the value of the patent after irreversible commitments have been made.

Ex post, a patent owner may be able to charge royalties that reflect the cost of switching to an alternative technology, which may be very high. Suppose a technology included in the 802.11 Wi-Fi standard is patented. Absent a RAND commitment, the patent owner may be able to charge a very high royalty for that patent because the 802.11 standard (and its modifications) are embedded in millions of devices and switching to an alternative technology would be enormously expensive and perhaps infeasible. The situation in which a firm or consumer has made irreversible commitments with high switching costs to an alternative is often referred to as "lock-in." 58

Many economists assert that a patent owner who makes a RAND commitment should not be permitted to gain the benefit of the costs of switching to an alternative standard after the standard has been adopted in the marketplace. Instead, they argue that the patent owner should be entitled to no more than the "incremental value" of the patented technology relative to its next-best alternative, measured before the standard has been adopted.⁵⁹ The incremental value is the marginal contribution of the patent to the value of the product. As such, it measures the additional value that consumers obtain from the patented technology or the reduction in production costs made possible by the patented technology.

The incremental value approach first identifies the alternative technology with the highest net value: the value of the technology less its royalty cost if the technology is patented (and the royalty cost is known). Suppose a patent covers a single discrete technology, for example, a way to manage power consumption in a mobile device, and suppose there are

^{57.} See, e.g., Gilbert, supra note 8, at 862; Farrell et al., supra note 8, at 607–08.

^{58.} See, e.g., Farrell et al., supra note 8, at 612, 650; Miller, supra note 8, at 357.

^{59.} See, e.g., THE SEDONA CONFERENCE WORKING GRP., COMMENTARY ON PATENT DAMAGES AND REMEDIES 23 (2014), available at https://thesedonaconference.org/download-pub/3827 ("Common sense and economics both argue that, in general, it would be irrational for an accused infringer to pay more for a license to a patent than the total economic cost it would incur to implement its next best available alternative to the patented technology, inclusive of all of the costs associated with the implementation of that next best alternative."); Farrell et al., supra note 9, at 642; Gilbert, supra note 8, at 862; Lemley & Shapiro, supra note 9, at 2041–42.

alternative ways to manage power consumption. The ex ante incremental value of the patent is its value less the net value of the next-best alternative. Suppose the next-best alternative has a value of \$0.20 per mobile device and can be licensed at a price of \$0.05 per device. Its net value is \$0.15. Furthermore, suppose the patented technology at issue would have a value of \$0.25 per mobile device. Then the ex ante incremental value of the patent is \$0.10 per mobile device.

If alternative technologies deliver similar values, the incremental value test reduces to a comparison between the cost of the technology and the cost of the least-expensive alternative. Suppose two technologies have the same functionality. One costs \$0.10 per covered device to implement and the other costs \$0.15 per covered device. The incremental value of the first technology is \$0.05. Incremental value cannot exceed the incremental cost of the chosen technology plus any differential benefits provided by the chosen technology relative to the next-best alternative. For an ex ante calculation, the incremental cost excludes the cost of switching to the alternative technology that is a consequence of investments that are specific to the chosen technology. In the previous example, suppose either technology choice requires an upfront and non-recoverable investment of \$10 million in addition to device costs. This \$10 million cost would be excluded from an ex ante comparison of the incremental costs of the two alternatives.

The incremental value approach is admittedly difficult to implement. Technology values may be unknown or measured with too little precision to provide a reliable measure of incremental value.⁶⁰ Furthermore, as shown in the illustrative example, when alternative technologies are proprietary, the incremental value of a technology depends on the royalty payment that would be required for its alternative. This royalty may be unknown or could change in a hypothetical rivalry between alternative technologies for adoption by the SSO.⁶¹

^{60.} Microsoft Corp., v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217, at *13 (W.D. Wash. Apr. 25, 2013) (noting the difficulty of determining the incremental value of patents).

^{61.} Some have argued that royalty costs should be excluded from considerations of social value because they are transfers between patent owners and patentees. See, e.g., David J. Teece & Edward F. Sherry, Standards Setting and Antitrust, 87 MINN. L. REV. 1913, 1931–34 (2003). However, royalty costs can impede the utilization of technologies and offset performance benefits. See Mark R. Patterson, Antitrust and the Costs of Standard-Setting: A Commentary on Teece & Sherry, 87 MINN. L. REV. 1995, 1999–2003 (2003).

Often, many patents have claims that cover a single technology. A typical standard in the information and communications technology sector can have hundreds or even thousands of patents that are declared essential to the standard. When many patents are essential to make, use, or sell products that employ a technology, the incremental value calculation does not address the value of an individual patent because each patent has a claim to the entire value of the technology. The solution to this problem requires an apportionment of the technology value to the individual patents.

Some have identified apportionment as a fatal flaw in the incremental value approach to RAND royalties.⁶² We disagree. Although there is as yet no single approach to apportionment that is generally accepted as ideal for every circumstance, there are guiding principles. The incremental value calculation should be performed at the level of the smallest functional unit covered by the patents at issue for which an independent value can be calculated.⁶³ The difficulty of apportioning the value of a technology to the different patents that are necessary to make, sell, or use products that employ the technology is not unique to SEPs. It is a problem for any technology when different entities own or control patents with claims on the technology.

We do not underestimate the analytical obstacles to quantifying the incremental value of a patented technology. In some cases the incremental value may be estimated by identifying the value of the patented technology relative to an unpatented alternative, as measured, for example, by the incremental value of enhanced performance or reliability. In other cases, the incremental value may be bounded by the known cost of an alternative that is a close substitute for the patented technology. The incremental value of a technology may depend on its use. For example, the value of a 3G cellular technology for a mobile handset may differ from the value of

^{62.} See, e.g., Sidak, supra note 8, at 932 (arguing that one cannot apply the "incremental value rule" when standard-essential patents must be used in fixed proportions).

^{63. &}quot;[W]here the entire value of a machine as a marketable article is properly and legally attributable to the patented feature, the damages owed to the patentee may be calculated by reference to that value. Where it is not, however, courts must insist on a more realistic starting point for the royalty calculations by juries—often, the smallest salable unit and, at times, even less." Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1227 (Fed. Cir. 2014) (citations omitted); see also VirnetX, Inc. v. Cisco Sys., Inc., 767 F.3d 1308, 1327 (Fed. Cir. 2014) (stating that the smallest saleable unit in royalty apportionment analysis need not be the smallest unit actually sold on the market: "the smallest salable unit approach was intended to produce a royalty base much more closely tied to the claimed invention than the entire market value of the accused products").

the technology when used in a base station, suggesting that RAND royalties may depend on the products that employ the technologies. Furthermore, implementers may value technologies differently even for the same product, and these values may depend on the competitive characteristics of markets in which the licensed technologies are used.

Anne Layne-Farrar and Gerard Llobet argue that these considerations imply that calculating incremental values can be complex and that equating royalties to incremental values may not result in socially optimal technology adoption decisions. We agree with their first point. The latter argument is not unique to standard-essential patents and is not a reason to avoid incremental value as a basis for calculating RAND royalties. Technology adoption decisions can be inefficient for many reasons, regardless of whether the technologies have RAND licensing commitments. These market imperfections do not justify the substitution of special factors for the determination of RAND royalties that do not reflect the incremental value of the patent.

C. BARGAINING AFTER STANDARD ADOPTION

Another interpretation is that a RAND royalty rate is whatever emerges from bilateral bargaining between a willing licensor and a willing licensee ex post, after a standard has been adopted. Standard-related hold-up (or hold-out) may limit the comparability of negotiated licenses and restrict the set of bargaining outcomes that are relevant to a RAND determination. In *Microsoft Corp. v. Motorola, Inc.*, Judge Robart opined that construction of a hypothetical negotiation in the RAND context must "consider alternatives that could have been written into the standard instead of the patented technology" with a focus "on the period before the standard was adopted and implemented (i.e., ex ante)."

J. Gregory Sidak argues that a RAND royalty is the result of a bargain with a range of outcomes in which the lower bound is the minimum amount the SEP holder is willing to accept and the upper bound is the

^{64.} See Anne Layne-Farrar & Gerard Llobet, Moving Beyond Simple Examples: Assessing the Incremental Value Rule Within Standards, 36 INT'L J. INDUS. ORG. 57, 66 (2014) (concluding, after analysis of several negotiation scenarios, that "the hope for a formulaic incremental value calculation strikes us as unrealistic").

^{65.} See Jorge L. Contreras, Fixing FRAND: A Pseudo-Pool Approach to Standards-Based Patent Licensing, 79 ANTITRUST L.J. 47, 55–57 (2013) (discussing "bilateralism" approach).

^{66.} Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217, at *13 (W.D. Wash. Apr. 25, 2013).

maximum amount the licensee is willing to pay.⁶⁷ Of course this range applies to any negotiation, and the relevant question is how the upper and lower bounds are determined and how tightly they constrain the possible outcomes. Sidak concludes,

A royalty is FRAND if it (1) ensures the SEP holder's continued participation in standard setting, (2) does not deny the implementer access to the standard, (3) is consistent with a reasonable aggregate royalty burden for all SEPs on the implementer's standard-compliant product, and (4) approximates the royalty rates of similarly situated licenses.⁶⁸

Sidak's conclusion, however, is circular in that it defines a FRAND royalty as reasonable if it is consistent with a reasonable royalty burden, without defining what is or is not reasonable. Furthermore, if one accepts our central thesis that similar principles should apply to determine reasonable royalties for SEPs and non-SEPs, then the concern with continued participation in standard setting would be substantially attenuated. Damages for infringement would be similar with or without the RAND commitment and the RAND commitment would not substantially discourage participation in standard setting.

D. INCENTIVES FOR INVENTION

Another approach to the determination of a RAND royalty is the financial return required to compensate the patentee for the effort and expense involved in creating the patented technology. Compensation is relevant if the RAND commitment is interpreted as a contract that explicitly requires a measure of adequate compensation. However, if SSOs do not condition the RAND commitment on a measure of adequate compensation or if compensation is not adequately defined, it is our view that a RAND commitment does not require a return from licensing that is sufficient to compensate the patentee for the cost of its invention.

The contribution from an invention is its value relative to the net value of the next-best alternative, as this measures the maximum amount that a consumer or implementer would be willing to pay for the invention.⁶⁹ The incremental value of a SEP (or a technology for which many SEPs are essential) can be very small if there is an alternative available at low cost that provides similar performance. In that case, the incremental value

^{67.} Sidak, *supra* note 8, at 933.

^{68.} Id.

^{69.} See Gilbert, supra note 8, at 862; NAS REPORT, supra note 10, at 61–63; Farrell et al., supra note 9, at 642; Lemley & Shapiro, supra note 9, at 2041–42.

approach to RAND may fail to compensate the inventor for the costs involved in developing the patented technology. But that can also be true for non-SEPs and indeed for every economic activity. There is no guarantee that the marketplace will offer a price that covers the cost of supplying a product, either in the short term or ever. This does not mean that ex ante incremental value necessarily will provide the right incentive for investment to create the technologies in the first place. However, whatever distortions may occur, they should not be different merely because the selection of the technology takes place in the context of developing a standard.

In this Article, we consider how courts have approached the determination of reasonable royalties for SEPs and non-SEPs that are valid and infringed. We find that these two approaches to compensate a patent owner for infringement share more similarities than they have been given credit for, and that a royalty rate satisfying a RAND commitment should be the same as a reasonable royalty calculated for damages purposes for a non-SEP that is valid and infringed if the SEP and non-SEP have similar economic characteristics. We propose a modification to the current reasonable royalty analysis for patent damages that brings it closer to theoretical models that have been proposed to compute RAND royalty rates. Based on our consideration of alternative approaches to determine the contours of a reasonable royalty, our proposed modification emphasizes a determination of the incremental value contributed by the patented technology, evaluated before consumers or firms make investments that are specific to the patented technology.

III. THE LAW OF PATENT DAMAGES IN THE U.S.

There was a substantial body of law devoted to determining "reasonable" patent royalties long before the advent of RAND commitments: the law of patent damages. Patent damages are intended to make a patent holder whole with respect to an infringement.⁷⁰ Damages are ex post remedies that, by definition, are only assessed after an infringement has occurred and the patents at issue have been found to be valid and enforceable. In many cases, patent damages, like damages in other tort actions, are retrospective, compensating the injured party, the patent owner, for a past harm.

^{70.} See 7 DONALD S. CHISUM, CHISUM ON PATENTS §20.01 (2015) ("The goal of the law of monetary relief for patent infringement is to provide full compensation to the owner of a patent.").

But patent cases differ from most other tort cases in that the wrong committed by the infringer is not always abated going forward. That is, the infringer may be permitted by the court to *continue* its infringement if an injunction is not awarded.⁷¹ Prior to the Supreme Court's 2006 decision in *eBay*, permanent injunctions almost always issued in patent cases following a judgment of infringement.⁷² But, as discussed above, the *eBay* four-factor test has made the issuance of an injunction in patent cases far from certain. Thus, in many instances infringement is permitted to continue indefinitely, subject only to the infringer's payment of an ongoing royalty to the patent holder.⁷³

There are several measures by which damages in patent suits may be assessed. Lost profits may be awarded to a patent holder if sales by the infringer can be shown to have supplanted the patent holder's own sales, and courts have a wide range of latitude to impose additional damages in exceptional cases.⁷⁴ But the most common measure of damages in patent cases today, and the exclusive measure of damages for post-judgment infringement (i.e., absent an injunction preventing future infringement), is a "reasonable royalty" attributable to the infringed patent.⁷⁵ Below we discuss in some detail the historical development of the reasonable royalty test for patent damages, and the methodologies that have arisen to compute reasonable royalties.

^{71.} See supra Part II (discussing the test for issuing injunctions in patent cases).

^{72.} See, e.g., Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1246–47 (Fed. Cir. 1989), cert. denied, 493 U.S. 853 (1989) ("Infringement having been established, it is contrary to the laws of property, of which the patent law partakes, to deny the patentee's right to exclude others from use of his property.... It is the general rule that an injunction will issue when infringement has been adjudged, absent a sound reason for denying it."); see also 7 CHISUM, supra note 70 §20.04[2][a] (2014) (discussing court decisions prior to eBay).

^{73.} Some have compared the scenario in which a permanent injunction is not granted after infringement is found to a court-ordered compulsory license. See, e.g., Paice LLC v. Toyota Motor Corp., 504 F.3d 1293, 1314 (Fed. Cir. 2007) (discussing courts' authority to order payment of royalties following denial of injunctive relief "styled a 'compulsory license' by the court" (citing Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 628 (Fed. Cir. 1985))).

^{74.} See 7 CHISUM, supra note 70, §§ 20.03[4][b] (Increased Damages) and 20.05 (Lost Profits).

^{75.} See Paice, 504 F.3d at 1315 (Should the parties fail to agree upon an ongoing royalty following the denial of an injunction, "the district court could step in to assess a reasonable royalty in light of the ongoing infringement.").

A. HISTORICAL DEVELOPMENT OF LAW OF PATENT DAMAGES

1. Early History—The Need to Prove Actual Losses

The law of patent damages developed prior to the twentieth-century merger of the courts of equity and law in the United States. Historically, patent holders were permitted to plead actions for infringement both in equity and at law. Today we are most familiar with the equitable remedy of injunctive relief in patent cases, but monetary damages were also available via the equitable remedy of accounting.⁷⁷ Monetary recoveries at equity were based on a theory of disgorging the infringer's wrongful gains attributable to his infringement.⁷⁸ In other words, a patent holder was entitled to recover from the infringer those profits that were wrongfully appropriated under a theory grounded in unjust enrichment.⁷⁹ Damages for profits arising from the infringement were codified in the Patent Act of 1870.80 In addition, in an action at law, a patent holder could recover from an infringer damages representing his or her own pecuniary loss resulting from the infringement, whether or not the infringer profited by the infringement.81 Thus, if the patent holder engaged in a regular program of licensing its patent to others at a certain royalty, and the infringer neglected to enter into a license agreement and pay the required royalty, the patent owner would be deemed to have lost the amount of that royalty and could collect the missing royalties as damages.

Based on these two principles, courts in the nineteenth and early twentieth centuries often reasoned that absent proof of wrongful profits earned by the infringer, or a regular program of licensing by the patent holder, the patent holder could recover only nominal damages for infringement (in addition to an injunction in equity, of course).⁸² The

^{76.} The separation of courts of equity and law derives from the ancient English judicial system, in which courts of law existed separately from, and served different purposes than, the equitable courts of chancery. *See generally* MORTON J. HORWITZ, THE TRANSFORMATION OF AMERICAN LAW: 1780–1860, at 265–66 (Stanley N. Katz ed., 1977).

^{77.} See 7 CHISUM, supra 70, § 20.02[1][d].

^{78.} Coupe v. Royer, 155 U.S. 565, 582 (1895).

^{79.} Note that this early formulation of "lost profits" damages was based on profits wrongfully earned by the *infringer*, consistent with the equitable action for an accounting. In the 1946 Act, by contrast, lost profits damages were defined as the profits that the *patent holder* would have made but for the infringer's wrongdoing, bringing them closer to a remedy at law (i.e., measured not by the infringer's undeserved gain, but the patent holder's loss). *See* 7 CHISUM, *supra* 70, §20.02[4].

^{80.} Patent Act of 1870, ch. 230, § 55, 16 Stat. 198, 206 (enacted July 8, 1870).

^{81.} Coupe, 155 U.S. at 582; see 7 CHISUM, supra 70, § 20.02[2].

^{82.} Coupe, 155 U.S. at 583.

Supreme Court's 1895 decision in *Coupe v. Royer* exemplified this approach. In *Coupe*, the holder of a patent covering a machine for converting raw hides to leather obtained a jury verdict of \$18,000 against a competitor who had used an infringing machine to process 66,000 hides. The Supreme Court reversed the verdict on the ground that no evidence had been presented regarding the patent holder's actual loss from the infringement. The Court held that in view of "the evidence disclosing the existence of no license fee, no impairment of the plaintiffs' market, in short, no damages of any kind, we think the court should have instructed the jury, if they found for the plaintiffs at all, to find nominal damages only."84

2. The Emergence of Reasonable Royalty Damages

Despite the rule against awarding patent damages absent proof of actual losses, several courts, both before and after *Coupe v. Royer*, did indeed award damages when lost profits and actual losses could not be shown. In these cases, courts hinted that damages based on the incremental value of the patented technology represented a fair measure of patent damages. In 1865 in *Suffolk Co. v. Hayden*, the Supreme Court held that,

There being no established patent or license fee in the case, in order to get at a fair measure of damages, or even an approximation to it, general evidence must necessarily be resorted to. And what evidence could be more appropriate and pertinent than that of the utility and advantage of the invention over the old modes or devices that had been used for working out similar results?⁸⁶

In 1872, the Court in *Mowry v. Whitney* reversed a lower court's denial of lost profits damages arising from a patent covering an improvement in the method of making railway wheels.⁸⁷ The lower court awarded the patent holder damages based on the infringer's entire profit from the sale of wheels made using the patented process, rather than only the profit

^{83 14}

^{84.} *Id.*; *see also* Rude v. Westcott, 130 U.S. 152, 167 (1889) (holding that "conjectural estimates" of patents' value did not provide adequate basis for damages finding).

^{85.} See John C. Jarosz & Michael J. Chapman, The Hypothetical Negotiation and Reasonable Royalty Damages: The Tail Wagging the Dog, 16 STAN. TECH. L. REV. 769, 776–77 (2013).

^{86. 70} U.S. 315, 320 (1865).

^{87. 81} U.S. 620 (1871).

attributable to the patented reheating and cooling process. The Supreme Court reversed, holding that,

The question to be determined in this case is, what advantage did the defendant derive from using the complainant's invention over what he had in using other processes then open to the public and adequate to enable him to obtain an equally beneficial result.⁸⁸

While the Supreme Court's 1895 decision in Coupe seemingly solidified the presumption against awarding patent damages when the patentee could not prove actual losses, this presumption was toppled in 1915 with the Court's decision in Dowagiac Manufacturing Co. v. Minnesota Moline Plow Co.89 In Dowagiac, the patent covered a new design for an agricultural grain drill. Because the market for grain drills was crowded and competitive, the patent owner could not prove that the infringer's profits were elevated on account of using the patented design (i.e., that the infringer sold more drills, or that the patent holder sold fewer, on account of the infringer's use of the patented improvement).90 Likewise, the patent owner had not embarked on a licensing program for the patent, choosing instead to retain its invention as "a close monopoly."91 As a result, the lower court awarded the patent holder only nominal damages for the infringement.92 The Supreme Court reversed, holding that absent evidence of lost profits or an established royalty, infringement damages could still be awarded on the basis of a "reasonable" royalty.93 And even though the plaintiff could produce no direct evidence of comparable royalties charged in the market for its invention, a reasonable royalty could be computed based on "the nature of the invention, its utility

⁸⁸ Id at 651

^{89.} Dowagiac Mfg. Co. v. Minn. Moline Plow Co., 235 U.S. 641 (1915). Prior to *Dowagiac*, some lower courts had already indicated a willingness to award "reasonable royalty" damages absent a showing of actual losses by the patentee. *See* U.S. Frumentum Co. v. Lauhoff, 216 F. 610, 614–17 (6th Cir. 1914) ("This damage or compensation is not, in precise terminology, a royalty at all, but it is frequently spoken of as a 'reasonable royalty'; and this phrase is a convenient means of naming this particular kind of damage."); *see also* Oskar Liivak, When Nominal is Reasonable: Damages for the Unpracticed Patent 40–48 (Sept. 9, 2014) (unpublished manuscript), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2488690 (discussing lower court cases).

^{90.} Dowagiac, 235 U.S. at 648.

^{91.} *Id*.

^{92.} *Id*.

^{93.} Id.

and advantages, and the extent of the use involved."⁹⁴ The *Dowagiac* analysis thus takes into account the intrinsic value of the patented invention and the extent of the infringing use, rather than only demonstrable monetary losses.

The 1922 amendments to the Patent Act⁹⁵ codified *Dowagiac's* reasoning and expressly authorized courts to award patentees a "reasonable sum" or "general damages" if a more precise measure of damages, such as existing royalty rates and lost profits, were not available. In 1946 the Patent Act was amended again, ⁹⁶ this time to make reasonable royalty damages explicitly available in all cases, not only those in which lost profits and existing royalty rates could not be discerned. ⁹⁷ The 1952 Act, ⁹⁸ which largely remains in effect today, ⁹⁹ provides that "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court."¹⁰⁰

The reasonable royalty measure of damages is thus available to any patentee, and forms a floor on royalties, even when the patentee cannot show lost profits.¹⁰¹ In addition, a reasonable royalty is the only practical measure of damages for prospective licensing of a patent after a finding of infringement (i.e., when no injunction issues).¹⁰²

Following the Supreme Court's decision in *Dowagiac*, courts began to calculate reasonable royalty damages based on "the nature of the invention, its utility and advantages, and the extent of the use involved." To a large degree, these analyses turned on discerning the value of the patented technology over available non-infringing substitutes. For example, the

^{94.} *Id*.

^{95.} Act of Feb. 18, 1922, Pub. L. No. 67-147, § 8, 42 Stat. 389, 392.

^{96.} Act of Aug. 1, 1946, Pub. L. No. 79-587, 60 Stat. 778.

^{97.} The 1946 Act also eliminated as a measure of damages the *infringer's* profits, thus shifting patent damages away from the equitable accounting measure toward a law-based damages calculation. *See supra* note 75.

^{98.} Act of July 19, 1952, Pub. L. No. 82-593, 66 Stat. 812.

^{99.} The 2011 amendments to the Patent Act, known as the America Invents Act or AIA, did not modify the damages provisions discussed herein.

^{100. 35} U.S.C. § 284 (2012).

^{101.} Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1554 (Fed. Cir. 1995) (en banc) ("A patentee is entitled to no less than a reasonable royalty on an infringer's sales for which the patentee has not established entitlement to lost profits.").

^{102.} See supra note 75 and accompanying text.

^{103.} Dowagiac Mfg. Co. v. Minn. Moline Plow Co., 235 U.S. 641, 648 (1915).

^{104.} See Seaman, supra note 28, at 1672–73 (discussing and citing numerous cases involving non-infringing substitutes before Georgia-Pacific).

district court in *Activated Sludge*, *Inc. v. Sanitary District of Chicago* extensively analyzed the technical advantages of a patented sludge purification process over available alternatives. ¹⁰⁵ The court concluded that the patented process was, indeed, superior to any potential substitute, a determination that should necessarily factor into the patent holder's damages for infringement. These opinions reinforce the value-based evaluation of patent damages in *Dowagiac*.

3. Georgia-Pacific and the Hypothetical Negotiation

Throughout the mid-twentieth century, federal courts adjudicated reasonable royalty damages cases based on the intrinsic value of the infringed patents. In 1970, however, the federal court for the Southern District of New York diverged from this path in *Georgia-Pacific* and developed a list of fifteen factors relevant to patent royalty damages calculations. In *Georgia-Pacific*, the court held that the reasonable royalty owed to a patent holder should be determined based on consideration of the following fifteen different factors:

- 1. The royalties received by the patent holder for licensing the patent, proving or tending to prove an established royalty.
- 2. The rates paid by the licensee for the use of other similar patents.
- 3. The nature and scope of the license, whether it is exclusive or nonexclusive, or restricted or non-restricted in terms of territory or customers.
- 4. The patent holder's established policy of maintaining its patent monopoly by licensing the use of the invention only under special conditions designed to preserve the monopoly.
- 5. The commercial relationship between the patent holder and licensees, such as whether they are competitors in the same territory in the same line of business or whether they are inventor and promoter.
- 6. The effect of selling the patented article in promoting sales of other products of the licensee; the existing value

^{105. 64} F. Supp. 25 (N.D. Ill. 1946).

^{106.} Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), *modified and aff d*, 446 F.2d 295 (2d Cir. 1971). For a detailed discussion of the facts and procedural history of *Georgia-Pacific*, see Seaman, *supra* note 28, at 1681–88, and Jarosz & Chapman, *supra* note 85, at 779–82.

- of the invention to the patent holder as a generator of sales of non-patented items; and the extent of such derivative or "convoyed" sales.
- 7. The duration of the patent and the term of the license.
- 8. The established profitability of the patented product, its commercial success and its current popularity.
- The utility and advantages of the patented technology over any old modes or devices that had been used for achieving similar results.
- 10. The nature of the patented invention, its character in the commercial embodiment owned and produced by the licensor, and the benefits to those who used it.
- 11. The extent to which the infringer used the invention and any evidence probative of the value of that use.
- 12. The portion of the profit or selling price that is customary in the particular business or in comparable businesses.
- 13. The portion of the realizable profit that should be credited to the invention as distinguished from any non-patented elements, manufacturing process, business risks or significant features or improvements added by the infringer.
- 14. The opinion testimony of qualified experts.
- 15. The amount that the patent holder and a licensee would have agreed upon at the time the infringement began if they had reasonably and voluntarily tried to reach an agreement.¹⁰⁷

These factors represent a broad spectrum of considerations relating to the patent holder's and the infringer's potential gains from the patented technology. Factor 1 (royalties) evokes the "established royalty" test of Coupe v. Royer, while Factor 9 (utility and advantages of the patented technology) harkens back to the incremental value analysis of Dowagiac. Some factors, such as Factor 14 (expert opinions), are cumulative in that their weight goes to issues addressed in the other factors. Nevertheless, the Georgia-Pacific factor that has come to dominate the reasonable royalty analysis is Factor 15, the royalty that the parties would have agreed upon at the time the infringement began if they had reasonably and voluntarily

tried to reach an agreement: the so-called "hypothetical negotiation" test. As explained by one federal district court: "Despite the fact that this hypothetical negotiation factor is just one of the factors on the list, the hypothetical negotiation is a method for incorporating the other factors in order to arrive at a reasonable royalty rate. That is, in a typical *Georgia-Pacific* analysis, the court will apply the first fourteen factors within a framework of assessing what the parties are likely to have agreed in their hypothetical negotiation.

Over the years, the *Georgia-Pacific* approach has become the de facto standard for adjudicating patent royalty damages in the federal courts despite its apparent limitations. As recently noted by the Federal Circuit,

Although we have never described the *Georgia-Pacific* factors as a talisman for royalty rate calculations, district courts regularly turn to this 15-factor list when fashioning their jury instructions. Indeed, courts often parrot all 15 factors to the jury, even if some of those factors clearly are not relevant to the case at hand. And, often, damages experts resort to the factors... with little explanation as to why they do so, and little reference to the facts of record.¹¹¹

In particular, the hypothetical negotiation test alluded to in Factor 15 of *Georgia-Pacific* has been criticized on numerous fronts. Daralyn Durie and Mark Lemley argue that the test is an obstacle to the determination of patent awards "because it overloads the jury with factors to consider that may be irrelevant, overlapping, or even contradictory." Other commentators have questioned the notion that such a negotiation ever would have occurred between litigants who obviously declined to enter into a license agreement and instead litigate their dispute. 113 Even the

^{108.} See, e.g., Durie & Lemley, supra note 28, at 628–29; Jarosz & Chapman, supra note 85, at 782–83; Seaman, supra note 28, at 1673. Though Georgia-Pacific is widely cited as the origin of the "hypothetical negotiation" test, several earlier cases adopted a similar approach. See, e.g., Seaman, supra note 28, at 1678 (citing earlier cases).

^{109.} Studiengesellschaft Kohle mbH v. Dart Indus., Inc., 666 F. Supp. 674, 680 (D. Del. 1987).

^{110.} See Durie & Lemley, supra note 28, at 628; Jarosz & Chapman, supra note 85, at 769; Seaman, supra note 28, at 1661.

^{111.} Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1230 (Fed. Cir. 2014).

^{112.} Durie & Lemley, supra note 28, at 628.

^{113.} See, e.g., U.S. FED. TRADE COMM'N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 170–71 (2011), available at https://www.ftc.gov/sites/default/files/documents/reports/evolving-ip-market place-aligning-patent-notice-and-remedies-competition-report-federal-trade/110307

Federal Circuit has dismissed this scenario as "absurd." There is also significant concern that the opinion in *Georgia-Pacific* gives no practical guidance to courts or juries concerning how its fifteen factors should be weighted or compared. Several commentators have argued that the hypothetical negotiation test is circular, as the royalties negotiated by parties will, to a large degree, depend on the royalty rates determined by courts to be reasonable, which theoretically depend on the results of a hypothetical negotiation, and so on. 116

We concur with these critiques of the *Georgia-Pacific* hypothetical negotiation test. The deficiencies of the *Georgia-Pacific* approach are made even more apparent by its inadequacy in addressing the issues raised by standard-essential patents, discussed below. Accordingly, we believe that a return to the roots of patent damages law, developed by the Supreme Court and Congress from the first Patent Act through 1970 when *Georgia-Pacific* was decided, is both warranted and necessary.

B. RAND IN THE COURTS

Recently, several U.S. courts have endorsed the concept that a RAND royalty should correspond to the value of the patented technology when the standard is developed and should not capture post-adoption costs required to switch to a different technology. In conducting this analysis, courts in several recent cases have attempted to apply the *Georgia-Pacific*

patentreport.pdf; Thomas F. Cotter, Four Principles for Calculating Reasonable Royalties in Patent Infringement Litigation, 27 SANTA CLARA COMPUTER & HIGH TECH. L.J. 725, 730 (2011); Jarosz & Chapman, supra note 85; Brian J. Love, The Misuse of Reasonable Royalty Damages as a Patent Infringement Deterrent, 74 MO. L. REV. 909, 914 (2009); Seaman, supra note 28, at 1660–61.

114. Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1554 n.13 (Fed. Cir. 1995) (en banc).

115. See Durie & Lemley, supra note 28, at 631; John W. Schlicher, Patent Damages, the Patent Reform Act, and Better Alternatives for the Courts and Congress, 91 J. PAT. & TRADEMARK OFF. SOC'Y 19, 22 (2009); Seaman, supra note 28, at 1704. J. Gregory Sidak attempts to add structure to the Georgia-Pacific factors by appealing to bargaining theory. J. Gregory Sidak, Bargaining Power and Patent Damages, 19 STAN. TECH. L. REV. 1 (2015). Christopher Seaman argues that reasonable royalties for patent infringement should be based on historical damages. Christopher B. Seaman, Ongoing Royalties in Patent Cases After eBay: An Empirical Assessment and Proposed Framework, 23 TEX. INTELL. PROP. L.J. 203 (2015). Neither approach accounts for factors relevant to standard-essential patents, such as the extent to which adoption of a standard makes alternative technologies more distant substitutes.

116. See, e.g., Jarosz & Chapman, supra note 85, at 823 n.251; Suzanne Michel, Bargaining for RAND Royalties in the Shadow of Patent Remedies Law, 77 ANTITRUST L.J. 889, 897 n.34; Mark Schankerman & Suzanne Scotchmer, Damages and Injunctions in Protecting Intellectual Property, 32 RAND J. ECON. 199, 200 (2001).

factors to determine appropriate RAND royalty rates.¹¹⁷ Yet in doing so, and as described in some detail below, these courts each concluded that the *Georgia-Pacific* analysis is ill-suited to making RAND royalty determinations.

In Microsoft v. Motorola, Judge James Robart of the Federal District Court for the Western District of Washington sought to determine both a reasonable royalty and a range of reasonable royalties for Motorola's patents covering two industry standards (ITU's H.264 audiovisual compression standard and IEEE's 802.11 wireless networking standards).¹¹⁸ In doing so, Judge Robart looked first to the reasonable royalty damages analysis in Georgia-Pacific, including its hypothetical negotiation framework.¹¹⁹ He reasoned that the parties to a hypothetical negotiation would set RAND royalty rates by "looking at the importance of the SEPs to the standard and the importance of the standard and the SEPs to the products at issue."120 However, the court also noted that "[f]rom an economic perspective, a RAND commitment should be interpreted to limit a patent holder to a reasonable royalty on the economic value of its patented technology itself, apart from the value associated with incorporation of the patented technology into the standard."121

The court determined RAND royalties for Motorola's patents by adopting a modified version of the *Georgia-Pacific* factors to recreate a hypothetical negotiation between the parties. The court expressly modified twelve of these factors. The modifications generally address,

- (i) The lack of comparability of negotiated royalty terms that fail to account for RAND obligations. (Factors 1 and 12)¹²²
- (ii) The importance of the value of the patented technology apart from the value associated with incorporation of the

^{117.} See Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217, at *16–17 (W.D. Wash. Apr. 25, 2013); In re Innovatio IP Ventures, LLC Patent Litig., 921 F. Supp. 2d 903, 907 (N.D. Ill. 2013); Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1229–30 (Fed. Cir. 2014).

^{118.} Microsoft, No. C10-1823JLR, 2013 WL 2111217, at *1-4.

^{119.} *Id.* at *19; see also Kassandra Maldonado, Breaching RAND and Reaching for Reasonable: Microsoft v. Motorola and Standard-Essential Patent Litigation, 29 BERKELEY TECH. L.J. 419, 443–46 (summarizing the court's adaptation of the Georgia-Pacific factors).

^{120.} Microsoft, 2013 WL 2111217, at *3.

^{121.} *Id.* at *18.

^{122.} Id. at *18-19

patented technology into the standard. (Factors 6, 8, 10, 11, and 13)¹²³

- (iii) The importance of alternatives that could have been written into the standard instead of the patented technology, with the focus on the period before the standard was adopted and implemented. (Factor 9)¹²⁴
- (iv) The purpose of the RAND commitment to encourage widespread adoption of the standard through avoidance of hold-up and stacking. (Factor 15)¹²⁵
- (v) The irrelevance of some of the factors because they do not relate to the RAND context (e.g., whether patentee has a policy to license others, relationship of the licensor and licensee, and the patent term). (Factors 4, 5, and 7)¹²⁶

It is useful to consider whether Judge Robart's modifications to the Georgia-Pacific factors are dictated specifically and uniquely by the presence of a RAND commitment. We conclude that they are not. Any licensing commitment—for example, a commitment to license at a particular level in the supply chain for a product—would raise similar comparability issues and may exclude some of the Georgia-Pacific factors from consideration. Consider Judge Robart's modifications to Factors 6, 8, 10, 11, 13, and 15, which focus on the importance of the value of the patented technology apart from the value associated with incorporation of the patented technology into the standard. One could apply the same reasoning to a patented technology that is incorporated in any product, without regard to whether the product complies with a particular standard. A reasonable royalty for a patent should be determined by the value of the patented technology and not by the costs of switching to another technology. Alternatively, Judge Robart could be saying that the standardization context is unique; however he has offered no clear explanation to reach this conclusion.

Judge Robart's modification to the ninth *Georgia-Pacific* factor highlights the lack of specificity of his conclusions to the RAND licensing context. Factor 9 addresses the importance of alternatives that could have been written into the standard instead of the patented technology. Judge Robart's modification emphasizes that this evaluation must focus on the

^{123.} *Id*.

^{124.} Id. at *19.

^{125.} Id. at *20.

^{126.} Id. at *18-19.

period before the standard was adopted and implemented. However, he does not explain why such an ex ante limitation is warranted for the determination of a RAND royalty but not in other licensing contexts.

In *In re Innovatio IP Ventures Patent Litigation*,¹²⁷ Judge James Holderman of the Northern District of Illinois largely followed the framework described by Judge Robart for the determination of RAND royalties. In particular, he applied a modified *Georgia-Pacific* analysis that simulates a hypothetical bilateral negotiation in the context of RAND obligations.¹²⁸ Judge Holderman further explained,

The purpose of conducting such a hypothetical negotiation is "to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began." Accordingly, the court must try, "as best as possible, to recreate the ex ante licensing negotiation scenario and to describe the resulting agreement." 129

Most recently, in *Ericsson, Inc. v. D-Link Systems, Inc.*, a case involving RAND-encumbered patents, the Federal Circuit reversed and remanded a jury verdict based, in part, on the district court's jury instruction to apply the fifteen *Georgia-Pacific* factors without modification. The Federal Circuit affirmed that "[i]n a case involving RAND-encumbered patents, many of the *Georgia-Pacific* factors simply are not relevant; many are even contrary to RAND principles." ¹³¹

The Federal Circuit noted several respects in which the *Georgia-Pacific* factors were both irrelevant and contrary to the RAND commitment under consideration.¹³² Like Judge Robart in *Microsoft v. Motorola*, the Federal Circuit criticized the use of *Georgia-Pacific* Factors 4, 5, 8, 9 and 10 when considering royalties subject to a RAND commitment.¹³³ Though the court did not hold that a modified version of the *Georgia-Pacific* factors must be used in cases involving SEPs, it found that the

^{127.} *In re* Innovatio IP Ventures, LLC Patent Litig., 921 F. Supp. 2d 903, 915–17 (N.D. Ill. 2013).

^{128.} See Maldonado, supra note 119, at 452-54 (summarizing the court's methodology).

^{129.} *Microsoft*, 2013 WL 2111217, at *17 (citing Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1324 (Fed. Cir. 2009)).

^{130.} Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1229–30 (Fed. Cir. 2014).

^{131.} *Id.* at 1230.

^{132.} *Id.* at 1230–31. For example, the court states that "factor 5—'[t]he commercial relationship between the licensor and licensee'—is irrelevant because Ericsson must offer licenses at a non-discriminatory rate." *Id.* (quoting Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970)).

^{133.} *Id*.

combination of errors in the lower court's instructions to the jury was significant enough to warrant remand.¹³⁴

IV. THE CASE FOR A UNIFIED FRAMEWORK FOR REASONABLE ROYALTIES

In this Part, we argue that a reasonable royalty should take into account the ex ante alternatives to the patented technology and focus on the incremental contribution of the asserted patent to the infringing product. Regardless of whether the patent is subject to a RAND commitment, the relevant alternatives for this hypothetical negotiation are the alternatives that were available before the infringer made investments that are specific to the patented technology and, in the case of a de facto market standard, before others make investments that cause available alternatives to become distant substitutes.

With this interpretation, there is nothing "essential" about standard-essential patents. A RAND commitment carries weight and is not irrelevant to the determination of a reasonable royalty. It is not seriously disputed that a RAND commitment creates an obligation to offer a license for the patented technology. The commitment also prohibits patent terms that are unduly discriminatory, without describing precisely the conditions under which patent terms fail the non-discrimination requirement. What the RAND commitment does not do in our opinion is create a unique approach to the evaluation of patent damages that predates investments by the infringer or others that are specific to the patented technology. We argue that the law provides a basis to conclude that a patentee should not benefit from such investments, without regard to whether the patent is burdened with a RAND commitment.

A. PATENT HOLD-UP IS A RISK FOR BOTH SEPS AND NON-SEPS

As described above, when faced with the task of estimating RAND royalties, courts have modified the *Georgia-Pacific* factors to stress an ex ante hypothetical negotiation to eliminate the risk of hold-up. Yet the risk of hold-up is not unique to patents with RAND commitments. For example, Carl Shapiro concludes that if courts rely on observed licensing rates to estimate a reasonable royalty for an infringed patent, the threat of hold-up can lead to royalty estimates that far exceed the social value of the

^{134.} *Id*

^{135.} See Contreras, supra note 50, at 14 (analyzing legal theories supporting the enforcement of RAND commitments).

patent, without regard to whether the patent is essential to a standard. The Federal Trade Commission, in its review of methodologies to estimate damages for patent infringement generally and not specifically limited to SEPs, recommends that "[to] prevent damage awards based on switching costs, courts should set the hypothetical negotiation at an early stage of product development, when the infringer is making design decisions and before it has sunk costs into using the patented technology."¹³⁷

Judge Robart opined that a RAND commitment distinguishes the hypothetical negotiation from a circumstance in which the patentee has not made a RAND commitment in his conclusion that "a proper methodology used to determine a RAND royalty should therefore recognize and seek to *mitigate the risk of patent hold-up that RAND commitments are intended to avoid.*" The mitigation of patent hold-up is a desirable end and one that may be reinforced by a RAND commitment. But if the mitigation of patent hold-up is a desirable end, it is also a desirable end for patents that *lack* a RAND commitment.

The ability of a patent owner to hold up an infringing firm by demanding royalties that reflect the fact that the infringer has made investments that are specific to the patented technology is by no means unique to the context of standards. Firms often make irreversible investments when they develop a product, independent of whether the product complies with a particular standard. These irreversible investments can allow a patentee to charge higher royalties than the patentee could obtain in a hypothetical negotiation that occurs before the specific investments are made. Furthermore, a firm can be locked-in to the use of patented technologies that become de facto market standards. If it is a desirable end to mitigate hold-up for patents that are subject to RAND commitments, it is also desirable to mitigate hold-up for other patents. It

^{136.} See Shapiro, supra note 14, at 309.

^{137.} THE EVOLVING IP MARKETPLACE, supra note 113, at 22.

^{138.} Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217, at *12 (W.D. Wash. Apr. 25, 2013) (emphasis added).

^{139.} See Miller, supra note 8, at 355; Swanson & Baumol, supra note 8, at 10–11.

^{140.} Allowing patent owners to benefit from lock-in can deter willful infringement, that is, infringement made with full knowledge that the activity violates the patent. However, findings of willful infringement are relatively rare and courts have the discretion to award treble damages if infringement is willful, which undermines the deterrence effect of allowing patentees to benefit from investments made by the infringer. See Kimberly A. Moore, Empirical Statistics on Willful Patent Infringement, 14 FED. CIR.

We contend that the analysis of RAND royalties conducted by Judges Robart and Holderman need not be limited to patents covered by RAND commitments. SEPs should not benefit from switching costs that arise from investments that are specific to the standard. The same logic applies to all patents. A patentee should be compensated for the value of her invention, as defined by its marginal contribution over the prior art. The patentee should not enjoy a benefit that arises merely because the infringer has made investments that have high switching costs.¹⁴¹

A further consideration in the evaluation of reasonable royalties for both SEPs and non-SEPs arises when, as is often the case, a product requires licenses to use many patents held by different owners. In that circumstance, each patent owner has an incentive to demand a large share of the value of the product and the resulting total royalty demand can exceed the demand that would maximize a licensor's profit if it were the sole source for all of the patents. This phenomenon is called "royalty-stacking." We discuss its implications below for a common framework to evaluate patent infringement damages.

B. ROYALTY-STACKING IS NOT UNIQUE TO SEPS

The court in *Microsoft v. Motorola* recognized that patent damage demands could impose costs on implementers and consumers that cannot be reconciled with a desire to compensate patent owners. When multiple independent patent owners each demand compensation for patent infringement, the total of these royalty demands can exceed the level that would maximize their joint profits. This "royalty stacking" issue is a cause for courts to evaluate individual royalty demands in the context of the potential total royalty burden that patent owners might impose on implementers and consumers. Judge Robart noted,

Motorola's royalty request for its 802.11 SEP portfolio raises significant stacking concerns. There are at least 92 entities that own 802.11 SEPs. If each of these 92 entities sought royalties

B.J. 227, 234 (2004) (willfulness found in 2.1% of patent cases decided in 1999–2000); Christopher B. Seaman, *Willful Patent Infringement and Enhanced Damages After* In Re Seagate: *An Empirical Study*, 97 IOWA L. REV. 417, 436–37 (2012) (finding that 1.9% of all patent cases filed between 2004 and 2010 resulted in a final merits decision on willfulness).

^{141.} Exceptions may be justified for willful infringement, although the use of treble damages may be sufficient to deter such behavior. *See* sources cited *supra* note 140.

^{142.} See Jorge L. Contreras, Standards, Royalty Stacking and Collective Action, 3 CPI ANTITRUST CHRON., Mar. 2015; NAS REPORT, supra note 10, at 55–57; Lemley & Shapiro, supra note 9, at 1993.

^{143.} See Microsoft, 2013 WL 2111217.

similar to Motorola's request of 1.15% to 1.73% of the endproduct price, the aggregate royalty to implement the 802.11 Standard, which is only one feature of the Xbox product, would exceed the total product price.¹⁴⁴

Judge Robart specifically noted that "a royalty rate that implicates such clear stacking concerns cannot be a RAND royalty rate because such a royalty rate does not stand up to the central principle of the RAND commitment—widespread adoption of the standard." Yet concerns about royalty stacking also are relevant to the determination of a reasonable royalty for non-SEPs when patents held by many different owners cover a technology. Many technological fields have crowded intellectual property rights. While thousands of patents have been declared to be essential to certain popular telecommunications and networking standards, many more thousands of patents cover non-standardized components and features of modern electronic devices. One source estimates that more than 250,000 patents cover a single smartphone, far in excess of the patents that cover technical standards implemented by the device. The third regard, product manufacturers must deal with both SEPs

^{144.} *Id.* at *73 (internal citation omitted).

^{145.} Id.

^{146.} See, e.g., Farrell et al., supra note 9; Lemley & Shapiro, supra note 9; Taylor, supra note 28, at 138 ("Any assessment of reasonable royalties must correct for this potential problem [stacking] by taking into account complementary technologies and identifying relative contributions to their gross value..."); SEDONA, supra note 59, at 17 (relevant factors to consider in patent damages assessment include "(ix) royalty stacking, if any").

^{147.} RPX Corp., Registration Statement (Form S-1) (Jan. 21, 2011), at 55 (U.S. Securities and Exchange Commission filing) ("Based on our research, we believe there are more than 250,000 active patents relevant to today's smartphones, a significant increase compared to our estimate of approximately 70,000 patents that were active and relevant to mobile phones in 2000. This growth can be attributed to the expanded set of features and functionality incorporated in today's smartphones, including touchscreens, internet access, streaming video, media playback, application store readiness and other web-based services, and WiFi connectivity options."); see also Ann Armstrong, Joseph J. Mueller & Timothy D. Syrett, The Smartphone Royalty Stack: Surveying Royalty Demands for the Components Within Modern Smartphones (Working Paper, May 29, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2443848. With respect to patents covering particular standards, see KNUT BLIND ET AL., STUDY ON THE INTERPLAY BETWEEN STANDARDS AND INTELLECTUAL PROPERTY RIGHTS (IPRS), FINAL REPORT 62 (2011), available at http://ec.europa.eu/enterprise/policies/europeanstandards/files/standards_policy/ipr-workshop/ipr_study_final_report_en.pdf (reporting the numbers of patents believed to be essential to standards including WCDMA (1000 patent families), LTE (1000 patent families), MPEG-2 and MPEG-4 (800 patents in 160 patent families), optical disc drive standards (2200 patent families), and DVB-H (30 patent families)). We express no opinion about the accuracy of these estimates. Rather,

and non-SEPs, and the reason to distinguish these two categories of patents again fades.

Similarly, the fact that a patent is declared as a SEP does not necessarily mean that the patent is, indeed, essential to implement the standard in a particular product, or that a standard-compliant product will infringe the patent. Studies have shown extensive over-declaration of patents as essential to standards. Courts have recently established that, notwithstanding a patent holder's declaration that its patent is essential to a standard, neither the essentiality of the patent to the standard nor the infringement of the patent by a product implementing the standard can be assumed. Further a defendant is entitled to argue both non-essentiality and non-infringement when the patent is asserted against it. In this respect as well, SEPs are no different than non-SEPs, and treating them differently in the reasonable royalty/hypothetical negotiation context is not justified.

The potential for royalty stacking is relevant to the determination of reasonable royalties in the context of both RAND commitments and patent damages more generally. In an industry characterized by multiple patents that cover component technologies of a product that implements many technologies, the incremental value of a particular patented component technology to the overall product value is likely to be lower if many other patented technologies also compete for a share of the overall product value. As a result, it is reasonable to introduce evidence regarding the number of patents and other patented technologies in the overall product when assessing the incremental value of a particular patented technology. ¹⁵¹ Conversely, withholding evidence regarding the total field

we merely note that the large number of non-SEPs reinforces our conclusion that concerns about royalty-stacking are not unique to SEPs.

^{148.} See generally Contreras, supra note 65, at 60–62; Rudi Bekkers, René Bongard & Alessandro Nuvolari, An Empirical Study on the Determinants of Essential Patent Claims in Compatibility Standards, 40 RESEARCH POL'Y 1001 (2011); David J. Goodman & Robert A. Myers, 3G Cellular Standards and Patents, 2005 INT'L CONF. ON WIRELESS NETWORKS, COMM. & MOBILE COMPUTING 415 (2005).

^{149.} See In re Innovatio IP Ventures, LLC, 921 F. Supp. 2d 903 (N.D. Ill. 2013); Apple Inc. v. Motorola, Inc., 869 F. Supp. 2d 901, 913–14 (N.D. Ill. 2012), aff d in part, 757 F.3d 1286 (Fed. Cir. 2014).

^{150.} Id.

^{151.} In *Ericsson, Inc. v. D-Link Systems*, the Federal Circuit held that "As with all patents, the royalty rate for SEPs must be apportioned to the value of the patented invention," but also noted that "[t]he district court need not instruct the jury on hold-up or stacking unless the accused infringer presents actual evidence of hold-up or stacking." 773 F.3d 1201, 1232, 1234 (Fed. Cir. 2014). We note that this evidentiary requirement could give an undue advantage to patent holders who are among the first to assert their

of patents covering a particular product or standard may lead a fact finder to overestimate the incremental value of the patent at issue, as knowing that a particular patent is only one of a thousand covering a product is likely to result in a different assessment of the patent's worth than believing it is the sole patent germane to the product.

C. TIMING OF HYPOTHETICAL NEGOTIATIONS—CONVERGING ON THE RAND ANALYSIS

When considering the appropriate methodology for determining a reasonable royalty under the *Georgia-Pacific* framework, one must consider the time at which the hypothetical negotiation should be deemed to occur. *Georgia-Pacific* Factor 15 calls for consideration of the amount that the patent holder and a licensee would have agreed upon *at the time the infringement began*.¹⁵² Under the law, infringement "begins" when a party first makes, uses, or sells an infringing product.¹⁵³

For a patent encumbered with a RAND commitment, Judge Robart's modification of the hypothetical negotiation in *Georgia-Pacific* considers the alternatives available ex ante, before the standard was adopted. With this modification, the patentee would not have leverage to exploit a firm's irreversible investments, without regard to whether the firm invested before or after a standard was adopted. Consider the following situation. There is a patent that covers a standard. Two firms make irreversible investments to supply a product that complies with the standard. Firm 1 invests immediately before the standard is formally adopted. Firm 2 invests much later after the standard has achieved wide acceptance in the market. After Firm 2 invests, the patent owner brings an infringement claim against both firms.

A hypothetical negotiation that occurs before the standard was formally adopted and implemented would consider the alternatives available before both firms invest. The available alternatives would not be diminished by investments that lock the firm into the standard. Under this hypothetical, the patentee could not "hold up" either firm by exploiting the firms' irreversible investments.

Suppose the patent at issue is not a SEP. Consider a new technology that achieves a superior signal-to-noise ratio for communications between

patents against a particular infringer. *See* Contreras, *supra* note 142, at 6 (providing a more detailed discussion of how a "race to the courthouse" phenomenon could arise).

^{152.} Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), modified and aff d, 446 F.2d 295 (2d Cir. 1971).

^{153. 35} U.S.C. § 271(a) (2012).

mobile phones and base stations. Either the new technology is not included in a communications standard or the technology is included in a standard but the patentee has not made a RAND commitment. Nonetheless, many sellers of mobile phones incorporate the new technology in their handsets and it has become a de facto market standard that is supported by base stations, to the exclusion of other similar technologies.

As in the previous example, Firm 1 and Firm 2 supply handsets that infringe the patent. Firm 1 is the first handset manufacturer to adopt the patented technology, while Firm 2 invests after the new technology has achieved widespread market acceptance and become a de facto communications standard. At the time that Firm 1 first infringes the patent, its technology alternatives are not limited by the practical necessity of maintaining compatibility with existing base stations. To the extent that viable alternatives are available when Firm 1 first makes sunk investments that infringe the patent, those alternatives would lower the royalty that would emerge from the hypothetical negotiation between the patent holder and Firm 1.

In contrast, Firm 2 faces the practical necessity of maintaining compatibility with the network of base stations that employ the patented technology. If Firm 2 chooses to invest, its alternatives available at the time the infringement begins are limited by the fact that the patented technology has become a de facto market standard. The patentee could exploit the lack of alternatives and charge a higher royalty to Firm 2. Following *Georgia-Pacific*, the hypothetical negotiation between the patent holder and Firm 2 would reflect the lack of alternatives and indicate a higher royalty compared with the hypothetical negotiation with Firm 1.

Yet there is no fundamental difference between the value contribution of the patent for the similar products supplied by Firm 1 or Firm 2. Firm 2 faces a more difficult hypothetical negotiation because other firms have chosen to support handsets and base stations that employ the patented technology. These decisions allow the patentee to negotiate a higher royalty because they limit the practical alternatives for Firm 2. They do not increase the value of the patent; rather, they make alternatives to the patented technology more distant substitutes.

The timing of the hypothetical negotiation in the *Georgia-Pacific* analysis addresses in part whether a patent owner can benefit from investments and other market factors that affect the available alternatives for the patented technology. If the hypothetical negotiation occurs before the implementing firm makes sunk investments, the patent owner should not be able to benefit from the high cost of switching to alternatives after

investments have been sunk. However, actions by other market participants to support a technology also can affect the available alternatives that are relevant to a hypothetical negotiation. If the alternatives are measured before *either* the infringer *or* other market participants make investments that are specific to the patented technology, then the calculation of a compensatory royalty would mirror the ex ante value calculation for a RAND royalty.

It is our view that the hypothetical negotiation for both SEPs and non-SEPs should reflect an environment in which neither the infringer nor others have made investments that are specific to the patented technology. We propose that Judge Robart's modification of the Georgia-Pacific factors to consider a hypothetical negotiation that occurs before the standard was adopted should apply more generally to non-SEPs, if market developments severely limit the choices that are practical alternatives to the patented technology. The hypothetical negotiation should embody the intent of Judge Robart's modification to capture the ex ante value of the patented technology, rather than the costs of switching to substitutes that are made distant by market developments, even if the patent does not cover a standard-essential patent with a RAND commitment. For both SEPs and non-SEPs, the hypothetical negotiation should reflect the alternatives available to the infringer before it is locked-in to the patented technology, either by its own actions or by the actions of others. This hypothetical negotiation captures the incremental value contribution of the patent and avoids confounding that value contribution with other factors unrelated to the patented technology that limit the alternatives available to the infringer.

D. INCONSISTENT TREATMENT OF PATENT INFRINGEMENT DAMAGES FOR SEPS AND NON-SEPS

Several notable patent cases illustrate the inconsistent treatment of infringement damages for SEPs and non-SEPs. In some of these cases, awards exceed a reasonable approximation of the asserted patent's incremental value.¹⁵⁴ In *Lucent Technologies, Inc. v. Gateway, Inc. (Lucent I)*,

^{154.} See Seaman, supra note 28, at 1663–64 (citing Lucent Techs. v. Gateway, Inc. (Lucent I), 509 F. Supp. 29 912 (S.D. Cal 2007) (awarding \$1.53 billion); Saffran v. Bos. Sci. Corp., No. 2:05–CV-547, 2008 WL 2716318 (E.D. Tex. July 9, 2008) (awarding \$501 million); Cornell Univ. v. Hewlett-Packard Co., 609 F. Supp. 2d 279 (N.D.N.Y 2009) (awarding \$184 million)). But see Brian Howard, The Truth About Patent Damage Awards, LAW360 (Oct. 16, 2014), http://www.law360.com/articles/557734/the-truth-about-patent-damage-awards (reporting that damages of less than \$2.3 million were awarded in 75% of patent cases between 2000 and 2013).

Lucent alleged that Microsoft's Windows Media Player and associated software infringed two of Lucent's patents for encoding audio in the MP3 format. The trial resulted in a jury verdict that initially awarded Lucent (and its successor, Alcatel-Lucent) \$1.5 billion for infringement of the two MP3 patents. Around the time of the litigation, Alcatel-Lucent was one of at least three entities that owned or licensed MP3 patents. The other two were Thompson, the licensing agent for patents owned by Fraunhofer IIS; and Audio MPEG, a subsidiary of Sisvel S.p.A., which licensed MP3 patents owned by France Telecom, Philips, and others. The other two were Thompson as a subsidiary of Sisvel S.p.A., which licensed MP3 patents owned by France Telecom, Philips, and others.

In *Microsoft v. Motorola*, Judge Robart concluded, "where multiple technologies (including both standard-essential and non-essential patents) are licensed within the same agreement, it is necessary to apportion the value of Motorola's 802.11 or H.264 SEPs from the other licensed properties." Yet there was no mention in *Lucent I* of the other MP3 patents that were necessarily infringed by Microsoft's Windows Media Player.

It is also notable that the MP3 technology is an element of the MPEG-1 and MPEG-2 audio and video standards developed by the International Organization for Standardization. Lucent had not made a RAND commitment for the patents asserted in the MP3 litigation. Nonetheless, issues such as incremental value and apportionment, duly noted by Judge Robart as necessary to estimate a reasonable royalty for patents with RAND commitments, are also present in *Lucent I*. Had the *Lucent I* court followed the roadmap described by Judge Robart or the "incremental value" test originated in *Dowagiac* and focused on the contribution of the asserted patents to the value of the infringing products and took into account the many other patents covering the same standard,

^{155.} Lucent I, 509 F. Supp. 2d at 917.

^{156.} *Id.* at 940. The district court granted defendants judgment as a matter of law. On appeal, the Federal Circuit ruled that Lucent had no standing to sue for one of the patents and that the defendants had not infringed the other patent. Lucent Techs., Inc. v. Gateway, Inc., 543 F.3d 710, 729, 733 (Fed. Cir. 2008).

^{157.} Fraunhofer IIS is a research laboratory that contributed to the development of digital encoding technologies.

^{158.} Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217, at *69 (W.D. Wash. Apr. 25, 2013) (internal citations omitted).

^{159.} Lucent acquired Alcatel in 2006. A related issue in the case was whether Lucent was bound by Alcatel's prior agreement with the MPEG patent pool to license its MP3 patents. The court ruled that Lucent was not bound by this agreement. *See* Lucent Techs., Inc. v. Gateway, Inc., No. 02-2060-B, 2007 U.S. Dist. LEXIS 73768 (S.D. Cal. Oct. 1, 2007).

it is likely that the court or jury would have established a lower royalty level.

Judge Robart's recognition of the shared value of intellectual property rights demonstrates a degree of sophistication that is often lacking in cases that allege damages for patent infringement. At least six of the ten largest patent infringement damage awards in recent years involved technologies covered by numerous patent rights. The apportionment of value to individual patents should be required for all demands for infringement damages when rights to multiple patents and other tangible as well as intangible assets are necessary to make, sell, or use a product or to provide a service. Although recent litigation involving SEPs highlighted the central importance of the need to apportion value to the patents at issue, the logic of apportionment is not unique to SEPs.

It is not our view that a RAND commitment is meaningless. Rather, our view is that litigation involving patents with RAND commitments has identified critical factors—such as apportionment, incremental value, and the potential for hold-up to distort negotiations—that are potentially relevant to *all* patents. These factors, with appropriate weights, should be considered in all patent infringement damages calculations. The history of patent litigation provides support for this conclusion, but that support has been obscured by the unstructured and ill-defined parameters in *Georgia-Pacific*. A return to the roots of patent damage law would allow a consistent treatment of patents with and without RAND commitments.¹⁶¹

E. Uniformity Encourages Participation in Standard-Setting

Treating patent damages uniformly, as we propose, has additional benefits. Differing approaches to SEPs and non-SEPs may encourage patent owners to avoid participation in standard-setting because doing so may enable them to escape the burden of a RAND commitment. This opt-out behavior potentially incurs significant social costs. The process of

^{160.} PRICEWATERHOUSECOOPERS, 2014 PATENT LITIGATION STUDY 7, chart 3 (2014).

^{161.} In a subsequent case involving Lucent and Microsoft, *Lucent Technologies, Inc. v. Gateway, Inc. (Lucent II)*, 580 F. Supp. 2d 1016 (S.D. Cal. 2008), *vacated*, 580 F.3d 1301 (Fed. Cir. 2009), the court also analyzed existing Lucent patent licenses to determine comparable royalty levels. These exemplars included licenses of both standard-essential patents, such as those covering the MPEG audiovisual compression standard, *id.* at 1331, and non-standardized technologies such as PC graphics boards, *id.* at 1330. Both SEPs and non-SEPs were considered in the royalty analysis, and their status as such did not merit mention in the court's decision.

standard setting benefits from wide participation, which is lacking if innovators choose not to participate in the development of new standards. In addition, patent hold-up by a patentee with no RAND commitment, because the patent owner opted out of standards development, has economic consequences similar to patent hold-up by a patentee that participated in the development of the standard.

Innovators will not be deterred from participating in SSOs that impose RAND commitments if, as we suggest, the royalties they can obtain when enforcing SEPs do not depend significantly on whether the patents are subject to RAND commitments. To accomplish this end, it is neither necessary nor productive to allow RAND royalties to capture the costs to firms and consumers of investments that lock themselves into a standard. A far better solution is to require infringers of SEPs to compensate patent owners based on the value of the patents relative to the alternatives available when the standard was being developed. Lock-in should not be a source of reward to patent owners, whether or not the patent is subject to a RAND licensing commitment.

Furthermore, to the extent that damages may reward patentees at levels up to the costs that infringers would incur if forced to switch to alternative technologies, patent owners would be encouraged to act strategically in their assertion of patent rights. They might thus delay the notice of infringement until firms have made substantial sunk investments or until patented technologies are so widely adopted that they become de facto standards (i.e., the classic "hold-up" scenario). In the context of standard-setting, owners of patents that may be essential to a standard may choose to avoid the standard-setting process and instead assert their patents as non-participants if that allows them to negotiate higher royalties. Yet, under our proposal, the underlying value of the patent will be unaffected by its owner's decision as to whether or not to participate in standard setting.

^{162.} See Farrell et al., supra note 9; Lemley & Shapiro, supra note 9.

^{163.} Rambus, Inc. is alleged to have taken this approach when it withdrew from an SSO in which it had participated prior to adoption of a new standard on SDRAM technology so that it could assert patents against SDRAM manufacturers adopting the standard. See Rambus Inc. v. Infineon Techs. AG, 318 F.3d 1081 (Fed. Cir. 2003).

^{164.} Einer Elhauge argues that the same legal standards should apply to RAND commitments whether they are made to standard-setting organizations or not. Einer Elhauge, *Treating RAND Commitments Neutrally*, 11 J. COMPETITION L. & ECON. 1 (2015). In contrast, we argue that the determination of a reasonable royalty for patent infringement should be based on the economic and technical characteristics of the

A related issue is whether a RAND commitment "travels with the patent" or is limited to the party that made the pledge and its licensee. This question has central importance if (i) a RAND commitment requires a distinct approach to remedy patent infringement, and (ii) the commitment is limited to the patentee that made the commitment and its licensee. In that case, selling or assigning the patent to a third party easily avoids a RAND commitment. However, this issue becomes less critical if, as we argue, a RAND commitment does not require a different approach to remedy patent infringement. If, instead, the determination of "reasonable" depends on the incremental contribution of the patented technology (and not on *Georgia-Pacific* factors applied in the "hypothetical negotiation" analysis), then the remedy for patent infringement would not change after the patent is assigned or sold to a third party.

F. IS RAND STILL RELEVANT?

By asserting that reasonable royalties mandated by RAND commitments should be calculated in the same manner as reasonable royalties for patent damages purposes and that patents subject to RAND commitments should be treated in the same manner as patents that are not subject to RAND commitments, we do not mean to imply that there is no value in RAND commitments. On the contrary, we believe that RAND commitments and other patent pledges serve several important purposes.

First, as discussed in Part I, when a patent is subject to a RAND commitment, the likelihood that a court will grant the patent holder an injunction to prevent further infringement is lower than it would be absent the RAND commitment. The fact that the patent holder made the RAND commitment strongly suggests, when applying the *eBay* analysis, that the patent holder will not be irreparably harmed absent an injunction and will be adequately compensated by monetary damages (i.e., a reasonable royalty) if an injunction is not granted.

Second, a patent holder's violation of a RAND commitment may give rise to damages or other remedies in favor of the infringer/potential licensee. It is interesting to note that in both *Microsoft v. Motorola* and *Apple v. Motorola*, patent holder Motorola was the *defendant* in suits alleging breach of contractual duties to the infringers, Motorola's potential

patented technology and its use, and not specifically on whether the patent owner has made a RAND commitment.

^{165.} See NAS REPORT, supra note 10, at 81–93.

licensees.¹⁶⁶ In *Microsoft*, Microsoft won specific performance, which involved Motorola's granting of a license at the RAND rate (as determined by Judge Robart).¹⁶⁷ This is not to say, however, that other damages with respect to Motorola's alleged breach of contract, bad faith, fraud or anticompetitive behavior, if established, might not also have been available to potential licensees.

Third, RAND commitments serve an important private ordering function by encouraging broad licensing of patents rather than patent infringement litigation and thereby reducing transaction costs. Thus, even if the royalty that a patent holder may charge to a licensee under a RAND commitment is the same as the royalty it would have received as damages in an infringement suit absent the RAND commitment, it is more efficient to operate under a system in which there is a presumption that licenses will be granted on reasonable terms compared to a less certain environment in which disputes are more likely to be pursued in litigation.

Finally, in most cases a patent holder's RAND commitment extends to all implementers of a particular standard rather than only to firms that are the members of the relevant SSO.¹⁶⁸ RAND commitments thus establish a broad class of parties entitled to receive licenses from the patent holder and, by the same token, create a broad category of firms having standing to enforce such commitments against non-compliant patent holders.¹⁶⁹

V. CALCULATING REASONABLE ROYALTIES: A NEW, OLD APPROACH TO PATENT DAMAGES

The preceding discussion identifies many economic characteristics relevant to the determination of infringement damages that are common to both SEPs and non-SEPs. Both types of patents may require an allocation of value to isolate the contributions of the patents to the overall value of the products that implement the patented technology. For both SEPs and non-SEPs, implementers may make investments that are

^{166.} See Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013); Apple Inc. v. Motorola, Inc., 869 F. Supp. 2d 901 (N.D. Ill. 2012), aff d in part, 757 F.3d 1286 (Fed. Cir. 2014).

^{167.} Microsoft, 2013 WL 2111217, at *101.

^{168.} See Jorge L. Contreras, A Brief History of FRAND: Analyzing Current Debates in Standard Setting and Antitrust Through a Historical Lens, 80 ANTITRUST L.J. 39 (2015); Bekkers & Updegrove, supra note 7, at 28.

^{169.} Under various theories including contractual third party beneficiary and promissory estoppel, a third party implementer of a standard may have the right to enforce a RAND commitment against a patent holder that has failed to grant it a patent license on RAND terms. See Contreras, supra note 50, at 499.

specific to the patented technologies prior to the beginning of the alleged infringement. Courts have addressed these issues in the context of infringement damages for SEPs. We propose a framework for the evaluation of patent damages that is common to both SEPs and non-SEPs. This common framework relies on recent court opinions and scholarship relating to RAND royalties for SEPs. In addition, it relies on judicial precedents for the determination of patent damages (for non-SEPs) that existed for nearly a century before *Georgia Pacific*. These precedents focused on the incremental value of the patented technology relative to its next-best substitute, which we endorse as a plank in our proposed common framework.

A. INCREMENTAL VALUE REDUX

As noted above, before the advent of the *Georgia-Pacific* hypothetical negotiation framework, courts largely based the determination of reasonable patent royalties on the incremental value of the patented technology.¹⁷⁰ The Supreme Court adopted this approach in *Dowagiac* in 1915, and courts followed it in hundreds of subsequent cases.¹⁷¹ But the *Georgia-Pacific* fifteen-factor analysis muddied the water substantially in 1970, allowing litigants and courts to focus on any number of confounding factors that distracted from the core inquiry regarding the value of the patented technology.¹⁷² Only recently in cases involving the calculation of RAND royalty rates for standard-essential patents have courts begun to realize that the incremental value of the patented technology is, and should be, the core inquiry when assessing reasonable patent royalties. Thus, as noted by the Federal Circuit in *Ericsson v. D-Link*,

There is no *Georgia-Pacific*-like list of factors that district courts can parrot for every case involving RAND-encumbered patents.... [D]istrict courts must make clear to the jury that any royalty award must be based on the *incremental value of the invention*, not the value of the standard as a whole or any increased value the patented feature gains from its inclusion in the standard.¹⁷³

^{170.} See supra Section III.A.2.

^{171.} Dowagiac Mfg. Co. v. Minn. Moline Plow Co., 235 U.S. 641 (1915). Citing cases include, for example, *Sheldon v. Metro-Goldwyn Pictures Corp.*, 309 U.S. 390, 403–04 (1940), and *United States v. National Lead Co.*, 332 U.S. 319, 351n.8 (1947).

^{172.} See supra Section III.A.3.

^{173.} Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1235 (Fed. Cir. 2014) (emphasis added).

We concur with this conclusion, but also advance the proposition that the inquiry as to SEPs should be no different than the inquiry for non-SEPs. Accordingly, we advocate a general return to the incremental value methodology for determining reasonable royalties, whether within the framework of a *Georgia-Pacific* hypothetical negotiation, or more generally as a question that may be answered directly by the finder of fact.¹⁷⁴ More specifically, incremental value is the willingness to pay for one technology relative to its next best alternative. The willingness to pay can be derived from a performance benefit or cost-savings attributed to the technology, but it is not greater than the cost of inventing around the patented technology if the alternative offers similar performance benefits.

We are not alone in advocating the use of incremental value to determine reasonable royalty patent damages, as several other recent commentators have advanced similar, though not identical, proposals. Christopher Seaman, for example, suggests using the cost of an acceptable non-infringing substitute as the upper bound on a patent's incremental value. However, while Seaman would include the cost of switching to an alternative to arrive at this upper bound on the patent's incremental value, we exclude switching costs, as they are, in our view, unrelated to the patent's intrinsic incremental value. In our view, unrelated to the

^{174.} As indicated above, we favor the determination of incremental patent value as a factual matter, independent of the hypothetical negotiation proposed under *Georgia-Pacific*. However, were we to adapt our proposal for use within a hypothetical negotiation framework, additional factors would come into play. These are discussed by Lemley & Shapiro, *supra* note 9, at 1999. Under a hypothetical negotiation scenario, the socially-optimal "benchmark" royalty rate can be expressed by the relationship θBV , where V represents the incremental value of the technology to the licensee, θ represents the relative strength of the patent, and B represents the relative bargaining skill of the parties (with B=1 indicating that the patent holder has maximal skill and the licensee has no skill, and with the Lemley-Shapiro model generally assigning B a baseline value of 0.5). There is some debate in the literature about the magnitude and presence of B in this calculation, with Elhauge and Golden each criticizing the use of B. See Einer Elhauge, Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?, 4 J. COMPETITION L. & ECON. 535, 541–45 (2008); John M. Golden, Commentary, "Patent Trolls" and Patent Remedies, 85 TEX. L. REV. 2111, 2137–38 (2007).

^{175.} Seaman, *supra* note 28, at 1661.

^{176.} In a recent paper, Norman Siebrasse and Thomas Cotter propose a methodology for calculating patent reasonable royalty damages that has applicability in cases involving both SEPs and non-SEPs. Siebrasse & Cotter, *supra* note 8. The crux of their proposal is that the value of a patent determined in a hypothetical negotiation should take into account the subsequent incorporation of the patented technology into a standard that is not due to hold-up. We agree that a standard adds value to a patent by facilitating its use with complementary patents and other inputs, but that value is apart from the value created by adoption of the standard.

David Taylor draws a useful distinction between patent royalty damages based on the valuation of patent *rights* versus the valuation of patented *technology* and concludes that courts should continue their movement toward technology-focused damages valuations.¹⁷⁷ We agree, and we argue that the most expedient means of doing so is by adopting the incremental value test outlined above to the smallest technology for which a stand-alone incremental value can be calculated, with an apportionment of that incremental value to the allegedly infringed patents.¹⁷⁸

Durie and Lemley argue for a structured approach to patent damages calculations that focuses on three fundamental questions: (1) what is the marginal contribution of the patented invention over the prior art?; (2) how many other inputs were necessary to achieve that contribution, and what is their relative value?; and (3) is there some concrete evidence suggesting that the market has chosen a number different than the calculus that results from (1) and (2)?¹⁷⁹

Judge Robart in *Microsoft* and Judge Holderman in *Innovatio* wrestled with the first two of these questions in their determinations of RAND royalties. They focused on the ex ante contributions of the patented technologies and denied the patent owner a return from the cost of switching ex post to alternatives or from the value created by adoption of the standard. In addition, they acknowledged the importance of apportioning the value of patented technologies to the values of the patents at issue. With regard to the third of Durie and Lemley's questions, they discounted the value of market evidence to the extent that observed negotiated royalties were inconsistent with the first two factors, such as royalties that captured the risk of hold-up or the value of the standard. The judges' approach is not inconsistent with the framework offered by

^{177.} Taylor, *supra* note 28, at 86–88, 95–96, 160 (observing that damages are based on patent rights including the increased royalty that a patentee could obtain based on the threat of injunction, as well as potential treble damages and attorneys' fee awards, whereas damages based on the value of patented technology would be "the amount of money that a user of patented technology can save or otherwise obtain based upon the difference between a world where the patented technology is used and a world where the patented technology is not used").

^{178.} While Taylor acknowledges the usefulness of valuing patented technologies on the basis of the next best alternative technology, *id.* at 96, this is only one of many possible damages approaches that he evaluates.

^{179.} Durie & Lemley, *supra* note 28, at 628.

^{180.} *Id.* at 629. It should be noted that negotiated royalties may understate the real value of patents that are known to be valid and infringed, as the former are typically negotiated without establishing validity and infringement.

Durie and Lemley if one interprets market evidence as probative to the extent that it reflects the first two fundamental factors.

B. NEXT BEST ALTERNATIVE

Other courts have addressed the question of incremental value by looking to the cost of an acceptable non-infringing alternative. The theory behind this approach is straightforward. Assuming that a non-infringing alternative to a patented technology exists, the maximum amount that an infringer is likely to pay to license the patented technology is the cost of a functionally similar non-infringing substitute (because if the patent holder demands more than this cost, a rational infringer would switch to the non-infringing alternative).¹⁸¹

Judge Frank Easterbrook (sitting by designation) adopted this approach in Grain Processing Corp. v. American Maize-Products Co. 182 In that case, Grain Processing held a patent claiming a method for producing maltodextrin, a food additive. American Maize produced maltodextrin according to the patented process, but soon after being informed that it infringed the patent, it switched to an alternative, non-infringing method.¹⁸³ Grain Processing sued for lost profits, which the district court denied.¹⁸⁴ Judge Easterbrook reasoned that the patent holder had foregone no profits, given that American Maize could have, and did, switch to a non-infringing alternative as soon as it became aware of the patent. 185 However, he awarded reasonable royalty damages to Grain Processing. In calculating the amount of the royalty, he observed that the alternative non-infringing process was approximately 2.3% more expensive to implement than the patented process, and he explained that "the only [costs] relevant to this case are the incremental costs of avoiding infringement." 186 Nevertheless, the district court set the reasonable royalty rate at 3% based on an application of Georgia-Pacific factors 1, 12 and 15,

^{181.} See sources cited supra note 59. If the patented technology and the non-infringing alternative allow production with different values or at different costs, the maximum amount that an infringer is likely to pay to license the patented technology would depend on these differentials as described in Section III.B, supra.

^{182.} Grain Processing Corp. v. Am. Maize-Prods. Co. (*Grain Processing I*), 893 F. Supp. 1386 (N.D. Ind. 1995), rev'd, 108 F.3d 1392 (Fed. Cir. 1997) (unpublished table decision), judgment entered at 979 F. Supp. 1233 (N.D. Ind. 1997), aff'd, 185 F.3d 1341 (Fed. Cir. 1999) (*Grain Processing II*).

^{183.} Grain Processing I, 893 F. Supp. at 1389.

^{184.} Id.

^{185.} Id. at 1392.

^{186.} Id.

evidencing a reluctance to base the entire royalty rate on the opinion of a single expert witness.¹⁸⁷

The availability of the substitute technology was raised again on appeal, when the Federal Circuit considered the district court's holding with respect to lost profits. The Federal Circuit found that the presence of a non-infringing alternative did not preclude an award of lost profits but also concluded that the cost of the "next-best available alternative[]" was probative of "the market value of the patent owner's exclusive right." 189

Though the Federal Circuit's holding in *Grain Processing* generally speaks to lost profits damages, it, coupled with the district court's ruling on reasonable royalties, has been viewed as an important guidepost in the determination of reasonable royalties.¹⁹⁰ In this respect we agree with Judge Easterbrook's reasoning: a reasonable royalty should be based on the incremental value of the patented technology, and the cost of an available, functionally similar non-infringing substitute should be a good indicator of that incremental value. This being said, other valid measures for incremental value may be found. But regardless of the particular approach to estimate incremental value, our principal recommendation is that the analytical framework for estimating infringement damages should apply to both SEPs and non-SEPs.

VI. CONCLUSION

The interpretation of a "reasonable royalty" in the context of a patent with a RAND commitment has gathered enormous attention from policy-makers, academics, and the courts. To a great extent the debate has attempted to reconcile the contrasting views of innovators and implementers with divergent perspectives on the meaning of "reasonable." Yet largely forgotten in this debate is the common intersection of factors that are relevant to a reasonable royalty for non-SEPs as well as for SEPs.

Courts have recognized that the traditional *Georgia-Pacific* factors must be modified to account for an economic interpretation of a RAND commitment. In particular, for a RAND-encumbered patent, the "hypothetical negotiation" in *Georgia-Pacific* must recognize the incremental contribution of the patented technology and how that would

^{187.} Id.

^{188.} See Grain Processing II, 185 F.3d 1341.

^{189.} Id. at 1351.

^{190.} See Nathaniel C. Love, Nominal Reasonable Royalties for Patent Infringement, 75 U. CHI. L. REV. 1749, 1761 (2008); Seaman, supra note 28, at 1713–14.

inform a relevant negotiation that takes place ex ante, before firms and consumers make investments that are specific to a standard. In the context of RAND litigation, courts also have recognized that the incremental value analysis must apportion the value of the infringing products to the patents at issue and avoid royalty-stacking. However, we note that there is nothing new about a focus on the incremental value of a patented technology in the assessment of a reasonable royalty. In fact, courts have long emphasized incremental value in their evaluation of damages for patent infringement. The central role of incremental value faded from view only after the emergence and popularization of the fifteen *Georgia-Pacific* factors.

We argue that incremental value is the appropriate framework to evaluate reasonable royalties for both SEPs and non-SEPs. A unified framework for infringement damages based on incremental value provides appropriate royalty compensation for all infringed patents and avoids many of the concerns that arise if SEPs are held to a different standard for assessing reasonable royalties.

LOSING THEIR LICENSE TO LIBEL: REVISITING § 230 IMMUNITY

Vanessa S. Browne-Barbour[†]

ABSTRACT

Libel, an ancient tort, protects one's reputation in a community. Historically, libel damages were presumed because of the tort's potential to cause permanent reputational harm. Today, the likelihood of such reputational harm is increased exponentially by the prevalence of the Internet, where billions of pages of information are accessible to more than two billion people. When libel occurs on the Internet, why should the law favor the interests of Internet service providers (ISPs) over the interests of the libeled? In applying § 230 of the Communications Decency Act (CDA) to defamation claims against ISPs arising from defamatory statements on ISP sites, the overwhelming majority of courts follow the lead of the United States Court of Appeals for the Fourth Circuit and decline to hold ISPs accountable for the tort of libel, along with other civil and criminal claims. This overly broad interpretation of § 230 essentially renders a well-established cause of action a nullity. Why should a statute designed to protect ISPs from liability for blocking or restricting access to pornography or other objectionable materials be construed to bar defamation claims, even when the ISPs have not engaged in conduct to limit access to offensive materials?

This Article argues that courts should adopt a narrower interpretation of § 230 to allow a remedy for defamation. Alternatively, it argues that Congress should adopt the DMCA as a model in revising § 230 by incorporating notice and take-down provisions. Such notice and take-down provisions would permit state common law defamation claims against ISPs, assuming the ISPs had actual or constructive knowledge of the defamatory content and failed to remove it within a statutorily mandated time period. Distributor or secondary publisher liability based on actual or constructive knowledge is consistent with traditional defamation law.

DOI: http://dx.doi.org/10.15779/Z38GG3D

© 2015 Vanessa S. Browne-Barbour.

† Professor of Law, South Texas College of Law. I am most appreciative of the support of Dean Don Guter and Associate Dean John Worley. I also am grateful for the comments of many of my faculty colleagues, including Professors Tobin Sparling, Richard Carlson, Geoffrey Corn, Njeri Mathis Rutledge, Shelby Moore, and Dru Stevenson. Finally, I also am grateful for the diligent research assistance of Meghna Patel, and the helpful editing of Maissa Chouraki, Joshua Furman, Lily Wang, Matthew Reagan, and the other members of the Berkeley Technology Law Journal.

TABLE OF CONTENTS

I.	INT	INTRODUCTION	
II.	HISTORICAL VIEWPOINTS		1508
	А. В.	HISTORY OF DEFAMATIONMAKING OF THE CDA & LEGISLATIVE HISTORY	
III.	SEC	CTION 230	1523
	A. B. C.	CONTENTS OF § 230	1525 1527 1528
IV.	PROPOSED CHANGES		1540
	A. B. C. D.	DIGITAL MILLENNIAL COPYRIGHT ACT (DMCA) COURTS SHOULD CONSTRUE THE CDA MORE NARROWLY CONGRESS SHOULD REVISE § 230 OF THE CDA INTERNATIONAL LAW AND ONLINE DEFAMATION	1551 1553
V.	CO	NCLUSION	1559

I. INTRODUCTION

In light of states' historical authority to provide a remedy to their citizens for reputational harm, one would think that individuals should be able to recover for defamatory statements made online about them, especially given society's increased reliance on email, online news sites, online editorial columns, interactive websites, blogs, and various forms of social media for the daily communication of information.¹ Online

^{1.} See generally Joshua Azriel & Charles Mayo, In The Age Of Social Media, Times v. Sullivan and Gertz v. Welch Decisions Still Important to Defamation Trials, J. INTERNET L., Feb. 2014, at 26 (commenting that increased use of various forms of social media "increases the likelihood that someone's reputation may be harmed"); see also Susan Freiwald, Comparative Institutional Analysis in Cyberspace: The Case of Intermediary Liability for Defamation, 14 HARV. J.L. & TECH. 569, 584 (2001) (suggesting that "serious online defamation presents more than just an academic question and its incidence will likely accelerate as cyberspace communications become even more widespread"); Reno v. ACLU, 521 U.S. 844, 853 (1997) (commenting that the Internet "constitutes a vast platform from which to address and hear from a worldwide audience of millions of readers, viewers, researchers, and buyers").

defamation presents a serious public policy problem in light of its potential to cause significant harm to its victims' reputations.² Yet courts to date have generally barred individual defamation and related state common law claims against Internet Service Providers and other interactive computer services (collectively referred to herein as ISPs).3 They have done so based upon an overly broad interpretation of § 230 of the Communications Decency Act of 1996 (CDA). Congress enacted § 230 to immunize ISPs from liability for limiting or restricting online access to pornography, obscenities, and other objectionable materials. Courts have extended that immunity to other federal and state law claims as well.⁶ This Article argues that Congress should revise § 230 of the CDA by incorporating a noticebased safe harbor provision modeled after the Digital Millennium Copyright Act (DMCA). Such a revision would impose liability on ISPs for third-party defamatory content only on proof of notice and subsequent failure to remove the defamatory content within a reasonable time. A revised § 230 would spare courts the current quandary of granting nearly blanket immunity to ISPs that have notice of material, and would incentivize ISP self-regulation, as the original Act intended.

Part II of this Article explains the history and current status of defamation law generally. This Part also examines two cases that provided the backdrop to which the drafters of the CDA responded. Part III discusses the content of the CDA, surveys the legislative history of the CDA, and concludes with a review of the subsequent jurisprudence

^{2.} Freiwald, *supra* note 1, at 584; *see also* PROSSER AND KEETON ON TORTS § 113, at 799 (W. Page Keeton et al. eds., 5th ed. 1984) (noting that "the last utterance may do no less harm than the first").

^{3.} Robert L. Rogers III, Ninth Circuit Court of Appeals Holds That Communications Decency Act Does Not Bar Actions Against Website Operators For Failure To Warn, 31 COMM. L. 8, 8 (2015).

^{4.} At 47 U.S.C. § 230(f)(2) (2012), the CDA defines an interactive computer service as "any information service, system, or access software provider that provides or enables computer access by multiple users to a computer server, including specifically a service or system that provides access to the Internet and such systems operated or services offered by libraries or educational institutions." Internet websites are the most common types of interactive computer services. *Id.*; Fair Hous. Council of San Fernando Valley v. Roommates.com, 521 F.3d 1157, 1162 n.6 (9th Cir. 2008). Although the U.S. Supreme Court has found other portions of the CDA unconstitutional, § 230 survives. *Id.* at 1162 n.5.

^{5.} See, e.g., Barnes v. Yahoo!, Inc., 570 F.3d 1096, 1101 (9th Cir. 2009) (noting that some of the "sister circuits have recognized, Congress enacted the Amendment in part to respond to a New York state court decision") (citing Roommates. Com, 521 F.3d at 1163); Zeran v. Am. Online, Inc., 129 F.3d 327, 331 (4th Cir. 1997).

^{6.} See infra Section III.C.1.

relating to § 230 of the CDA and its effect on the ability of individuals to recover damages from ISPs for online defamatory content posted by third parties. Part IV proposes changes to the CDA and discusses the safe harbor provisions of the DMCA,7 which could serve as a model for the revision of § 230 of the CDA. Incorporating notice and take-down provisions modeled after the DMCA would permit state common law defamation claims against ISPs, assuming the ISPs had actual or constructive knowledge of the defamatory content and failed to remove it within a statutorily mandated time period. Such liability based on actual or constructive knowledge is consistent with traditional defamation law.8 Alternatively, Part IV further argues that an unamended § 230 of the CDA should be interpreted to allow private plaintiffs to seek redress from ISPs when defamatory content is posted on their websites by third parties. It recommends that courts adopt a narrower interpretation of the scope of the CDA to allow such relief. The Article concludes by asserting that, under either theory, the application of § 230 of the CDA should follow the traditional defamation law model, which imposes liability on distributors or secondary publishers who communicate information with actual or constructive knowledge of the defamatory content.9

II. HISTORICAL VIEWPOINTS

A. HISTORY OF DEFAMATION

Libel and slander compose the two basic forms of defamation.¹⁰ The Restatement (Second) of Torts defines libel as "the publication of defamatory matter by written or printed words, by its embodiment in physical form or by any other form of communication that has the potentially harmful qualities characteristic of written or printed words."¹¹ In contrast, slander results from "the publication of defamatory matter by spoken words, transitory gestures or by any form of communication other

^{7.} Digital Millennium Copyright Act, 17 U.S.C. § 512 (2012) (providing a safe harbor for online service providers to limit liability for unauthorized use of copyrighted materials); see also Lucille A. Jewel, You're Doing It Wrong: How the Anti-Law School Scam Blogging Movement Can Shape the Legal Profession, 12 MINN. J.L. SCI. & TECH. 239, 240 (2011) (commenting that CDA immunity encourages "critical ideas and arguments; a different system, such as a notice and take-down scheme," as in the DMCA likely would result in a "less robust exchange of ideas").

^{8.} Dan B. Dobbs, Paul T. Hayden & Ellen M. Bublick The Law Of Torts, § 522 (2014).

^{9.} *Id*.

^{10.} Restatement (Second) Of Torts § 568 (1977).

^{11.} *Id.* § 568(1).

than those stated in" the preceding definition for libel.¹² Additionally, a defendant may be held liable for slander per se when the defamatory statements include an accusation of crimes of moral turpitude,¹³ loathsome disease,¹⁴ or serious sexual misconduct.¹⁵ Statements that impact a plaintiff's business, trade, profession, or office may also be slander per se.¹⁶ A plaintiff may recover in such cases without proof of special damages.¹⁷

Early American defamation law derives, at least in part, from English law.¹⁸ The tort of defamation protects the individual's reputation in a community.¹⁹ As a dignitary tort, defamation law not only compensates for harm to one's reputation, but also seeks "to vindicate the honor of the person defamed and to enforce society's civility norms."²⁰ In contrast, under early English common law, a good reputation was a defense to nearly every crime.²¹ During the Middle Ages in England, one could seek a remedy for reputational harm in both secular and religious courts.²²

- 13. Id. § 571.
- 14. *Id.* § 572.
- 15. Id. § 574.
- 16. Id. § 573.
- 17. Id. § 570.

- 19. Veeder, *supra* note, 18 at 547 (observing that "the law of defamation professes to protect personal character and public institutions from destructive attacks, without sacrificing freedom of thought and benefit of public discussion").
- 20. David A. Anderson, *Rethinking Defamation*, 48 ARIZ. L. REV. 1047, 1047, 1049 (2006) (noting that defamation is a dignitary tort and that attempts to "reduce it to a remedy for economic loss would be historically unfaithful, doctrinally radical, and destructive of important cultural values").
- 21. Veeder, *supra* note 18, at 549 (citing 2 SIR FREDERICK POLLACK & FREDERIC WILLIAM MAITLAND, THE HISTORY OF ENGLISH LAW BEFORE THE TIME OF EDWARD I, at 535–36 (1898)).
- 22. Veeder, *supra* note 18, at 546–47. "The Church, then, being answerable for the cleanliness of men's lives, stayed the tongue of the defamer at one *pro custodia morum* of the community, and *pro salute animae* of the delinquent. The usual ecclesiastical penance for the offence was an acknowledgment of the baselessness of the imputation, in the

^{12.} *Id.* § 568(2). "The area of dissemination, the deliberate and premeditated character of its publication and the persistence of the defamation are factors to be considered in determining whether a publication is a libel rather than a slander." *Id.* § 568(3).

^{18. &}quot;The case *De Libellis Famosis* is the formal starting point of the English law of libel." Van Vechten Veeder, *The History and Theory of the Law of Defamation*, 3 COLUM. L. REV. 546, 566 (1903) (citing *The Case de Libellis Famosis, or of Scandalous Libels*, (1605) 77 Eng. Rep. 250, 251 (K.B.)); see also Elizabeth Samson, *The Burden to Prove Libel: A Comparative Analysis of Traditional English and U.S. Defamation Laws and the Dawn of England's Modern Day*, 20 CARDOZO J. INT'L & COMP. L. 771, 777 (2012) (noting that "[m]uch of American [defamation] law is derived from the English common law tradition" but the laws differ substantially on the burden of proof required); Dobbs, *supra* note 8, § 522.

During the thirteenth and fourteenth centuries, seigniorial or manorial courts commonly heard defamation actions and punished defamation as sin.²³ The late sixteenth century saw the decline of manorial courts, and the king's courts more commonly began to hear defamation claims.²⁴ Initially, defamation claims were heard only as special actions on the case.²⁵ "The original common law doctrine of defamation, based upon the nature of the imputation, became stereotyped as the law of spoken defamation, or slander..."²⁶ Defamation claims heard "through the Star Chamber became the law of written and printed defamation, or libel."²⁷ After the abolition of the Star Chamber in 1641, libel became cognizable as a tort.²⁸

Historically, strict liability applied to defamation claims on proof of a defamatory statement about a person that was communicated to a third person.²⁹ The law presumed harm to one's reputation from defamatory statements, thereby allowing the recovery of presumed and punitive

vestry room in the presence of the clergyman and church wardens of the parish, and an apology to the person defamed." *Id.* at 551. Apart from the seigniorial and religious courts, the law provided a separate avenue of relief for defamation of certain members of the aristocracy by a statute "known as *De Scandalis Magnatum." Id.* at 553 (citing Slanderous Reports Act, 1275, 3 Edw. 1, c. 34). The "limited aristocracy" protected by the Act included "Prelates, Dukes, Earls, Barons, and great men of the realm, and also of the Chancellor, Treasurer, Clerk of the Privy Seal, Steward of the King's House, Justices of the one bench or the other, and of other great officers of this realm." *Id.* at 553 n.3.

- 23. Veeder, *supra* note 18, at 549–50 ("More than a thousand years ago King Alfred provided that the slanderer should have his tongue cut out, unless he could redeem it with the price of his head.").
- 24. *Id.* at 551–52, 557 (noting that the first defamation statute was enacted in the thirteenth year of Edward I, but had little effect until the ninth year of Edward II, when an additional defamation statute was enacted that permitted "corporal penance" as money payment in defamation cases).
 - 25. Id.
- 26. *Id.* at 547 (citing Frank Carr, The English Law Of Defamation: With Especial Reference To The Distinction Between Libel And Slander, 18 L.Q. REV. 255 (1902)).
- 27. *Id.* at 546–47. In the case of *King v. Lake in the Exchequer* in 1670, Lord Chief Baron Hale first set forth the civil doctrine of libel. (1670) 145 Eng. Rep. 552.
- 28. David A. Anderson, *supra* note 20, at 1049 n.12 (citing RESTATEMENT OF TORTS § 568 cmt. b (1938)).
- 29. See, e.g., RESTATEMENT (SECOND) OF TORTS § 580 cmt. b (1977), observing that:

[T]he common law was to the effect that if the defendant was at fault in publishing the statement to a third party and it was reasonably understood to defame the other he was subject to liability.... This amounted to the imposition of strict liability or 'liability without fault' with regard to the falsity and the defamatory character of the statement.

damages.³⁰ Subsequently, however, the tort of slander required proof of special damages, unless the defamatory statement fell within one of the four slander per se categories.³¹

Because "[e]very repetition of the defamation is a publication in itself," whether or not the person repeating the defamation attributes it to its source," anyone who repeats a defamatory statement is as liable as the original publisher.³² Traditional common law defamation rules distinguish, however, between the liability imposed on primary publishers and that imposed on distributors (also known as secondary publishers).³³

Primary publishers face strict liability for defamation.³⁴ They "can be held liable for defamatory statements contained in their works even absent proof that they had specific knowledge of the statement's inclusion."³⁵ In contrast, distributors or secondary publishers bear no liability for defamatory statements contained within materials they distribute absent "proof that they knew or had reason to know of the existence of

^{30.} RESTATEMENT (SECOND) OF TORTS § 620 cmts. a–c (discussing presumed and punitive damages in *Gertz v. Robert Welch, Inc.*, 418 U.S. 323 (1974)); *see also* Carr, *supra* note 26, at 399 (reviewing the convoluted history of defamation and predicting that "the law will probably remain as it is to the end, for as Sir Frederick Pollock says, 'the law went wrong from the first in making the damage and not the insult the cause of action"). *But see* Leslie Yalof Garfield, *The Death of Slander*, 35 COLUM. J.L. & ARTS 17, 52 (2011) (concluding that the distinction between libel and slander should be abrogated in favor of "one all encompassing tort of defamation").

^{31.} See generally RESTATEMENT (SECOND) OF TORTS § 570–574; see also Freiwald, supra note 1, at 584 (noting that damages include compensation for actual injuries, "out of pocket losses, injury to reputation and community standing, personal humiliation, and mental anguish and suffering"); Terwilliger v. Wands, 17 N.Y. 54, 57, 60 (1858) (stating that "special damages must have been the natural, immediate and legal consequence of the words," and providing examples such as "the loss of a marriage, loss of hospitable gratuitous entertainment, preventing a servant or bailiff from getting a place, the loss of customers by a tradesman; and says that in general whenever a person is prevented by the slander from receiving that which would otherwise be conferred upon him, though gratuitously, it is sufficient").

^{32.} Barnes v. Yahoo!, Inc., 570 F.3d 1096, 1101 (9th Cir. 2009) (quoting PROSSER AND KEETON ON TORTS, *supra* note 2, § 113, at 799).

^{33.} *Id.*; see also Cubby, Înc. v. CompuServe, Inc., 776 F. Supp. 135, 139 (S.D.N.Y. 1991). Liability for defamation also has been separated into three categories of participants: "primary publishers, secondary publishers or disseminators, and those who are suppliers of equipment and facilities and are not publishers at all." *Barnes*, 570 F.3d at 1104 (citing PROSSER AND KEETON ON TORTS, *supra* note 2, § 113, at 803).

^{34.} DOBBS, *supra* note 8, § 522.

^{35.} Zeran v. Am. Online, Inc., 129 F.3d 327, 331 (4th Cir. 1997) (citing PROSSER AND KEETON ON TORTS, *supra* note 2, § 113, at 810); *see also Barnes*, 570 F.3d at 1104 (citing PROSSER AND KEETON ON TORTS, *supra* note 2, § 113, at 810–11).

defamatory matter contained in [the materials] published."36 An underlying policy reason for the distinction between imposing liability on primary publishers and secondary publishers or distributors is the degree of editorial control over the defamatory content.³⁷ The greater that degree, "the higher the duty of care and corresponding liability." Traditionally, primary publishers include "those entities that print or broadcast content."39 For example, "[p]rimary publishers include most media outlets, such as the newspaper or book publisher that prints the statement, or the radio or television station that broadcasts it."40 Distributors, or secondary publishers, include telegraph and telephone companies, libraries, newsstands, and book vendors.41 Distributors and secondary publishers generally are considered mere transmitters or conduits, rather than true publishers.⁴² While distributors and secondary publishers are generally liable for defamation, some authorities find no liability for the mere transmittal of defamatory statements delivered "by the post office, or . . . a phone or telegraph company" because the communication itself is not deemed to be a publication.⁴³

"Publication" in defamation law is a term of art. It refers to communicating the defamatory statement to someone "other than the person defamed."⁴⁴ Liability for publishing defamatory material may be imposed even if the individual is not the original publisher of the material.⁴⁵ According to the Restatement (Second) of Torts, "[o]ne who intentionally and unreasonably fails to remove defamatory matter that he knows to be exhibited on land or chattels in his possession or under his

^{36.} Zeran, 129 F.3d at 331 (quoting PROSSER AND KEETON ON TORTS, supra note 2, § 113, at 811) (internal quotation marks omitted).

^{37.} Amanda Groover Hyland, Comment, *The Taming Of The Internet: A New Approach To Third-Party Internet Defamation*, 31 HASTINGS COMM. & ENT. L.J. 79, 96 (2008).

^{38.} Id.

^{39.} Id.

^{40.} RODNEY SMOLLA, 1 LAW OF DEFAMATION § 4:92 (2d ed.) (notes omitted).

^{41.} PROSSER AND KEETON ON TORTS, *supra* note 2, § 113, at 810–11; DOBBS, *supra* note 8, § 522 ("[M]any others such as telegraph and telephone companies, libraries and news vendors are called transmitters, distributors or secondary publishers rather than primary publishers."). "The disseminator is essentially a conduit, not an originator or promoter of content." *Id.* "As to these, it seems clear that liability cannot be imposed unless the distributor knows or should know of the defamatory content in materials he distributes." *Id.*

^{42.} DOBBS, *supra* note 8, § 113, at 799.

^{43.} SMOLLA, *supra* note 40, § 4:92 (notes omitted).

^{44.} RESTATEMENT (SECOND) OF TORTS § 577(1) and cmt. b (1977).

^{45.} *Id.* § 577(2).

control is subject to liability for its continued publication."⁴⁶ Under this principle, even without knowledge or intent, ISPs may be held liable for defamatory content created by third parties, as liability is based upon knowledge or reason to know and "intentionally and unreasonably" failing to remove the harmful content.⁴⁷

Thus, absent the shield of § 230 immunity, Internet intermediaries that know or should have known of defamatory content—who generally would be considered distributors and secondary publishers in a traditional context—could be held liable if they fail to remove the content.⁴⁸ Generally, the primary functions of intermediaries include: "access and storage providers, marketplace exchanges, buy/sell fulfillment, demand collection systems, auction brokers, virtual marketplaces, as well as searchengines, advertising networks, web aggregators, news syndicators or social networking sites."⁴⁹ Intermediaries generally "facilitate transactions between third parties."⁵¹ Internet intermediaries provide "access to, host, transmit and index content, products and services originated by third parties on the Internet or provide Internet-based services to third parties."⁵¹ There are numerous forms of Internet intermediaries.⁵² For example, whether wired or wireless, Internet access and service providers "[p]rovide access to households, businesses, . . . government" and Internet

^{46.} Id.

^{47.} Id.

^{48.} Barnes v. Yahoo!, Inc., 570 F.3d 1096, 1104 (9th Cir. 2009) (citing PROSSER AND KEETON ON TORTS, *supra* note 2, § 113, at 799).

^{49.} ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), THE ECONOMIC AND SOCIAL ROLE OF INTERNET INTERMEDIARIES 15 (2010), available at http://oecd.org/internet/ieconomy/44949023.pdf. "The OECD is a unique forum where the governments of . . . democracies work together to address the economic, social and environmental challenges of globalization[,]" as well as to promote understanding of and a response to "new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population." Id. at 2. The 34 OECD member nations are as follows: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom and the United States. Members and Partners, OECD, http://www.oecd.org/about/membersandpartners (last visited April 22, 2015). By agreement, the OECD sought to achieve their goals "through an appropriate balance of laws, policies, self-regulation, and consumer empowerment." Id. at 4. The Commission of the European Communities participates in the OECD. Id. at 2.

^{50.} The Economic and Social Role of Internet Intermediaries, supra note 49, at 15.

^{51.} *Id.*

^{52.} *Id*.

cafes utilizing "physical transport infrastructure."⁵³ Examples of Internet service providers include Verizon, Comcast, T-Mobile, NTT, Internet Initiative Japan, Vodafone, Orange, and other large telecommunications companies.⁵⁴ Some Internet service providers may also provide "web hosting, web page design, and consulting services related to networking software and hardware."⁵⁵

Another form of intermediary provides the "[w]eb hosting, data processing and content delivery" services offered by entities such as "Navisite, Akamai, OVH, Easyspace, Rackspace, Register.com, Go Daddy, [and] GMO Internet Inc.⁵⁶ Web hosting services and data processing services, more commonly known as 'cloud computing' platforms," are yet another form of intermediary.⁵⁷ Internet search engines and portals like "Google, Yahoo!, Baidu, Naver, [and] MSN" also provide intermediary services.⁵⁸ E-commerce intermediaries such as eBay, Amazon, Priceline.com, and Ali Baba facilitate buying and selling online.⁵⁹ When paying for items online, payment systems like Visa, Paypal, and Mastercard are intermediaries used to process Internet payments.⁶⁰ Participative or interactive intermediary forms used for social networking and content creation includes Facebook, YouTube, Ohmy News, and LinkedIn.⁶¹ Additional interactive or participative platforms include blogs, 62 wikis, 63 instant messaging, 64 mobile, 65 websites allowing critiques of written works,66 group-based aggregation,67 photo-sharing

^{53.} *Id.* at 9, 11.

^{54.} Id. at 9.

^{55.} *Id.* at 11.

^{56.} *Id.* at 9.

^{57.} *Id.* at 9, 11, 39.

^{58.} *Id.* at 9.

^{59.} *Id*.

^{60.} *Id.*

^{61.} *Id.* Additional social media sites include MySpace, Mixi, "Twitter, Bebo, Orkut, Cyworld, Imeem, and ASmallWorld." *Id.* at 14.

^{62.} *Id.* at 14 (listing additional blogs, such as BoingBoing, Engadget, Skyrock, LiveJournal and Windows Live Spaces).

^{63.} Id. (listing wiki sites, such as Wikipedia, PBWiki, Google Docs, and Wiktionary).

^{64.} Id. (listing Skype, Trillian, and Windows Live Messenger media).

^{65.} *Id.* (listing mobile version of social media sites).

^{66.} *Id.* (listing Amazon, FanFiction.Net, and SocialText).

^{67.} *Id.* (listing "[s]ites where users contribute links and rate them such as Digg, reddit," as well as "[s]ites where users post tagged bookmarks such as del.icio.us").

websites,⁶⁸ podcasting,⁶⁹ virtual worlds,⁷⁰ online computer games,⁷¹ and video content and file-sharing sites.⁷²

In the United States, the defenses of truth and consent, as well as several privileges, are available to defendants in a defamation case.⁷³ Traditionally, truth is an absolute defense and only requires proof that the statement was substantially true.⁷⁴ Privileges available to defendants in defamation actions include absolute and qualified privileges.⁷⁵ Absolute privileges completely immunize the defendant from liability for defamation.⁷⁶ These absolute privileges apply, for example, to statements made during judicial⁷⁷ and legislative⁷⁸ proceedings and to statements made by federal government officials.⁷⁹ Similarly, qualified privileges relieve a defendant of liability for defamation to protect the defendant's interest,⁸⁰ the public's interest,⁸¹ and the interests of others.⁸²

Generally, there are four categories of qualified privileges.⁸³ The first category is "the public interest privilege, to publish materials to public officials on matters within their public responsibility."⁸⁴ The second

68. *Id.* (listing Flickr and Kodak Gallery).

- 69. *Id.* (listing additional podcasts as iTunes, @Podder, FeedBurner (Google), and WinAmp).
- 70. *Id.* (listing Dotsoul Cyberpark, Entropia Universe, Second Life, and Acive Worlds as examples of virtual worlds).
- 71. *Id.* (listing World of Warcraft, Club Pogo, Sims Online, Tomb Raider, and Lineage Ultima Online).
 - 72. Id. (listing Daily Motion, YouTube, GyaO, and Crackle).
- 73. RESTATEMENT (SECOND) OF TORTS §§ 581A, 583, 585–592, 593–598 (1977).
- 74. *Id.* § 581A and § 581A, cmt. f. (Defendant "need not prove the literal truth of the allegedly defamatory accusation, 'so long as the imputation is substantially true so as to justify the "gist" or "sting" of the remark."); Maheu v. Hughes Tool Co., 569 F.2d 459, 465–66 (9th Cir. 1977).
 - 75. *Id.* §§ 585–592, 593–598.
 - 76. DOBBS, *supra* note 8, §§ 538–539.
- 77. RESTATEMENT (SECOND) OF TORTS §§ 585–589 (absolute privilege applies to judges, lawyers, jurors, and witnesses).
- 78. *Id.* §§ 590–590A (absolute privilege applies to legislators and witnesses testifying before legislature).
 - 79. Id. § 585; see also id. at ch. 25, tit. B, intro. note.
 - 80. Id. § 594.
 - 81. Id. § 598.
 - 82. Id. § 595.
 - 83. DOBBS, *supra* note 8, § 544.
- 84. DOBBS, *supra* note 8, § 554; *see also* DAVID ELDER, DEFAMATION: A LAWYER'S GUIDE § 2:26 (2014) (providing examples of public interest privilege, including "a victim's complaint of police misconduct to higher authority, a letter from a

category is "the privilege to publish to someone who shares a common interest, or relatedly, to publish in defense of oneself or in the interest of others." The third category of qualified privilege is fair comment, which "protect[s] the defendant's statement of opinion about matters of public interest, provided the defendant truly stated the facts upon which the opinion was based." The final qualified privilege category is "the privilege to make a fair and accurate report of public proceedings and public documents." Generally, these qualified privileges are conditional, such that a defendant may forfeit them by exceeding the scope of the privilege, engaging in excessive publication, or publishing with an improper purpose. 88

In 1964, the U.S. Supreme Court began to frame the traditional rules of defamation within a constitutional context.⁸⁹ In *New York Times v. Sullivan*, the Court held that freedom of the press and freedom of speech required that public officials could not recover presumed and punitive damages for defamatory statements related to their official conduct absent proof of "actual malice." A statement is made with actual malice if the speaker makes a statement "with knowledge that it was false or with reckless disregard of whether it was false or not." ⁹¹

citizen to a county commissioner regarding the county director of animal control, [or] a disciplinary complaint with a local or state bar association" (citations omitted)).

^{85.} DOBBS, supra note 8, § 554; see also ELDER supra, note 84, § 2:24 (noting that the common interest privilege "is not limited to those with 'identical, congruent, or even parallel' interests" and includes "discussing examples of the common interest privilege including "inquiries made by plaintiff's employer to construction management firm's officers concerning plaintiff's continuing effectiveness as construction coordinator, recommendations by an independent consultant hired by plaintiff's employer to review its operations and make recommendations, [or] communications between an employer and outside review entity as to expenditures qualifying for insurance coverage" (citations omitted)); id. § 2:25 (commenting that the privilege to publish in one's defense or the defense of others generally concerns "one to whom the publisher is legally obligated to publish the information or is one to whom the publication is otherwise defensible," such as "where defendant-doctor communicated with the patient's lawyer regarding contemplated litigation, or where a doctor conferred with a charitable foundation regarding a patient he had referred for further treatment, or where an attorney communicated with the police or court administrator or a prospective vendor or to prospective defendants in a lawsuit on behalf of his client" (citations omitted)).

^{86.} DOBBS, *supra* note 8, § 567.

^{87.} *Id.* § 548 (stating that "fair and accurate reports of judicial, legislative, and official executive proceedings or reports arrests, and official hearings or meetings of public bodies" are privileged (citations omitted)).

^{88.} Id.; see also RESTATEMENT (SECOND) OF TORTS §§ 599–605A (1977).

^{89.} New York Times v. Sullivan, 376 U.S. 254 (1964).

^{90.} Id. at 283-84.

^{91.} Id. at 279-80.

A decade later, in *Gertz v. Robert Welch, Inc.*, the Court held that "so long as they do not impose liability without fault, the States may define for themselves the appropriate standard of liability for a publisher or broadcaster of defamatory falsehood injurious to a private individual." When the plaintiff seeks presumed and punitive damages, the "actual malice" standard also applies to cases involving private individuals in matters of public concern. Subsequently, in *Philadelphia Newspapers v. Hepps*, a defamation case involving a private figure and a matter of public concern, the Court held that the plaintiff must prove the defamatory statement was false. 94

On the other hand, the U.S. Supreme Court has ruled that defamatory statements about a private person in a matter of private concern require a less stringent standard of proof. In Dun & Bradstreet, Inc. v. Greenmoss Builders, Inc., the Court concluded that First Amendment concerns are reduced in such private defamation cases. Consequently, the Court held that in these cases "the state interest adequately supports awards of presumed and punitive damages—even absent a showing of 'actual malice."

Frequently, defamation in cyberspace is posted anonymously or pseudonymously. Online anonymity and pseudonymity present challenges for an individual seeking to recover for defamation because often it is difficult, if not impossible, to identify the creator of the defamatory content. The U.S. Supreme Court, however, does recognize

- 92. Gertz v. Robert Welch, Inc., 418 U.S. 323, 347 (1974).
- 93. Id. at 325.
- 94. Philadelphia Newspapers, Inc. v. Hepps, 475 U.S. 767 (1986).
- 95. Dun & Bradstreet, Înc. v. Greenmoss Builders, Inc., 472 U.S. 749, 759–61 (1985).
 - 96. Id. at 759-61.
 - 97. *Id.* at 761–63.
- 98. Doe v. Cahill, 884 A.2d 451, 456 (Del. 2005) (citing Lyrissa Barnett Lidsky, Silencing John Doe: Defamation & Discourse in Cyberspace, 49 DUKE L.J. 855, 895 (2000)); see also Bryant Storm, Comment, The Man Behind the Mask: Defamed Without a Remedy, 33 N. ILL. U. L. REV. 393, 402 (2013) (identifying challenges to filing suit against anonymous defamers including "(1) the court may find that the plaintiff does not satisfy the procedural requirements necessary to compel discovery, (2) the internet publisher may file a motion to quash the subpoena, or (3) the identifying information may no longer exist").
- 99. See, e.g., Robert Danay, The Medium Is Not the Message: Reconciling Reputation and Free Expression in Cases of Internet Defamation, 56 MCGILL L.J. 1, 12–13 (2010) (observing that "since such communications are often impersonal and anonymous, ... considered that there exists 'a greater risk that ... defamatory remarks [will be] believed[,]" and "that defamation over the Internet had a greater potential to damage reputation as compared with 'its less pervasive cousins'").

a First Amendment right to anonymous speech.¹⁰⁰ In *McIntyre v. Ohio*, the Court stated that "the interest in having anonymous works enter the marketplace of ideas unquestionably outweighs any public interest in requiring disclosure as a condition of entry."¹⁰¹ "[One's] decision to remain anonymous, like other decisions concerning omissions or additions to the content of a publication, is an aspect of the freedom of speech protected by the First Amendment."¹⁰²

B. MAKING OF THE CDA & LEGISLATIVE HISTORY

Section 230 of the CDA responded to two recently decided cases:¹⁰³ Stratton Oakmont, Inc. v. Prodigy Services Co., ¹⁰⁴ and Cubby v.

- 100. Buckley v. Am. Constitutional Law Found., 525 U.S. 182, 197–99 (1999) (finding unconstitutional Colorado statute requiring identifying badges and filing affidavits identifying names to distribute political petitions campaign materials); McIntyre v. Ohio Elections Comm'n, 514 U.S. 334, 341–42 (1995) (finding unconstitutional Ohio statute banning anonymous pamphleteering).
 - 101. McIntyre, 514 U.S. at 342.
- 102. *Id*; discussing its decision in *Talley v. California*, 362 U.S. 60 (1960), the *McIntyre* court stated:

In Talley, the Court held that the First Amendment protects the distribution of unsigned handbills urging readers to boycott certain Los Angeles merchants allegedly engaging in discriminatory employment practices. Writing for the Court, Justice Black noted that "[p]ersecuted groups and sects from time to time throughout history have been able to criticize oppressive practices and laws either anonymously or not at all." Justice Black recalled England's abusive press licensing laws and seditious libel prosecutions, and he reminded us that even the arguments favoring the ratification of the Constitution advanced in the Federalist Papers were published under fictitious names. On occasion, quite apart from any threat of persecution, an advocate may believe her ideas will be more persuasive if her readers are unaware of her identity. Anonymity thereby provides a way for a writer who may be personally unpopular to ensure that readers will not prejudge her message simply because they do not like its proponent.

Id. (quoting *Talley*, 362 U.S. at 342 (citations omitted)). The extent of the right to speak anonymously remains unclear. *See*, *e.g.*, Storm, *supra* note 98, at 411 (citing Doe v. Reed, 130 S. Ct. 2811 (2010); Citizens United v. Fed. Election Comm'n, 130 S. Ct. 876 (2010)).

103. See, e.g., Barnes v. Yahoo!, Inc., 570 F.3d 1096, 1101 (9th Cir. 2009) (noting that some of the "sister circuits have recognized, Congress enacted the Amendment in part to respond to a New York state court decision") (citing Fair Hous. Council of San Fernando Valley v. Roommates.com, 521 F.3d 1157, 1163 (9th Cir. 2008)); Zeran v. Am. Online, Inc., 129 F.3d 327, 331 (4th Cir. 1997); see also FTC v. Accusearch Inc., 570 F.3d 1187, 1195 (10th Cir. 2009). In Shiamili v. Real Estate Group of New York, Inc., 17 N.Y.3d 281, 284 (2011), the Court of Appeals of New York, in a case of first impression, determined that the CDA barred "plaintiff's claim against a Website operator arising out of allegedly defamatory comments posted to the Website."

CompuServe.¹⁰⁵ Although the legislative history of § 230 does not reference Cubby by name, Cubby is discussed and distinguished factually in Stratton, which is mentioned by name in the congressional records.¹⁰⁶

Cubby involved a defamation claim based on allegedly libelous statements that appeared on an online forum run by CompuServe.¹⁰⁷ CompuServe was a pre-Internet ISP that provided subscribers with access to an electronic library and approximately 150 special interest forums.¹⁰⁸ Subscribers could access the various forums using "electronic bulletin boards, interactive online conferences, and topical databases."¹⁰⁹ Rather than maintaining control over content posted on their various forums, CompuServe contracted with a separate, independent entity to "manage, review, create, delete, edit and otherwise control the contents' of the Journalism Forum 'in accordance with editorial and technical standards and conventions of style as established by CompuServe."¹¹⁰

Developers of a competitor database filed suit against CompuServe based on statements posted on CompuServe's Journalism Forum.¹¹¹ The complaint alleged libel, business disparagement, and unfair competition.¹¹² CompuServe moved for summary judgment, asserting "that it acted as a distributor, and not a publisher, of the statements, and [could not] be held liable for the statements because it did not know and had no reason to

^{104.} Stratton Oakmont v. Prodigy, 1995 WL 323710 (N.Y. Sup. Ct. May 24, 1995); see also 141 CONG. REC. 16025 (1995) (statement of Sen. Coats, "I want to be sure that the intent of the amendment is not to hold a company who tries to prevent obscene or indecent material under this section from being held liable as a publisher for defamatory statements for which they would not otherwise have been liable. . . . Am I further correct that the subsection (f)(4) defense is intended to protect companies from being put in such a catch-22 position? If they try to comply with this section by preventing or removing objectionable material, we don't intend that a court could hold that this is assertion of editorial content control, such that the company must be treated under the high standard of a publisher for the purposes of offenses such as libel."); 141 CONG. REC. H8470 (daily ed. Aug. 4, 1995) (statement of Representative Cox, referring to Stratton decision as "backward"); 141 CONG. REC. H8471 (daily ed. Aug. 4, 1995) (statement of Rep. Goodlatte, criticizing Stratton decision).

^{105.} Cubby, Inc. v. CompuServe, Inc., 776 F. Supp. 135 (S.D.N.Y. 1991).

^{106.} Stratton, 1995 WL 323710, at *3.

^{107.} Cubby, 776 F. Supp. at 137.

^{108.} Id.

^{109.} Id.

^{110.} Id.

^{111.} *Id.* at 138. The alleged defamatory "statements included a suggestion that individuals at Skuttlebut gained access to information first published by Rumorville 'through some back door'; a statement that Blanchard was 'bounced' from his previous employer, WABC; and a description of Skuttlebut as a 'new start-up scam." *Id.*

^{112.} *Id.*

know of [them]."¹¹³ The court reviewed the relevant law on liability of distributors and publishers for libel, as well as CompuServe's control over the content posted on the Journalism Forum.¹¹⁴ The court determined that CompuServe offered essentially "an electronic, for profit library" and thus was equivalent to a more traditional news vendor.¹¹⁵ The court held that the "inconsistent application of a lower standard of liability to an electronic news distributor such as CompuServe than that which is applied to a public library, book store, or newsstand would impose an undue burden on the free flow of information."¹¹⁶ The court concluded that CompuServe maintained no more editorial control over the publications it provided than traditional purveyors of information did.¹¹⁷ Thus, "it would be no more feasible for CompuServe to examine every publication it carried for potentially defamatory statements than it would be for any other distributor to do so."¹¹⁸

Having characterized CompuServe as a distributor for the sake of First Amendment concerns, the court determined that CompuServe's liability for defamation should be determined based on whether it knew or had reason to know of the libelous content on its forum.¹¹⁹ As the plaintiff failed to demonstrate that CompuServe could have had such knowledge, the court granted CompuServe's motion for summary judgment on the libel claim.¹²⁰

The court in *Stratton Oakmont v. Prodigy* reached the opposite conclusion.¹²¹ It determined that the ISP was a publisher, thereby holding it liable for defamatory content posted on its Internet site by a third party.¹²² The ISP, Prodigy Services Company (Prodigy), maintained a

^{113.} Id. at 143.

^{114.} *Id.* at 140 (quoting Cianci v. New Times Publ'g Co., 639 F.2d 54, 61 (2d Cir. 1980)) ("one who repeats or otherwise republishes defamatory matter is subject to liability as if he had originally published it"); *see also* RESTATEMENT (SECOND) OF TORTS § 578 (1977). Regarding "news vendors, book stores, and libraries, however, 'New York courts have long held that vendors and distributors of defamatory publications are not liable if they neither know nor have reason to know of the defamation." *Cubby*, 776 F. Supp. at 139 (quoting Lerman v. Chuckleberry Publ'g, Inc., 521 F. Supp. 228, 235 (S.D.N.Y. 1981)).

^{115.} *Cubby*, 776 F. Supp. at 139.

^{116.} *Id.* at 140.

^{117.} Id.

^{118.} *Id*.

^{119.} Id. at 140-41.

^{120.} Id. at 141.

^{121.} Stratton Oakmont v. Prodigy, 1995 WL 323710, at *1 (N.Y. Sup. Ct. May 24, 1995).

^{122.} *Id*.

computer network service with approximately two million subscribers.¹²³ Prodigy hosted bulletin boards with information on various topics.¹²⁴ These included the *Money Talk* forum, "allegedly the leading and most widely read financial computer bulletin board in the United States, where members [could] post statements regarding stocks, investments and other financial matters."¹²⁵

Prodigy contracted with individuals to serve as leaders of its bulletin board discussions, as well as to encourage and increase usage of its services.¹²⁶ Prodigy's promotional materials marketed the company as an online community that seeks a "value system that reflects the culture of the millions of American families."¹²⁷ In support of its family-friendly objective, Prodigy developed and implemented policies, guidelines, and a software-screening program.¹²⁸ Prodigy also made available to its bulletin board discussion leaders an emergency delete function to remove offensive materials posted by subscribers.¹²⁹ When using the emergency delete function to remove offensive messages, the board leaders could select from a range of pre-prepared messages to the poster.¹³⁰ These variously characterized posts as "solicitation, bad advice, insulting, wrong topic, off topic, bad taste, etcetera."¹³¹

On two occasions in October 1994, an unidentified user posted allegedly defamatory messages on *Money Talk* concerning Stratton Oakmont, Inc. (Stratton), a securities investment banking firm, and its president.¹³² The defamatory statements alleged, among other things, that one of Stratton's initial public offerings constituted a "major criminal fraud," that Stratton "was a cult of brokers who either lie for a living or get fired," and that Stratton's president had committed criminal and fraudulent acts related to an initial public offering.¹³³ Based on these

^{123.} *Id*.

^{124.} *Id*.

^{125.} Id.

^{126.} *Id*.

^{127.} Id. at *2.

^{128.} Id.

^{129.} *Id.*

^{130.} Id.

^{131.} *Id.* at *2-3.

^{132.} *Id.* at *1.

^{133.} *Id.* at *1. Jordan Belfort, who was indicted on securities fraud and money laundering charges in 1998, is one of the founders of the Stratton Oakmont brokerage firm. *Wolf of Wall Street' Distributors Seek Dismissal of Use-of-Likeness Suit*, WESTLAW J. ENT. INDUSTRY, May 7, 2014, at 1. *The Wolf of Wall Street* is an Oscar nominated movie that is based on Mr. Belfort's memoir of the same name. *See* THE WOLF OF WALL

statements, Stratton filed a ten-count suit against Prodigy, which included a libel per se claim seeking \$200 million in damages.¹³⁴

Prodigy sought partial summary judgment, focusing on the issues of (1) whether Prodigy is considered a publisher or distributor, and (2) whether the *Money Talk* bulletin board leader "acted with actual and apparent authority as Prodigy's 'agent' for the purposes of the claims in this action." Regarding Prodigy's status as a publisher or distributor, the court examined whether Prodigy "exercised sufficient editorial control over its computer bulletin boards to render it a publisher." Prodigy argued that it was not a publisher but rather a distributor in conformance with the prior decision in *Cubby*. 137

The court found, notwithstanding the decision in *Cubby*, that Prodigy was a publisher, based, in part, on documentary evidence of Prodigy's policies and content guidelines. 138 The court distinguished the activities of the ISP in Cubby. 139 Unlike the Cubby ISP, Prodigy had publically represented that it controlled the content on its computer bulletin boards and had touted "its automatic software screening program, and the Guidelines which Board Leaders [were] required to enforce."140 The court further determined that Prodigy's acceptance of the benefits of editorial control subjected it to a higher standard of liability.¹⁴¹ In contrast, it noted that the ISP in *Cubby* and other ISPs had made "no such choice." 142 Consequently, the court held that the bulletin board leaders had acted as Prodigy's agent. 143 Thus, Prodigy's efforts to develop and implement policies and guidelines to limit or restrict access to objectionable material posted on its online sites resulted in the court's determination that Prodigy was liable as a publisher for defamatory statements posted on its forum by an unidentified user.144

STREET (Paramount Pictures 2013); JORDAN BELFORT, THE WOLF OF WALL STREET (2008).

^{134.} Stratton, 1995 WL 323710, at *1.

^{135.} *Id.*

^{136.} *Id.* at *3.

^{137.} *Id.* at *4–5.

^{138.} Id. at *3.

^{139.} Id.

^{140.} Id. at *4.

^{141.} Id.

^{142.} Id. at *5.

^{143.} *Id.* at *6.

^{144.} *Id.* at *3–6.

III. SECTION 230

A. Contents of § 230

As titled, § 230 offers "[p]rotection for private blocking and screening of offensive material" on the Internet. When ISPs voluntarily implement a process to screen and block access to "offensive materials," the "[g]ood [s]amaritan" provision in subsection (c) protects ISPs from liability. Importantly, subsection (c)(1) addresses the status of ISPs and expressly states "[n]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider. Subsection (c)(2) protects ISPs from civil liability when ISPs "restrict access to or availability of material" that the ISPs deem to be "obscene, lewd, lascivious, filthy, excessively violent, harassing, or otherwise objectionable. This statutory protection against civil liability applies even if the restricted materials are "constitutionally protected. However, subsection (f)(3) specifically denies immunity to ISPs that have created the objectionable material themselves.

Subsection (d) mandates that ISPs provide their customers with a notice of content blocking equipment at the time of entering an agreement.¹⁵¹ Specifically, the ISP shall provide the customer with notice of the commercial availability of "parental control protections (such as computer hardware, software, or filtering services)... that may assist the customer in limiting access to material that is harmful to minors."¹⁵² The mandatory notice must provide customers with current providers of parental control protections.¹⁵³ The statute protects ISPs from civil liability when they provide "information content providers or others the technical means to restrict access to material" the ISPs deem to be "obscene, lewd, lascivious, filthy, excessively violent, harassing, or otherwise

^{145. 47} U.S.C. § 230 (2012).

^{146. § 230(}c).

^{147. § 230(}c)(1).

^{148. § 230(}c)(2)(A).

^{149.} *Id*.

^{150.} $\S 230(f)(3)$; see also $\S 230(c)(1)$.

^{151. § 230(}d).

^{152. § 230(}d). Section 230(f)(4) defines "access software provider" as "a provider of software (including client or server software), or enabling tools that do any one or more of the following: (A) filter, screen, allow, or disallow content; (B) pick, choose, analyze, or digest content; or (C) transmit, receive, display, forward, cache, search, subset, organize, reorganize, or translate content."

^{153. § 230(}d).

objectionable."¹⁵⁴ In this way, the statute removes the prospect of the ISPs incurring civil liability in the course of restricting or limiting access to content the ISPs consider offensive. ¹⁵⁵ By so doing, the CDA recognizes the importance of maintaining the Internet as a free market for ease of access to informational, educational, and entertainment resources, while bowing to concerns about potentially objectionable content. ¹⁵⁶

Section 230 specifically notes that it does not preempt certain federal and state laws.¹⁵⁷ Regarding federal law, it states that the statute has no effect on communications privacy law,¹⁵⁸ intellectual property law,¹⁵⁹ and criminal law.¹⁶⁰ In regard to state laws, § 230 provides that "[n]othing in this section shall be construed to prevent any State from enforcing any State law that is consistent with this section."¹⁶¹ Thus, state laws are not preempted so long as they do not conflict with § 230. However, § 230 also states that "[n]o cause of action may be brought and no liability may be imposed under any State or local law that is inconsistent with this section."¹⁶²

^{154. §§ 230(}c)(2)(A)–(B). The statute defines "information content provider" as "any person or entity that is responsible, in whole or in part, for the creation or development of information provided through the Internet or any other interactive computer service." § 230(f)(3).

^{155.} See § 230(c)(2)(A).

^{156.} See § 230(c)(2).

^{157. § 230(}e).

^{158. § 230(}e)(4) ("Nothing in this section shall be construed to limit the application of the Electronic Communications Privacy Act of 1986 or any of the amendments made by such Act, or any similar state law.").

^{159. § 230(}e)(2) ("Nothing in this section shall be construed to limit or expand any law pertaining to intellectual property."); § 230(e)(3) ("Nothing in this section shall be construed to prevent any State from enforcing any State law that is consistent with this section."); § 230(e)(4) ("Nothing in this section shall be construed to limit the application of the Electronic Communications Privacy Act of 1986 . . . or any similar State law."); see also CYBERsitter, LLC v. Google Inc., 905 F. Supp. 2d 1080 (C.D. Cal. 2012) (trademark infringement not barred by CDA); Almeida v. Amazon.com, Inc., 456 F.3d 1316, 1322–324 (11th Cir. 2006) (resolving a CDA question on other grounds); Ohio State Univ. v. Skreened Ltd., 16 F. Supp. 3d 905, 918 (S.D. Ohio 2014) (noting that the § 230 "immunity provision does not apply in the trademark context of a state law right of publicity claim"); Ford Motor Co. v. GreatDomains.com, Inc., No. 00-CV-71544-DT, 2001 WL 1176319, at *1 (E.D. Mich. Sept. 25, 2001) (noting that § 230(e)(2) "unambiguously precludes . . . immunity" in the context of federal trademark laws).

^{160. § 230(}e)(1) ("Nothing in this section shall be construed to impair the enforcement of section 223 or 231 of this title, chapter 71 (relating to obscenity) or 110 (relating to sexual exploitation of children) of title 18, or any other Federal criminal statute.").

^{161. § 230(}e)(3).

^{162.} See id.

B. LEGISLATIVE HISTORY OF THE CDA

In 1996, Congress engaged in a comprehensive revision of the Telecommunications Act. In the revision, Congress sought to "reduce regulation and encourage 'the rapid deployment of new telecommunications technologies." The major components of the statute aimed "to promote competition in the local telephone service market, the multichannel video market, and the market for over-the-air broadcasting." ¹⁶⁵

Congress incorporated the CDA of 1996¹⁶⁶ in its revisions of the Telecommunications Act. Unquestionably, Congress intended § 230 to overrule *Stratton*. ¹⁶⁷ Indeed, the House Conference Report on the Cox-Wyden version of the bill proposing the enactment of § 230 by the House of Representatives expressly stated that "[o]ne of the specific purposes of this section is to overrule *Stratton Oakmont v. Prodigy* and any other similar decisions which have treated such providers and users as publishers or speakers of content that is not their own *because they have restricted access to objectionable material*." The Report further averred that "[t]he conferees believe that such decisions create serious obstacles to the important federal policy of empowering parents to determine the content of communications their children receive through interactive computer services." ¹⁶⁹

^{163.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56; *see also* Reno v. ACLU, 521 U.S. 844, 857 (1997) ("The Telecommunications Act of 1996... was an unusually important legislative enactment.").

^{164.} *Reno*, 521 U.S. at 857 (quoting Telecommunications Act of 1996, Pub. L. No. 104-104, pmbl., 110 Stat. 56, 56 (1996)).

^{165.} Reno, 521 U.S. at 857-58.

^{166.} Telecommunications Act of 1996, Pub. L. No. 104-104, §§ 501-509, 110 Stat. 56, 133-139 (1996); see also Reno, 521 U.S. at 857.

^{167.} H.R. REP. NO. 104-458, at 191, 194 (Conf. Rep.) (1996); 141 Cong. Rec. 22044-06 (Cox-Wyden Proposal offered by Chris Cox (R-CA) and Ron Wyden (D-OR)); see also Robert Cannon, The Legislative History of Senator Exon's Communications Decency Act: Regulating Barbarians on the Information Superhighway, 49 FED. COMM. L.J. 51, 63 (1996) ("In the Conference Report, the conferees specifically stated that they were overturning Stratton."); Freiwald, supra note 1, at 596 (stating that § 230 was enacted to overrule Stratton Oakmont v. Prodigy and nothing more).

^{168.} H.R. REP. NO. 104-458, at 194 (Conf. Rep.) (1996) (emphasis added); S. REP. NO. 104-230, at 194 (Conf. Rep.); *see also* 141 Cong. Rec. 22044-06 (Cox-Wyden Proposal offered by Chris Cox (R-CA) and Ron Wyden (D-OR)); Batzel v. Smith, 333 F.3d 1018, 1029 (9th Cir. 2003).

^{169.} H.R. REP. NO. 104-458, at 194 (Conf. Rep.) (1996) (emphasis added); S. REP. NO. 104-230, at 194 (Conf. Rep.); *see also* 141 Cong. Rec. 22044-06 (Cox-Wyden Proposal offered by Chris Cox (R-CA) and Ron Wyden (D-OR)); Batzel v. Smith, 333 F.3d 1018, 1029 (9th Cir. 2003).

The Cox-Wyden Amendment, the foundation for what is now § 230 of the CDA, stated that it "sought to further First Amendment and e-commerce interests on the Internet while also promoting the protection of minors." Thus, proponents of the CDA promoted it, in part, as a means to protect children from access to online pornography and other obscene materials. Senator Exon argued "the worst, most vile, most perverse pornography is only a few click-click-clicks away from any child on the Internet." To further convince his Senate colleagues of the potentially harmful images lurking in cyberspace, Senator Exon had a staffer prepare as demonstrative evidence the now famous "blue binders" of images of online pornography. Thus, through the CDA, Congress attempted to restrict certain types of speech online, which necessarily implicated First Amendment free speech protections.

The CDA also sought to encourage the Internet industry to self-regulate its transmission of indecent and obscene content.¹⁷⁵ Congress considered self-regulation a better alternative to government interference in an unfamiliar, rapidly-developing new medium.¹⁷⁶ Decisions like *Stratton*, however, provided disincentives for self-regulation given the risk of exposure to liability.¹⁷⁷ Section 230 expressly addressed that concern and

^{170.} Batzel, 333 F.3d at 1028 (citing 141 CONG. REC. H8469-72 (referring to "[s]tatements of Representatives Cox, Wyden, Lofgren, and Goodlatte")).

^{171.} *Id.* at 1026, 1028 (reviewing the history of the CDA, focusing specifically on § 230) (citing PUB. L. NO. 104-104, tit. V. (1996); H.R. REP. NO. 104-458, at 81–91 (1996); S. REP. NO. 104-230, at 187–193 (1996); S. REP. NO. 104-23, at 9 (1996)).

^{172. 141} CONG. REC. 15503 (1995).

^{173.} See id. at 15503–04. "At the request of Senator Exon, a friend downloaded from the Internet a collection of pornography. This was gathered in a blue folder and made accessible at Senator Exon's desk on the Senate floor so that everyone could observe the 'filth' that was accessible to every boy and girl in this country." Cannon, *supra* note 167, at 64.

^{174.} See Reno v. ACLU, 521 U.S. 844, 857–58 (1997). The First Amendment of the U.S. Constitution provides as follows: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances." U.S. CONST. AMEND. I.

^{175.} Reno, 521 U.S. at 857–58.

^{176.} See Ben Ezra, Weinstein & Co. v. Am. Online, Inc., 206 F.3d 980, 986 (10th Cir. 2000) (citing 141 CONG. REC. H8460-01, H8470 (1995) (statement of Rep. Barton) (The Congressional intent of enacting § 230 is to provide ISPs "a reasonable way to . . . help them self-regulate themselves without penalty of law.")).

^{177.} Theoretically, self-regulation could be accomplished through market forces. These forces, driven in part by the need of consumers for confidence in the reliability of the information provided, would essentially create a parallel universe of ISPs: those that are responsible and reliable, and those that are not.

provides protection to ISPs that voluntarily act to restrict access to objectionable materials.¹⁷⁸

The CDA intended to protect ISPs from liability in two respects when the ISPs voluntarily implemented software programs to block, restrict, screen, or otherwise limit access to obscene content from their sites. First, it aimed to protect the ISPs from liability to the purveyors of such content.¹⁷⁹ Second, the "intent of the amendment [was] not to [allow] a company who tries to prevent obscene or indecent material under this section [to] be[] held liable as a publisher for defamatory statements for which they would not otherwise have been liable."¹⁸⁰ Accordingly, in response to the court's determination in *Stratton* that the ISP was a publisher, Congress determined that ISPs are neither publishers nor speakers, and provided immunity to ISPs for content provided by third parties when the ISPs implemented blocking policies or provided its users with information on how to accomplish the same.¹⁸¹

C. JUDICIAL INTERPRETATION OF § 230

Although the U.S. Supreme Court has struck down portions of the CDA as unconstitutional, § 230 of the CDA, including its "Good Samaritan" immunity provision, survives. A substantial majority of the United States Circuit Courts of Appeal have determined that § 230 immunizes ISPs from liability for online content provided by a third party. These courts "have interpreted the CDA to establish broad

^{178. § 230(}c)(2).

^{179.} See *id*.

^{180. 141} CONG. REC. 16025 (1995).

^{181.} See, e.g., Freiwald, supra note 1, at 596.

^{182.} Fair Hous. Council v. Roommates.com, Inc., 521 F.3d 1157, 1162 n.5, 1179 (9th Cir. 2008) (citing Reno v. ACLU, 521 U.S. 844 (1997)). After the U.S. Supreme Court found portions of the CDA unconstitutional, Congress again sought to restrict online access to pornographic materials by minors by enacting the Child Online Protection Act of 1998 (COPA), 47 U.S.C. § 231 (1998). See George B. Delta & Jeffrey H. Matsuura, Attempts at Legislating Against Obscenity, in CCH LAW OF THE INTERNET § 12.02 (2013), available at 2013 WL 3924203. Subsequently, the U.S. Supreme Court declared § 231 unconstitutional. See Ashcroft v. ACLU, 542 U.S. 656 (2004). See generally Martha McCarthy, The Continuing Saga of Internet Censorship: The Child Online Protection Act, 2005 BYU EDUC. & L.J. 83 (2005).

^{183.} Chi. Lawyers' Comm. for Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666, 669 (7th Cir. 2008) ("broad immunity from liability for unlawful third-party content") (citing Zeran v. Am. Online, Inc., 129 F.3d 327, 335 (4th Cir. 1997); Batzel v. Smith, 333 F.3d 1018, 1029 (9th Cir. 2003); Ben Ezra, Weinstein & Co. v. Am. Online, Inc., 206 F.3d 980, 986 (10th Cir. 2000); Green v. Am. Online, Inc. 318 F.3d 465 (3d Cir. 2003); Universal Commc'n Sys., Inc. v. Lycos, Inc., 478 F.3d 413 (1st Cir. 2007)); see also Cyrus Sarosh Jan Manekshaw, Liability of ISPs: Immunity from Liability Under the

'federal immunity to any cause of action that would make service providers liable for information originating with a third-party user of the service." 184

1. CDA Immunity from Defamation Upheld

The United States Court of Appeals for the Fourth Circuit was one of the first federal courts of appeal to address the issue of § 230 immunity for an ISP related to content posted on its Internet sites by third parties. In Zeran v. America Online, Inc., an unidentified individual posted advertisements on AOL offering for sale t-shirts, key chains, bumper stickers, and other items "featuring offensive and tasteless slogans related to the April 19, 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City." The advertisements instructed prospective purchasers to call "Ken" and listed his home telephone number in Seattle, Washington. In fact, the advertisements were a cruel prank played by an anonymous poster on Kenneth Zeran.

As a result of the offensive online advertisements, Zeran received threatening and harassing telephone calls, including death threats. ¹⁸⁹ Zeran could not change his telephone number because he operated an athome business that relied on his telephone communications with his customers. ¹⁹⁰ Zeran contacted AOL to explain the problem and requested that AOL remove the advertisement. ¹⁹¹ An AOL representative assured Zeran the advertisement would be removed; however, the next day, an anonymous person posted a similarly offensive advertisement with additional items for sale, and again listed Zeran's home telephone number as the contact. ¹⁹² Zeran contacted local police and the Federal Bureau of Investigation (FBI) as the number of violent, threatening telephone calls escalated to a call every two minutes. ¹⁹³

Digital Millennium Copyright Act and the Communications Decency Act, 10 COMPUTER L. REV. & TECH. J. 101, 107 n.47 (2005) (citing federal cases and two state cases: Barrett v. Fonorow, 799 N.E.2d 916, 924 (Ill. App. Ct. 2003); Schneider v. Amazon.com, 31 P.3d 37, 43 (Wash. Ct. App. 2001)).

^{184.} Johnson v. Ården, 614 F.3d 785, 788, 791 (8th Cir. 2010) (quoting Almeida v. Amazon.com, Inc., 456 F.3d 1316, 1321 (11th Cir. 2006)).

^{185.} Zeran v. Am. Online, Inc., 129 F.3d 327 (4th Cir. 1997).

^{186.} Id. at 329.

^{187.} Id. at 329.

^{188.} Id.

^{189.} Id.

^{190.} Id.

^{191.} Id.

^{192.} Id.

^{193.} Id.

Zeran eventually filed a negligence claim in the United States District Court for the Western District of Oklahoma against America Online, Inc. (AOL), based on AOL's failure "to remove the defamatory posting promptly, to notify its subscribers of the message's false nature, and to effectively screen future defamatory material." Subsequently, the case was transferred to the Eastern District of Virginia. 195

Zeran alleged that AOL owed a duty to its subscribers "to notify [them] of the message's false nature, and to effectively screen future defamatory material."¹⁹⁶ In response, AOL raised § 230 of the CDA as a defense to Zeran's complaint and filed a motion for judgment on the pleadings.¹⁹⁷ AOL argued its § 230 defense immunized ISPs from liability for online postings by a third party.¹⁹⁸ The district court rejected Zeran's claim that AOL owed a duty to remove the defamatory postings promptly after Zeran had notified AOL of the offensive postings and the resulting violent threats.¹⁹⁹ The court granted AOL's motion for judgment on the pleadings, and Zeran appealed.²⁰⁰

The Court of Appeals for the Fourth Circuit considered the availability of § 230 as a defense to Zeran's claims.²⁰¹ In construing the statute, the court first determined that "[b]y its plain language, § 230 creates a federal immunity to any cause of action that would make service providers liable for information originating with a third-party user of the service."²⁰² The court also considered Congress's purposes and policies in enacting the statute.²⁰³ These included protecting the growth of an

^{194.} *Id.* at 330. Prior to filing his complaint against AOL, Zeran also filed a separate suit against the owner of KRXO, an Oklahoma City radio station. *Id.* at 329. A KRXO announcer received a copy of the offensive AOL posting and read it on air. *Id.* Zeran subsequently "was inundated with death threats and other violent calls from Oklahoma City residents." *Id. Zeran's* complaint against the owner of KRXO radio station sought damages for defamation, false light invasion of privacy, and intentional infliction of emotional distress. Zeran v. Diamond Broad. Inc., 19 F. Supp. 2d 1249, 1252–54 (W.D. Okla. 1997) (summary judgment granted in favor of radio station owner finding insufficient evidence of injury to reputation on the defamation claim, and denying claim that the radio station's negligence resulted in false light invasion of privacy and intentional infliction of emotional distress), *aff d*, 203 F.3d 714 (10th Cir. 2000).

^{195.} Zeran, 129 F.3d at 329.

^{196.} Id. at 330.

^{197.} Id. at 328-30.

^{198.} Id.

^{199.} Id. at 330.

^{200.} Id.

^{201.} Id.

^{202.} Id.

^{203.} Id. at 330-33.

Internet that fosters free speech and incentivizing self-regulation in the Internet industry with minimal government interference.²⁰⁴ The court also observed that Congress had enacted § 230 to respond to *Stratton Oakmont*, *Inc. v. Prodigy Services Co.*²⁰⁵

Zeran had argued on appeal that § 230 immunizes publishers, but does not protect distributors from liability for online content posted by a third party.²⁰⁶ Zeran contended that AOL functioned as a distributor of such content.207 The court noted the distinction between distributors and publishers, but concluded that distributors also may be classified as publishers.²⁰⁸ The court determined that Zeran placed "too much importance to the presence of the distinct notice element in distributor liability."209 The court stated that "[t]he simple fact of notice surely cannot transform one from an original publisher to a distributor in the eyes of the law."210 However, the court ultimately rejected Zeran's argument that § 230 immunity is not available to distributors.²¹¹ It found that when AOL receives notice of defamatory material, AOL's position is no different than that of a traditional publisher.²¹² The court relied on Prosser's hornbook in its discussion of whether distributors should be treated as original publishers for the proposition that those who are in the business of disseminating information intentionally are publishers, with or without notice of the information's content.²¹³ Despite Zeran's claim to the contrary—that § 230 does not shield service providers that have notice of the defamatory content—the court held that "[s]ection 230... plainly immunizes computer service providers like AOL from liability for information that originates with third parties."214 Under the Zeran analysis, when a distributor receives notice of the defamatory material, it "must decide whether to publish, edit, or withdraw the posting." Thus, in the court's view, the distributor becomes a publisher and is entitled to § 230 immunity.²¹⁶

```
204. Id.
```

^{205.} *Id.* at 331.

^{206.} Id. at 331-32.

^{207.} Id.

^{208.} *Id.* (quoting PROSSER AND KEETON ON TORTS, supra note 2, § 113).

^{209.} Id. at 332.

^{210.} Id.

^{211.} Id. at 334-35.

^{212.} Id.

^{213.} Id. at 332.

^{214.} Id. at 328.

^{215.} Id. at 332.

^{216.} Id. at 332–33.

A number of commentators have criticized the *Zeran* decision.²¹⁷ Some argued that, "[b]y defining distributors as publishers, the *Zeran* court effectively eliminated all defamation liability for third-party content posted on the Internet."²¹⁸ One scholar argues that the interest in protecting one's reputation is a dignitary interest protected by the Ninth Amendment that should not be diminished by "an expansive reading of the First Amendment."²¹⁹ Such a sweeping change in the law would require clear evidence of Congressional intent to preempt all state law defamation claims.²²⁰ However, § 230 and its legislative history are silent on the issue.²²¹

Other critics stress that § 230(c)(2)(A) grants immunity from civil liability only to ISPs that voluntarily engage, as Congress intended, in acts that "restrict access to or availability of material that the provider or user considers to be obscene, lewd, lascivious, filthy, excessively violent, harassing, or otherwise objectionable, whether or not such material is constitutionally protected."²²² Thus, by its own terms, § 230 protection appears limited to ISPs that engage in some manifest *action* to restrict, block, or screen access to objectionable speech.²²³ These critics note that the gist of Zeran's complaint was that AOL took no action at all to block the speech that plagued him.²²⁴ Consequently, § 230 immunity should not

^{217.} A string of article cites are provided in *Barrett v. Rosenthal*, 9 Cal. Rptr. 3d 142, 154 n.8 (Cal. Ct. App. 2004), reproduced *infra* note 345.

^{218.} Olivera Medenica, *The Immutable Tort of Cyber-Defamation*, J. INTERNET L., Jan. 2008, at 3, 5 (observing that § 230 immunity has been applied not only in defamation cases but also in negligence, unfair competition, breaches of contract and state securities laws, and cyberstalking) (citing Doe v. Am. Online Inc., 783 So. 2d 1010, 1013–1017 (Fla. 2001), *cert. denied*, 534 U.S. 891 (2001) (negligence); Perfect 10, Inc. v. CCBill, LLC, 340 F. Supp. 2d 1077 (C.D. Cal. 2004) (unfair competition); Morrison v. Am. Online, Inc., 153 F. Supp. 2d 930, 934 (N.D. Ind. 2001) (defamation)).

^{219.} Cristina Carmody Tilley, Rescuing Dignitary Torts from the Constitution, 78 BROOK. L. REV. 65, 121 (2012) (arguing that Ninth Amendment "dignitary rights are protected from the diminishment that necessarily follows from an expansive reading of the First Amendment").

^{220.} See, e.g., Theodor v. Superior Court, 501 P.2d 234, 237 (Cal. 1972) (stating that "it should not be presumed that the Legislature in the enactment of statutes intends to overthrow long-established principles of law unless such intention is made clearly to appear either by express declaration or by necessary implication" (internal quotation marks omitted)).

^{221.} See, e.g., Medenica, supra note 218, at 5.

^{222. § 230(}c)(2)(A); see also Barrett v. Rosenthal, 9 Cal. Rptr. 3d at 154 n.8 (providing a string of article cites, reproduced *infra* note 345).

^{223.} See, e.g., Medenica, supra note 218, at 5.

^{224.} See, e.g., Barrett, 9 Cal. Rptr. 3d at 154 n.8 (providing a string of article cites) (reproduced *infra* note 345).

have applied. By protecting AOL from liability, the *Zeran* court well exceeded the intended scope of § 230's immunity provision.²²⁵

Yet another scholar argues that court decisions construing § 230 merely exacerbate Congress' error in enacting the Act.²²⁶ For example, in Zeran, the district court "sanctioned the one-sided bargain that permitted intermediaries to learn of egregious defamation on their systems but take no action."227 In finding the ISP immune from liability, the district court's reasoning was unclear as to the significance of notice in the distinction between primary publishers and distributors.²²⁸ In affirming that § 230 confers immunity to the ISP, the Court of Appeals for the Fourth Circuit similarly misconstrued the importance of notice in its determination that "notice surely cannot transform one from an original publisher to a distributor in the eyes of the law."229 Both the Fourth Circuit and the district court failed to consider the principle that notice "does not transform a distributor into a publisher, but rather subjects a distributor to liability appropriate to its knowledge if it fails to respond to complaints."230 Further, the Fourth Circuit determined that "notice-based liability would discourage intermediary monitoring" and, potentially, could lead to selfcensorship, thereby limiting, rather than, encouraging free speech.²³¹

Another scholar argues that there is little support for the *Zeran* court's determination that there is no distinction between publishers and distributors, which results in blanket immunity under § 230 for both types of publishers.²³² Among other things, she recommends that the traditional

^{225.} See Medenica, supra note 218, at 9. One commentator observed that the overly broad interpretation of § 230 is ineffective and "it treats internet publishers differently than print publishers merely because they are on the internet, and it protects and immunizes a less deserving kind of speech[,]" namely non-political "[s]peech that targets private persons." Storm, supra note 98, at 421.

^{226.} Freiwald, *supra* note 1, at 637–42.

^{227.} *Id.* at 640.

^{228.} See id.

^{229.} Id. (quoting Zeran v. Am. Online, Inc., 129 F.3d 327, 332 (4th Cir. 1997)).

^{230.} *Id.* The author further noted that at least one court recognized its role in exacerbating the one-sided bias and stated, as it adopted the reasoning of *Zeran*, that through "some sort of tacit *quid pro quo* arrangement with the service provider community, Congress has conferred immunity from tort liability as an incentive to Internet service providers to self-police the Internet for obscenity and other offensive material, even where the self-policing is unsuccessful or not even attempted." *Id.* at 644 (quoting Blumenthal v. Drudge, 992 F. Supp. 44, 52 (D.D.C. 1998)).

^{231.} *Id.* at 640–41.

^{232.} Medenica, *supra* note 218, at 8 ("I find it hard to believe, however, that Congress meant this legislation to provide the all-encompassing immunity it has become.").

distinction between distributors and publishers should be revived.²³³ In reviewing the legislative history, including the purposes and objectives of Congress, one of which was to overrule the *Stratton Oakmont v. Prodigy* decision, the commentator concludes that the *Zeran* court broadened "the scope of the *Stratton* holding well beyond the intended limits of § 230."²³⁴ She further concludes that reviving distributor liability, which is based on knowledge or reason to know of the defamatory statement, is consistent with the Act's purpose to encourage self-monitoring.²³⁵

Other scholars agree with these criticisms of the *Zeran* decision.²³⁶ One scholar posits that *Zeran*'s overly broad interpretation of § 230 immunity has resulted in "the immunization of 'parties surely not within the intended scope of Section 230."²³⁷ He further states that *Zeran*'s rigid construction of § 230 "does not allow for situations where immunity should not be extended despite third-party authorship" and, contrary to the Act's purpose, eliminates any incentive to self-monitor.²³⁸ Still other *Zeran* critics similarly contend that the decision provides more extensive immunity from defamation liability than Congress intended, in light of both the legislative history and plain language of the statute.²³⁹

^{233.} Id. at 8-9.

^{234.} Id. at 9.

^{235.} Id.

^{236.} See, e.g., Ryan Gerdes, Scaling Back § 230 Immunity: Why The Communications Decency Act Should Take A Page From The Digital Millennium Copyright Act's Service Provider Immunity Playbook, 60 DRAKE L. REV. 653, 667 (2012).

^{237.} *Id.* at 667 (quoting Gregory M. Dickinson, Note, An Interpretive Framework for Narrower Immunity Under Section 230 of the Communications Decency Act, HARV. J.L. & PUB. POL'Y 863, 873 (2010)).

^{238.} *Id.* (quoting Gregory M. Dickinson, Note, An Interpretive Framework for Narrower Immunity Under Section 230 of the Communications Decency Act, HARV. J.L. & PUB. POL'Y 863, 873 (2010)).

^{239.} See, e.g., Jonathan A. Friedman & Francis M. Buono, Limiting Tort Liability for Online Third-Party Content Under Section 230 of the Communications Act, 52 FED. COMM. L.J. 647, 660–61 (2000) (citing Ian Ballon, Zeran v. AOL: Why the Fourth Circuit Is Wrong, J. INTERNET L., Mar. 1998, at 6; David R. Sheridan, Zeran v. AOL and the Effect of Section 230 of the Communications Decency Act upon Liability for Defamation on the Internet, 61 ALB. L. REV. 147 (1997); David Wiener, Negligent Publication of Statements Posted on Electronic Bulletin Boards: Is There Any Liability Left After Zeran?, 39 SANTA CLARA L. REV. 905 (1999); Steven M. Cordero, Comment, Damnum Absque Injuria: Zeran v. AOL and Cyberspace Defamation Law, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 775 (1999)).

Subsequently, numerous federal courts of appeal have reached the same conclusion as the court in Zeran.²⁴⁰ In 2000, the Court of Appeals for the Tenth Circuit considered whether AOL, as an ISP, had forfeited § 230 immunity when it provided access to allegedly inaccurate information regarding a company's publicly traded stock.²⁴¹ A manufacturer and designer of corporate finance computer software, Ben Ezra, Weinstein, and Company (Ben Ezra), sought damages and injunctive relief against AOL on theories of defamation and negligence.²⁴² Ben Ezra "alleged that on three separate occasions [AOL] published inaccurate information concerning [Ben Ezra's] stock price and share volume."243 Affirming the district court's grant of summary judgment for AOL, the Court of Appeals noted that Ben Ezra had failed to present any evidence that AOL, "in whole or in part," had created or developed the incorrect information.²⁴⁴ Citing with approval the Zeran decision, the court concurred with the Fourth Circuit's determination that § 230 proscribes ISP liability for online information content created by third parties.²⁴⁵ More recently, the Tenth Circuit reaffirmed its position.²⁴⁶

^{240.} See, e.g., Ben Ezra, Weinstein & Co. v. Am. Online, Inc., 206 F.3d 980, (10th Cir. 2000) (discussed infra); Green v. Am. Online Inc., 318 F.3d 465 (3rd Cir. 2003) (discussed infra); Johnson v. Arden, 614 F.3d 785 (8th Cir. 2010) (finding ISP immune under § 230; ISP was not an information content provider or developer, did not solicit defamatory statements, and thus was immune from liability for state tort claims for defamatory statements posted by third party); Universal Commc'n Sys., Inc. v. Lycos, Inc., 478 F.3d 413 (1st Cir. 2007) (finding Internet message board operator immune from liability for defamatory statements posted by pseudonymous posters; user created information content); Carafano v. Metrosplash, İnc., 339 F.3d 1119 (9th Cir. 2003) (finding Internet dating service immune from liability for defamation and other tort claims arising from anonymous posting creating fictitious profile with sexually suggestive statements, using the name, home address, and email address of actress; actress and minor son forced to reside in hotels and other places because of safety concerns); Batzel v. Smith, 333 F.3d 1018 (9th Cir. 2003); Zeran v. Am. Online, Inc., 129 F.3d 327 (4th Cir. 1997); Giordano v. Romeo, 76 So. 3d 1100, 1101-02 (Fla. Dist. Ct. App. 2011) (holding website operator absolutely immune). Numerous state courts also have followed the Zeran analysis on the CDA's grant of immunity to ISPs. See infra note 266.

^{241.} Ben Ezra, 206 F.3d at 983.

^{242.} Id.

^{243.} Id.

^{244.} *Id.* at 983, 985–86. The court observed that despite repeated questions during oral arguments concerning evidence in the record in support of Ben Ezra's claim that AOL developed or created the inaccurate information, counsel for Ben Ezra "could not identify any evidence." *Id.* at 985 n.5.

^{245.} *Id.* at 986, citing *Zeran*, 129 F.3d at 327, 330.

^{246.} See, e.g., Getachew v. Google, Inc., 491 F. App'x 923 (10th Cir. 2012) (holding search engine immune from plaintiffs federal and state law claims).

In 2003, the Courts of Appeals for the Third and Ninth Circuits also followed the Zeran court's holding.²⁴⁷ In Green v. AOL, a subscriber filed suit against AOL and two unidentified AOL subscribers alleging, among other things, defamation, negligence, and intentional infliction of emotional distress.²⁴⁸ The claim arose from AOL's failure to police the activities of third parties who, on one occasion, had launched malicious software that temporarily disabled the plaintiff's computer,²⁴⁹ and, on another occasion, had posted defamatory comments about the plaintiff in an AOL chat room.²⁵⁰ Quoting Zeran, the Third Circuit rejected the plaintiff's claim, holding that § 230 "bars 'lawsuits seeking to hold a service provider liable for its exercise of a publisher's traditional editorial functions—such as deciding whether to publish, withdraw, postpone, or alter content."²⁵¹ Also quoting Zeran, the Ninth Circuit barred a claim arising from the fraudulent and cruel posting of a profile in the plaintiff's name on an online dating service.²⁵²

The First,²⁵³ Sixth,²⁵⁴ Seventh,²⁵⁵ Eighth,²⁵⁶ and Eleventh Circuit Courts of Appeals²⁵⁷ have followed suit in rejecting claims against ISPs involving content posted by third parties. In *Universal Communications Systems, Inc. v. Lycos, Inc.*, the First Circuit opined that the broad immunity "effectuate[d] Congress's 'policy choice... not to deter harmful online speech through the... route of imposing tort liability on companies that serve as intermediaries for other parties' potentially injurious messages."²⁵⁸ The court disregarded the ISP's notice of the

^{247.} See Green v. AOL, 318 F.3d 465 (3rd Cir. 2003); Carafano v. Metrosplash, Inc., 339 F.3d 1119 (9th Cir. 2003).

^{248.} Green, 318 F.3d at 469.

^{249.} Id.

^{250.} Id.

^{251.} Id. at 471, citing Zeran v. Am. Online, Inc., 129 F.3d 327, 330 (4th Cir. 1997).

^{252.} Carafano, 339 F.3d at 1123–24. Although § 230 immunity does not protect online information content providers responsible for creating or developing information, in whole or in part, the Carafano court found the ISP immune from liability, despite "[t]he fact that some of the content was formulated in response to the [ISP's] questionnaire." *Id.* at 1124.

^{253.} Universal Commc'n Sys., Inc. v. Lycos, Inc., 478 F.3d 41 (1st Cir. 2007).

^{254.} Seaton v. Tripadvisor LLC, 728 F.3d 592, 599 n.8 (6th Cir. 2013).

^{255.} Chi. Lawyers' Comm. for Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666, 668 (7th Cir. 2008) (discussing liability under the Fair Housing Act).

^{256.} Johnson v. Arden, 614 F.3d 785, 787 (8th Cir. 2010). The plaintiffs alleged a conspiracy to post false and defamatory information about their business among the six named defendants, including the ISP. *Id.* at 788.

^{257.} Dowbenko v. Google Inc., 582 Fed. App'x 801, 805 (11th Cir. 2014).

^{258.} *Universal Commc'n Sys.*, 478 F.3d at 418 (quoting Zeran v. Am. Online, Inc., 129 F.3d 327, 330–31 (4th Cir. 1997)) (omissions in original).

misinformation posted in this case, concentrating instead on the plaintiff's failure to demonstrate that the ISP had in any way created or facilitated the misinformation through "[the ISP]'s registration process or ... link structure."259 The Seventh Circuit ruled in favor of the ISP Craiglist in an action asserting that a discriminatory online posting of a housing advertisement had violated the Fair Housing Act.²⁶⁰ Observing that Craigslist had neither directly nor indirectly fostered the discriminatory content, the court observed that one "cannot sue the messenger just because the message reveals a third party's plan to engage in unlawful discrimination."261 More recently, the Court of Appeals for the Eleventh Circuit affirmed the district court's determination that Google was immune to the plaintiff's defamation claim despite the plaintiff's contention that the defendant "manipulated its search results to prominently feature the article at issue. 262 Finally, in dicta, the Sixth Circuit absolved the travel ISP Tripadvisor of any liability under the CDA for including the plaintiff's hotel on its dirtiest hotel of the year list, ²⁶³ a list compiled from the results of comments posted in its survey of public users.264

Predictably, federal district courts have followed the lead of the majority of circuit courts of appeal.²⁶⁵ To date, the number of such cases exceeds thirty.²⁶⁶ The claims asserted range from defamation, invasion of

^{259.} Id. at 420.

^{260.} See Chi. Lawyers' Comm. for Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666, 672 (7th Cir. 2008).

^{261.} Id.

^{262.} *Dowbenko*, 582 Fed. App'x at 805.

^{263.} Seaton v. Tripadvisor LLC, 728 F.3d 592, 599 n.8 (6th Cir. 2013) ("We note that even if the complaint or proposed amended complaint had alleged that Trip Advisor's users' statements are defamatory, Tripadvisor cannot be held liable for its users' statements under the Communications Decency Act, 47 U.S.C. § 230(c)(1).").

^{264.} Id. at 594.

^{265.} See Michael L. Smith, Search Engine Liability for Autocomplete Defamation: Combating the Power of Suggestion, 2013 U. ILL. J.L. TECH. & POLY 313, 323.

^{266.} See Kimzey v. Yelp Inc., 21 F. Supp. 3d 1120 (W.D. Wash. 2014), appeal filed, No. 14-35489 (9th Cir. June 5, 2014); Dowbenko v. Google Inc., 991 F. Supp. 2d 1219 (S.D. Fla. 2013), aff'd, 582 F. App'x 801 (11th Cir. 2014); Stevo Design, Inc. v. SBR Mktg. Ltd., 968 F. Supp. 2d 1082 (D. Nev. 2013); Klayman v. Zuckerberg, 910 F. Supp. 2d 314 (D.D.C. 2012), aff'd, 753 F.3d 1354 (D.C. Cir. 2014); Directory Assistants, Inc. v. Supermedia, LLC, 884 F. Supp. 2d 446 (E.D. Va. 2012); Spreadbury v. Bitterroot Pub. Library, 856 F. Supp. 2d 1195 (D. Mont. 2012); Ascentive, LLC v. Opinion Corp., 842 F. Supp. 2d 450 (E.D.N.Y. 2011); Holomaxx Techs. v. Microsoft Corp., 783 F. Supp. 2d 1097 (N.D. Cal. 2011); Parisi v. Sinclair, 774 F. Supp. 2d 310 (D.D.C. 2011); Jones v. Dirty World Entm't Recordings, LLC, 766 F. Supp. 2d 828 (E.D. Ky. 2011); Rosetta Stone Ltd. v. Google Inc., 732 F. Supp. 2d 628 (E.D. Va. 2010), aff'd, 676 F.3d

privacy, and negligence, to unfair trade practices.²⁶⁷ Following the reasoning in *Zeran*, the district courts have held that ISPs are immune from liability for various state law claims. A number of state courts have also decided that § 230 immunity barred the claims alleged.²⁶⁸

144 (4th Cir. 2012); Jurin v. Google Inc., 695 F. Supp. 2d 1117 (E.D. Cal. 2010); Goddard v. Google, Inc., 640 F. Supp. 2d 1193 (N.D. Cal. 2009); Doe v. MySpace, Inc., 629 F. Supp. 2d 663 (E.D. Tex. 2009); Murawski v. Pataki, 514 F. Supp. 2d 577 (S.D.N.Y. 2007); Atl. Recording Corp. v. Project Playlist, Inc., 603 F. Supp. 2d 690 (S.D.N.Y. 2009); Nemet Chevrolet, Ltd. v. Consumeraffairs.com, Inc., 564 F. Supp. 2d 544 (E.D. Va. 2008), aff'd, 591 F.3d 250 (4th Cir. 2009); Almeida v. Amazon.Com, Inc., No. 04-20004-CIV, 2004 WL 4910036 (S.D. Fla. July 30, 2004), aff d, 456 F.3d 1316 (11th Cir. 2006); Doe v. Friendfinder Network, Inc., 540 F. Supp. 2d 288 (D.N.H. 2008); Langdon v. Google, Inc., 474 F. Supp. 2d 622 (D. Del. 2007); Prickett v. infoUSA, Inc., 561 F. Supp. 2d 646 (E.D. Tex. 2006); Dimeo v. Max, 433 F. Supp. 2d 523 (E.D. Pa. 2006), aff'd, 248 F. App'x 280 (3d Cir. 2007); Beyond Sys., Inc. v. Keynetics, Inc., 422 F. Supp. 2d 523 (D. Md. 2006); Universal Commc'n Sys., Inc. v. Lycos, Inc., No. CIV.A.05-11172-REK, 2005 WL 5250032 (D. Mass. Dec. 21, 2005), affd, 478 F.3d 413 (1st Cir. 2007); Corbis Corp. v. Amazon.com, Inc., 351 F. Supp. 2d 1090 (W.D. Wash. 2004); Perfect 10, Inc. v. CCBill, LLC, 340 F. Supp. 2d 1077 (C.D. Cal. 2004) aff'd in part, rev'd in part and remanded, 481 F.3d 751 (9th Cir. 2007), opinion amended and superseded on denial of reh'g, 488 F.3d 1102 (9th Cir. 2007); Optinrealbig.com, LLC v. IronPort Sys., Inc., 323 F. Supp. 2d 1037 (N.D. Cal. 2004); Novak v. Overture Servs., Inc., 309 F. Supp. 2d 446 (E.D.N.Y. 2004); Noah v. AOL Time Warner, Inc., 261 F. Supp. 2d 532 (E.D. Va. 2003), affd, No. 03-1770, 2004 WL 602711 (4th Cir. Mar. 24, 2004); Carafano v. Metrosplash.com, Inc., 207 F. Supp. 2d 1055 (C.D. Cal. 2002), aff'd on other grounds, 339 F.3d 1119 (9th Cir. 2003), holding modified by Fair Hous. Council of San Fernando Valley v. Roommates. Com, LLC, 521 F.3d 1157 (9th Cir. 2008); PatentWizard, Inc. v. Kinko's, Inc., 163 F. Supp. 2d 1069 (D.S.D. 2001); Batzel v. Smith, No. 00CV9590, 2001 WL 1658210 (C.D. Ĉal. Mar. 21, 2001), aff'd, 333 F.3d 1018 (9th Cir. 2003); Does v. Franco Prods., No. 99 C 7885, 2000 WL 816779 (N.D. Ill. June 22, 2000), aff d sub nom. Doe v. GTE Corp., 347 F.3d 655 (7th Cir. 2003); Ben Ezra, Weinstein & Co. v. Am. Online, Inc., No. 97-485 LH/LFG, 1999 WL 727402 (D.N.M. Mar. 1, 1999), aff'd, 206 F.3d 980 (10th Cir. 2000); Blumenthal v. Drudge, 992 F. Supp. 44 (D.D.C. 1998).

267. See, for example, state law cases cited *supra*, note 266. *See also* Miller v. Fed. Exp. Corp., No. 49A02-1307-PL-619, 2014 WL 1318698 (Ind. Ct. App. Apr. 3, 2014 (ISP immune to defamation claims); Vazquez v. Buhl, 90 A.3d 331, 333 (Conn. App. Ct. 2014) (ISP immune to defamation claim); Internet Brands, Inc. v. Jape, 760 S.E.2d 1 (Ga. App. 2014) (CDA barred defamation claim against website operator); Hill v. StubHub, Inc., 727 S.E.2d 550, 561 (N.C. App. 2012) (§ 230 immunity applies to bar unfair trade practices claims against online marketer); GoDaddy.com, LLC v. Toups, 429 S.W.3d 752, 759 (Tex. App. 2014) (common law negligence and intentional infliction of emotional distress claims barred by § 230).

268. See, e.g., Hare v. Richie, Civ. Action No. ELH-11-3488, 2012 WL 3773116, at *17–18 (D. Md. 2012).

"Nevertheless, § 230(c)(1) 'was not meant to create a lawless no-man's-land on the Internet." 269

2. CDA Immunity Defense Does Not Apply

In 2008, the Ninth Circuit departed from the Zeran line of cases, holding that § 230 does not necessarily protect an ISP from liability for postings by third parties. Fair Housing Council of San Fernando Valley v. LLCconcerned an Internet website Roommates.com,Roommates.com ("Roommates"), which matched owners of spare rooms to people seeking accommodation.²⁷⁰ To participate in the roommate matching service, subscribers created a profile by answering a series of questions.²⁷¹ Subscribers provided, among other information, their name, email address, location, and additional comments.²⁷² Roommates also required subscribers to state their sex, sexual orientation, and whether children would be living with them.²⁷³ Roommates prepared a subscriber profile from this information that included the subscriber's description, preferences, and a pseudonym.²⁷⁴ The Fair Housing Councils of the San Fernando Valley and San Diego ("Councils") filed suit against Roommates in federal court, alleging, among other things, that Roommates's service violated federal fair housing laws.²⁷⁵ The federal district court held that § 230 immunized Roommates from liability.²⁷⁶ Councils appealed.²⁷⁷

On appeal, the Court of Appeals for the Ninth Circuit observed that Congress had enacted § 230 in response to *Stratton Oakmont, Inc. v. Prodigy Services Co.*²⁷⁸ Reviewing the CDA's history, the Court opined that Congress had sought to protect ISPs from liability for removing, blocking, screening, and restricting access to obscene and otherwise

^{269.} *Hare*, 2012 WL 3773116, at *16 (quoting Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157, 1164 (9th Cir. 2008)).

^{270.} Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157, 1161 (9th Cir. 2008)

^{271.} *Id*.

^{272.} Id.

^{273.} Id.

^{274.} Id. at 1161-62.

^{275.} *Id.* at 1162, 1162 n.4 (quoting Fair Housing Act, 42 U.S.C. § 3604(c) (2012) and CAL. GOV. CODE § 12955) (noting that the "Fair Housing Act prohibits certain forms of discrimination on the basis of 'race, color, religion, sex, familial status, or national origin" and observing that the "California fair housing law prohibits discrimination on the basis of 'sexual orientation, marital status, ... ancestry, ... source of income, or disability").

^{276.} Id. at 1162.

^{277.} Id.

^{278.} Id. at 1163.

objectionable material to further its policy of protecting children.²⁷⁹ The court noted the caption of the immunity provision in § 230(c): Protection from "Good Samaritan blocking and screening of offensive material."²⁸⁰ Citing with approval a Seventh Circuit decision,²⁸¹ the court held that "the substance of § 230(c) can and should be interpreted consistent with its caption."²⁸² The court stated, "Congress sought to immunize the *removal* of user-generated content, not *creation* of content."²⁸³ In fact, the statute expressly provides for liability claims against information content providers responsible for creating or developing the information content in whole or in part.²⁸⁴

The court distinguished Roommates's online activity from that of a passive conduit. It noted Roommates's business practices solicited unlawful information by asking unlawful questions. Roommates also bore partial responsibility for creating the subscriber profile.²⁸⁵ Roommates had not merely created a platform that third parties had abused. Instead, the alleged illegality of the site was linked directly to Roommates's active participation in developing the questions and its search mechanism.²⁸⁶ The court noted that "[p]roviding immunity every time a website uses data initially obtained from third parties would eviscerate the exception to § 230 for 'develop[ing]' unlawful content 'in whole or in part."²⁸⁷

In Federal Trade Commission v. Accusearch Inc., the Court of Appeals for the Tenth Circuit also denied § 230 immunity to an ISP because it was an information content provider.²⁸⁸ The ISP, Accusearch, used an Internet site to sell personal information, including telephone records.²⁸⁹ The Federal Trade Commission (FTC) filed suit, alleging Accusearch's sale of the telephone records "constituted an unfair practice in violation of § 5(a) of the Federal Trade Commission Act (FTCA)."²⁹⁰ The FTC sought the

^{279.} Id. (quoting H.R. REP. NO. 104-458, at 194 (1996) (Conf. Rep.), reprinted in 1996 U.S.C.C.A.N. 10).

^{280.} Id. at 1163-64.

^{281.} Chi. Lawyers' Comm. for Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666, 669 (7th Cir. 2008) (quoting Doe v. GTE Corp., 347 F.3d 655, 659–60 (7th Cir. 2003)).

^{282.} Roommates.com, 521 F.3d at 1164 (citing Chi. Lawyers', 519 F.3d at 666).

^{283.} Id. at 1163 (emphasis in original).

^{284.} *Id.* (citing § 230(f)(3)).

^{285.} *Id.* at 1166–67.

^{286.} *Id.* at 1172.

^{287.} Id. at 1171.

^{288.} FTC v. Accusearch, 570 F.3d 1187, 1197-1200 (10th Cir. 2009).

^{289.} Id. at 1190.

^{290.} Id.

cessation of "Accusearch's sale of confidential information and to require it to disgorge its profits" from prior sales."²⁹¹

Appealing the district court's grant of summary judgment in favor of the FTC, Accusearch claimed § 230 immunity.²⁹² In response, the Tenth Circuit noted that § 230's immunity defense only could be granted by showing the defendant is a "provider or user of an interactive computer service," had acted as a "publisher or speaker," and had received the relevant information from another provider.²⁹³ The court found Accusearch was, indeed, a content provider because "[b]y paying its researchers to acquire telephone records, knowing that the confidentiality of the records was protected by the law, it contributed mightily to the unlawful conduct of its researchers."²⁹⁴ Thus, the court rejected Accusearch's contention that its activity was neutral, holding instead that Accusearch acted with intent to generate unlawful content.²⁹⁵ Consequently, CDA immunity did not apply.²⁹⁶

According to the Court of Appeals for the Ninth Circuit, § 230 bars claims treating intermediaries as publishers or speakers of third-party content.²⁹⁷ When, however, a plaintiff's claim is based on promissory estoppel and not premised on treating the intermediary as a speaker or publisher, § 230 does not bar the claim.²⁹⁸ In reaching this decision, the court declined to resolve the dispute arising from the *Zeran* court's conclusion that "distributor liability is merely a subset of publisher liability for purposes of defamation law."²⁹⁹ The defendant sought immunity based solely on § 230(c)(1).³⁰⁰

In its reading of the statutory text, the court concluded that "it appears clear that neither this subsection nor any other declares a general immunity from liability deriving from third-party content[.]"³⁰¹ Quoting a decision from the Court of Appeals for the Seventh Circuit, the court observed that "[s]ubsection (c)(1) does not mention immunity or any

^{291.} Id.

^{292.} Id.

^{293.} Id. at 1196.

^{294.} Id. at 1200.

^{295.} *Id.* at 1200–01.

^{296.} Id. at 1201.

^{297.} Barnes v. Yahoo!, Inc., 570 F.3d 1096, 1107-09 (9th Cir. 2009).

^{298.} Id. at 1109.

^{299.} *Id.* at 1104. The court commented that the various parts of § 230 must be read as a whole, which ultimately leads to the conclusion that plaintiff's state law negligent undertaking claim is barred. *Id.* at 1105, 1109.

^{300.} Id. at 1100.

^{301.} *Id*.

synonym."³⁰² In fact, the Seventh Circuit "questioned whether § 230(c)(1) creates any form of 'immunity."³⁰³ Moreover, the Seventh Circuit inquired, "[w]hy should a law designed to eliminate ISPs' liability to the creators of offensive material end up defeating claims by the victims of tortious or criminal conduct?"³⁰⁴

As noted, the majority of federal district and state courts have followed the Fourth Circuit's opinion in Zeran to hold ISPs immune from liability for third-party content. However, Barrett v. Rosenthal, a California Court of Appeal decision, offered a well-reasoned opinion to the contrary.³⁰⁵ Barrett involved an appeal from an order striking a complaint for "libel, libel per se and conspiracy as a strategic lawsuit against public participation" under California's anti-Strategic Lawsuits Against Public Participation (SLAPP) statute.³⁰⁶ Barrett concerned two physicians who were nationally recognized consumer advocates, each of whom maintained an Internet website.³⁰⁷ They had developed these sites to provide, among other things, consumer health guides and to expose "health frauds and quackery."308 The physicians alleged the defendant "posted 10,900 messages to newsgroups—an average of 15 per calendar day."309 During a two-year period, "one or both of them were mentioned in more than 200 of these messages, all of which were intended to injure their reputations."310

The physicians filed a complaint alleging libel per se, libel, and conspiracy against the authors of the posts, which included an alternative

^{302.} *Id.* (quoting Chi. Lawyers' Comm. for Civil Rights Under Law, Inc. v. Craigslist, Inc., 519 F.3d 666, 669 (7th Cir. 2008)) (internal quotation marks omitted).

^{303.} Chi. Lawyers', 519 F.3d at 669 (citing Doe v. GTĒ Corp., 347 F.3d 655 (7th Cir. 2003)).

^{304.} Id. at 670; Doe v. GTE Corp., 347 F.3d at 660.

^{305.} Barrett v. Rosenthal, 9 Cal. Rptr. 3d 142 (Cal. Ct. App. Feb. 3, 2004), as modified, review granted and opinion superseded, 87 P.3d 797 (Cal. 2004), rev'd, 146 P.3d 510 (Cal. 2006).

^{306.} Barrett, 9 Cal. Rptr. 3d at 146. A court must engage in a two-step process to determine whether the lawsuit is a SLAPP. Id. at 147. The first step is to assess "whether to demonstrate that the act or acts of which the plaintiff complains were taken 'in furtherance of the [defendant]'s right of petition or free speech under the United States of California Constitution in connection with a public issue." Id. (citing Equilon Enterprises v. Consumer Cause, Inc., 29 Cal. 4th 53, 67 (2002)). If this threshold requirement is satisfied, the second step is for the plaintiff to show a probability of prevailing on the merits of his or her claim. Id.

^{307.} *Id.* at 144. The physicians involved were Stephen J. Barrett, M.D., and Terry Polevoy, M.D. *Id.* at 143.

^{308.} *Id.*

^{309.} Id. at 145.

^{310.} Id.

medicine advocate and director of the Humantics Foundation for Women,³¹¹ as well as several additional defendants.³¹² The complaint alleged that the defendants had posted repeated messages defaming them on various online sites, including "two Usenet 'newsgroups,' which focused on 'alternative medicine."³¹³ The trial court struck the complaint as a SLAPP.³¹⁴

Although the trial court found that the online statements falsely accused the physician of engaging in criminal conduct and inappropriately sought to initiate professional disciplinary proceedings or a criminal investigation against the physician, the court provided three reasons for its conclusion that the physician was unlikely to prevail on his claim.³¹⁵ The first reason was that § 230 shielded the defendant from liability because she merely republished the online statements and did not create them.³¹⁶ Second, plaintiffs alleging public-figure defamation have the burden of proving "actual malice," which the physician failed to meet.³¹⁷ Third, the trial court found that the plaintiffs "could not establish that they suffered monetary damage of any kind."³¹⁸

On appeal, the California Court of Appeal stated that the Internet is "the most participatory form of mass speech yet developed" and agreed with the trial court's determination that Internet communications are in a public forum subject to SLAPP.³¹⁹ However, the court of appeal disagreed that one of the physicians would be unlikely to prevail on their defamation claims.³²⁰ The court set aside the trial court's determination on the issues of the § 230 immunity defense, actual malice, and damages, concluding that one of the physicians "was not required to plead special damages, as the republished statement was libelous per se."³²¹ The court distinguished the liability rules that apply to primary publishers, distributors, and

^{311.} Ilena Rosenthal was one of several defendants. Id. at 143.

^{312.} *Id.* at 144. The additional defendants were not involved in the appeal. *Id.* at 145 n.3. Additionally, the physicians' lawyer, a named plaintiff in the case, filed a motion to voluntarily dismiss Rosenthal. *Id.* at 145.

^{313.} Id. at 144.

^{314.} *Id.* at 143–44.

^{315.} Id. at 142, 150.

^{316.} Id. at 142.

^{317.} Id. at 150.

^{318.} Id.

^{319.} Id. at 149.

^{320.} Id. at 149-50.

^{321.} *Id*.

conduits.³²² The court also briefly examined the legislative history of § 230.³²³

The court of appeal next considered *Zeran*, the leading case construing § 230.³²⁴ The court observed that "[t]he most consequential aspect of the Fourth Circuit's opinion in *Zeran* is its conclusion that § 230 immunized providers and users of interactive computer services from liability not only as *primary publishers* but also as *distributors*."³²⁵ To determine the status of the ISP, *Zeran* focused "solely on section 577 of the Restatement (Second) of Torts," which states that "[p]ublication of defamatory matter is its communication intentionally or by a negligent act to one other than the person defamed."³²⁶

The *Barrett* court rejected *Zeran*'s broad immunity conclusion.³²⁷ It held that *Zeran* completely "ignored the complementary common law rule described in section 581(1) of the Restatement, which is that 'one who... transmits defamatory matter published by a third person is subject to liability *if*, but only *if*, he knows or has reason to know of its defamatory character."³²⁸ Under *Zeran*, ISPs enjoy complete § 230 immunity, "despite the fact that the provider or user knowingly distributes defamatory materials, even if the provider or user profits from such conduct."³²⁹ The court of appeal commented that *Zeran*'s expansive construction and application of § 230 has caused one trial court judge to have "gagged on the unfairness that resulted from application of such a broad immunity."³³⁰

The court reasoned that *Zeran* was based upon two critical, but faulty, determinations.³³¹ The first is "that the word 'publisher' in § 230(c)(1) refers not just to primary or original publishers of a third-party defamation but also to distributors."³³² The second is "that confining the immunity to

^{322.} Id.

^{323.} Id. at 151-53.

^{324.} Id. at 152.

^{325.} *Id.* at 153 (emphasis in original).

^{326.} Id.; Restatement (Second) of Torts § 577 (1974).

^{327.} Id. at 155.

^{328.} Id.

^{329.} *Id.* (citing Blumenthal v. Drudge, 992 F. Supp. 44 (D.D.C. 1998)). The court of appeals in *Barrett* stated that "[s]ince the decision in *Zeran*, no court has subjected a provider or user of an interactive computer service to notice liability for disseminating third-party defamatory statements over the Internet, though a three-judge minority of the Florida Supreme Court would have done so." *Id.* at 153.

^{330.} *Id.* at 153 (citing Doe v. AOL, 783 So. 2d 1010, 1018 (Fla. 2001) (Lewis, J., dissenting)).

^{331.} *Id*.

^{332.} Id.

primary publishers would not accomplish the policies section 230 was designed to effectuate."³³³ The court of appeal found no justifiable basis to apply broad immunity under either determination.³³⁴

The court of appeal likewise reasoned that "[1]egislative use of the legally uncertain word 'publisher' is simply too flimsy a basis upon which to grant providers and users of interactive computer services what amounts to an 'absolute protection' requiring the 'total sacrifice of the competing value served by the law of defamation' and the subordination of 'a concept at the root of any decent system of ordered liberty."³³⁵ After all, both courts and scholars distinguish between publishers and distributors, and many "eminent law professors writing scholarly articles in learned journals commonly use the word 'publisher' to refer only to a primary publisher, even when their subject is the transmission of speech in cyberspace."³³⁶ It is a well-established principle of law "that statutes which invade the common law... are to be read with a presumption favoring the retention of long-established and familiar principles, except when a statutory purpose to the contrary is evident."³³⁷

Ultimately, the court held that the trial court erred in its determination that § 230 provided absolute immunity to the plaintiffs' defamation claims.³³⁸ The court found further that "the statute cannot be deemed to abrogate the common law principle that one who republishes defamatory matter originated by a third person is subject to liability *if he or she knows or has reason to know of its defamatory character*."³³⁹ Therefore, § 230 immunity does not apply to distributors, and did not bar the remaining plaintiff's defamation claim.³⁴⁰

Despite the sound and thorough analysis by the court of appeal, the California Supreme Court adopted *Zeran*'s rationale, holding that Congress did not intend to create an exception from § 230 immunity for distributors.³⁴¹ Although the Supreme Court stated that it shared the

^{333.} *Id*.

^{334.} Id.

^{335.} Id. at 157 (citing Gertz v. Robert Welch, Inc., 418 U.S. 323, 341 (1974)).

^{336.} *Id.* (citing David R. Sheridan, Zeran v. AOL and the Effect of Section 230 of the Communications Decency Act Upon Liability for Defamation on the Internet, 61 ALB. L. REV. 147, 169–170 n.143 (1997); *see*, *e.g.*, Cass R. Sunstein, The First Amendment in Cyberspace, 104 YALE L.J. 1757, 1801 (1995)).

^{337.} Barrett, 9 Cal. Rptr. 3d at 155.

^{338.} *Id.* at 155–56.

^{339.} Id. at 152 (citing RESTATEMENT (SECOND) OF TORTS § 581(1) (1974)) (emphasis in original).

^{340.} *Id.* at 167.

^{341.} Barrett v. Rosenthal, 146 P.3d 510, 514 (Cal. 2006).

concerns of those who have expressed reservations about the *Zeran* court's broad interpretation of § 230 immunity, as well as the "disturbing implications" such "blanket immunity" provides, the court nonetheless concluded that ISPs are exempt from liability for republication of defamatory statements.³⁴² Accordingly, the California Supreme Court reversed the appellate decision below.³⁴³

As the *Barrett* court observed, numerous scholars have been critical of the *Zeran* court's flawed analysis.³⁴⁴ In *Barrett*, the court cited with approval dozens of scholarly articles offering a critical analysis of *Zeran*.³⁴⁵ Nearly a decade later, the number of articles critical of *Zeran* has substantially increased.³⁴⁶ These scholars provide a well-reasoned basis for

346. See, e.g., Christina Carmody Tilley, supra note 219, at 121 (arguing that Ninth Amendment "dignitary rights are protected from the diminishment that necessarily follows from an expansive reading of the First Amendment"); Catherine R. Gellis, 2013 State of the Law Regarding Internet Intermediary Liability for User-Generated Content, 69 BUS. LAW. 209 (Nov. 2013); Laura A. Heymann, The Law of Reputation and the Interest

^{342.} Id. at 529.

^{343.} *Id*.

^{344.} Barrett, 9 Cal. Rptr. 3d at 154.

^{345.} Id. at 154 n.8 provides the following extensive list of citations: Sewali K. Patel, Immunizing Internet Service Providers From Third Party Internet Defamation Claims: How Far Should Courts Go?, 55 VAND. L. REV. 647, 679-689 (2002); Susan Freiwald, Comparative Institutional Analysis in Cyberspace: The Case of Intermediary Liability for Defamation, 14 HARV. J.L. & TECH. 569, 594-596 (2001); Brian C. McManus, Rethinking Defamation Liability for Internet Service Providers, 35 SUFFOLK U. L. REV. 647 (2001); Mitchell P. Goldstein, Service Provider Liability for Acts Committed by Users: What You Don't Know Can Hurt You, 18 J. MARSHALL J. COMPUTER & INFO. L. 591, 634-635 (2000); Michael H. Spencer, Defamatory E-mail and Employer Liability: Why Razing Zeran v. America Online is a Good Thing, 6 RICH. J.L. & TECH. 25 (2000); Steven J. Davidson et al., The Law of Cyberspace Liability of Information Service Providers, J. INTERNET L., Dec. 1999, at 1; Steven M. Cordero, Damnum Absque Injuria: Zeran v. AOL and Cyberspace Defamation Law, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 775, 778 (1999); Annemarie Pantazis, Zeran v. America Online, Inc.. Insulating Internet Service Providers From Defamation Liability, 34 WAKE FOREST L. REV. 531, 547–550 (1999); Michelle J. Kane, Blumenthal v. Drudge, 14 BERKELEY TECH. L.J. 437, 452-453 (1999); David Wiener, Negligent Publication of Statements Posted on Electronic Bulletin Boards: Is There Any Liability Left After Zeran?, 39 SANTA CLARA L. REV. 905 (1999); Ian C. Ballon, Zeran v. AOL: Why the Fourth Circuit is Wrong, J. INTERNET L., Mar. 1998, at 6; David R. Sheridan, Zeran v. AOL and the Effect of Section 230 of the Communications Decency Act Upon Liability for Defamation on the Internet, 61 ALB. L. REV. 147, 169-170 (1997); Robert T. Langdon, The Communications Decency Act § 230: Makes Sense? Or Nonsense?—A Private Person's Inability to Recover if Defamed in Cyberspace, 73 ST. JOHN'S L. REV. 829, 852-853 (1999). The following two sources listed in Barrett v. Rosenthal take contrasting positions: Matthew Schruers, The History and Economics of ISP liability for Third Party Content, 88 VA. L. REV. 205 (2002); Jonathan A. Friedman & Francis M. Buono, Limiting Tort Liability for Online Third-Party Content Under Section 230 of the Communications Act, 52 FED. COMM. L.J. 647 (2000).

Congress to revisit the injustice created by the *Zeran* court's overly broad construction of § 230. While revisiting the issue, Congress also should consider that its "expressed desire to overrule *Stratton Oakmont*, the absence of any apparent intent to disturb the effect of the decision in *Cubby*, and the statements of Representative Cox, the author of § 230, are consistent with exclusion of distributor liability from statutory immunity."³⁴⁷ Several district courts already have followed suit, concluding that § 230 immunity does not apply for various reasons, including that the ISP was not a publisher or that the ISP was a content provider. ³⁴⁸

IV. PROPOSED CHANGES

A. DIGITAL MILLENNIAL COPYRIGHT ACT (DMCA)

When Congress enacted the CDA, it was concerned with the ease of access to a nearly limitless electronic universe of information and therefore sought to restrict online access to pornography and other objectionable materials.³⁴⁹ Section 230(e)(2) of the CDA, however, provides that "[n]othing in this section shall be construed to limit or expand any law pertaining to intellectual property."³⁵⁰ Ease of online user access and duplication of copyright-protected works creates potential liability for ISPs. In dealing with claims of online infringement of intellectual property, the ISPs find themselves in the same situation as when allegations of online defamation arise. As in defamation cases, the readily identified ISPs, rather than the anonymous or pseudonymous offending users, are more likely to be sued for copyright infringement.³⁵¹ For that reason, Congress' response to the problem of online infringement in the DMCA provides guidance in how online defamation also might be handled.

of the Audience, 52 B.C. L. REV. 1341 (2011); Felix T. Wu, Collateral Censorship and the Limits of Intermediary Immunity, 87 NOTRE DAME L. REV. 293 (2011) (acknowledging the chilling effect of collateral censorship and arguing for limits on intermediary liability when it acts as an original speaker or the type of liability specifically targets intermediaries).

^{347.} Barrett, 9 Cal. Rptr. 3d at 160.

^{348.} See, e.g., Fraley v. Facebook, 830 F. Supp. 2d 785, 801 (N.D. Cal. 2011); Alvi Armani Medical, Inc. v. Hennessey, 629 F. Supp. 2d 1302, 1306 (S.D. Fla. 2008); 800-JR Cigar, Inc. v. GoTo.com Inc., 437 F. Supp. 2d 273, 295 (D.N.J. 2006).

^{349.} See, e.g., 141 CONG. REC. 15503 (1995)

^{350. 47} U.S.C. § 230(e)(2) (2012).

^{351.} Stephen A. Hess, *Minesweeping the Digital Millennium Copyright Act "Safe" Harbors*, COLO. LAWYER, Oct. 2004, at 95 (observing that ISPs are not only more accessible, but also likely more solvent "than the primary infringers").

In 1998 Congress enacted the DMCA in part to protect copyrighted "works susceptible to being stored and disseminated through the Internet." The DMCA's primary goal, protecting authors' private interests in their creative works, contrasts sharply with that of the Copyright Act, which protects the public's interests in use and access to copyrighted works. 353

The DMCA defines a "service provider" in two different ways.³⁵⁴ Subparagraph (A) defines a service provider as "an entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material as sent or received."³⁵⁵ The definition of a service provider in subparagraph (B) is broader. It states that a service provider "means a provider of online services or network access, or the operator of facilities therefor, and includes an entity as defined in subparagraph (A)."³⁵⁶

Congress established four limitations in the DMCA to address concerns about potential financial consequences of service provider liability on the Internet.³⁵⁷ These limitations are known as "safe harbors."³⁵⁸ The

^{352.} Id. Additionally, "Congress enacted the DMCA in 1998 in order to implement the World Intellectual Property Organization Copyright Treaty and Performances and Phonograms Treaty ('WIPO')." Ross Alexander, Legislative Reform of the Copyright Act's Fair Use Clause: Failure to Vault Conflict and Express Preemption of the Copyright Act Requires Legislative Attention, 59 SYRACUSE L. REV. 331, 355 (2008). Under WIPO, contracting nations are required "to provide legal protection and remedies 'against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law." Id. (citing World Intellectual Property Organization Copyright Treaty and Performances and Phonograms Treaty, art. 11, Dec. 20, 1996, S. Treaty Doc. No. 105-17, 2186 U.N.T.S. 152).

^{353.} Alexander, *supra* note 352, at 355.

^{354. 17} U.S.C. § 512(k)(1) (2012); see also Richard Belsky, The Digital Millenium Copyright Act And You: A Framework For A Functional Future, 14 U. BALT. INTELL. PROP. L.J. 1, 46 (2005) (arguing that judicial review of DMCA claims "utilize the functionality framework as a limiting and coordinating doctrine under which undeserving DMCA claims may be filtered out . . . to protect consumers and aftermarket industrialists alike from the potential evils of DMCA overuse); see also Maura L. Rees, Ensuring Qualification For DMCA Section 512(C), in MANAGING INTELLECTUAL PROPERTY ISSUES IN CYBERSPACE 91, 98 (2012), available at 2012 WL 2244968 (providing brief summary of DMCA with recommendations on advising clients concerning the Act).

^{355. § 512(}k)(1)(A).

^{356. § 512(}k)(1)(B); see also Hess, supra note 351, at 95–96.

^{357.} Hess, *supra* note 351, at 95.

safe harbor provisions in subsections (a) through (d) provide protection from liability for the online activities of third parties, so long as the statutory requirements of the Act are met.³⁵⁹ The provisions state that "[w]hether a service provider qualifies for the limitation on liability in any one of the [safe harbor] subsections [is] based solely on the criteria in that subsection, and shall not affect a determination of whether that service provider qualifies for the limitations on liability under any other such subsection."³⁶⁰

The first safe harbor offers protection from liability arising from "transitory digital network communications." The statute provides immunity to an ISP

for infringement of copyright by reason of the provider's transmitting, routing, or providing connections for, material through a system or network controlled or operated by or for the service provider, or by reason of the intermediate and transient storage of that material in the course of such transmitting, routing, or providing connections.³⁶²

There are several requirements for this safe harbor. The ISP must not have initiated or directed the transmission of the infringed material. Nor can the ISP select the material or recipients of the material, except in an automated response at the request of another individual.³⁶³ The first safe harbor also prohibits an ISP from maintaining a copy of the material on its system or network "in a manner ordinarily accessible" to one other than the intended recipients.³⁶⁴ Moreover, the ISP can maintain the copy for no "longer period than is reasonably necessary for the transmission, routing, or provision of connections."³⁶⁵ Finally, the ISP shall not modify the content of the materials.³⁶⁶

^{358.} *Id.* The limitations are set forth in Title II of the DMCA, which is the Online Copyright Infringement Liability Limitation Act (OCILLA), amending the Copyright Act, at 17 U.S.C. § 512.

^{359. § 512(}n). Subsection (n) governs construction of the limitations and provides that the limitation in subsection (a) through (d) offer separate and different limitations that are available to service providers.

^{360. § 512(}n).

^{361. § 512(}a).

^{362.} *Id*.

^{363. § 512(}a)(1)–(3).

^{364. § 512(}a)(4).

^{365.} *Id.*

^{366. § 512(}a)(5).

The second safe harbor concerns protection from liability for system caching.³⁶⁷ It does not, however, immunize against infringing materials passing through the site.³⁶⁸ Many of the provisions governing caching are very similar those in the first safe harbor, with a few notable additions.³⁶⁹ For example, in addition to the different definition for service provider, subsection (b) requires a service provider to comply with its own conditions concerning access to cached materials.³⁷⁰ Importantly, subsection (b) includes a take-down notice provision. This protects the ISP from liability for providing access to infringing materials if "the service provider responds expeditiously to remove, or disable access to, the material that is claimed to be infringing upon notification of claimed infringement."371 The take-down notice provision requires the removal of the infringing material from the originating site and confirmation of such removal by the party giving the notification.³⁷² Service providers that take down the infringing materials are immune to liability if they meet the other conditions in the system caching provision.³⁷³

The DMCA's third safe harbor relates to "information residing on systems or networks at direction of users." Congress recognized the increased potential for infringement liability accompanying website users storing and providing public access to uploaded information on service providers' sites. Accordingly, "the DMCA imposes obligations on the service providers to eliminate access to infringing materials of which they are given proper notice." Therefore, an essential factor in determining whether immunity is available under this safe harbor is whether the service provider had actual or constructive knowledge of the infringing material. The service provider had actual or constructive knowledge of the infringing material.

The notification provisions in the third safe harbor are more extensive than those found in the second safe harbor.³⁷⁷ As a result, the provisions in this subsection impose a greater burden on the service provider to earn

^{367. § 512(}b).

^{368.} Hess, *supra* note 351, at 97.

^{369. § 512(}b).

^{370.} See § 512(b)(2)(B)–(C). "[C]aching refers to creating temporary caches of material to make for more efficient operation of [a] network," which is distinguished from "hosting [which] refers to storing information." ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), *supra* note 49, at 11.

^{371. § 512(}b)(2)(E) (emphasis added); see also Hess, supra note 351, at 97.

^{372.} See § 512(b)(2)(E)(i)–(ii).

^{373.} See § 512(b)(2)(E).

^{374. § 512(}c).

^{375.} Hess, *supra* note 351, at 97.

^{376.} See § $5\overline{12}(c)(1)(A)(i)$ —(iii); see also Hess, supra note 351, at 97–98.

^{377.} See § 512(b)–(c); see also Hess, supra note 351, at 97–98.

immunity for the infringing material.³⁷⁸ For example, the service provider is required to designate and make known to the public an authorized agent to receive notice of potentially infringing material.³⁷⁹ Likewise, the service provider must list contact information for the agent and any other information "the Register of Copyrights may deem appropriate."³⁸⁰

The DMCA also includes specific procedures the complaining party must follow when notifying the ISP of infringement under the third safe harbor provision. The notice must be in writing, with a "physical or electronic signature of a person authorized to act on behalf of the owner of an exclusive right that is alleged infringed."³⁸¹ The notice also must sufficiently identify the infringed materials to permit removal or disable access to the materials.³⁸² The notification must contain physical and electronic contact information for the complaining party. Further, the notification must include statements that the use of the alleged infringed materials was unauthorized, the statements in the notice are accurate, and the complaining party is authorized to act on behalf of the owner of the allegedly infringing materials.³⁸³

The fourth and final safe harbor governs the use of information location tools.³⁸⁴ Information location tools relate to devices used to refer or link "users to an online location containing infringing material or infringing activity... including a directory, index, reference, pointer, or hypertext link."³⁸⁵ Congress included this safe harbor "to ensure that service providers can provide search engines without fear of liability for facilitating the acquisition or propagation of infringing materials that are located on servers over which they have no control."³⁸⁶ This final safe harbor also contains a notice and take-down provision.³⁸⁷

Therefore, the DMCA expressly incorporates notice and take-down provisions in three of its four safe harbor provisions. Service provider liability turns on notice. After all, service providers with actual or constructive knowledge of allegedly infringing materials have a duty to remove or disable access to the infringing materials to avoid liability.

^{378.} See id.

^{379.} See § 512(c)(2).

^{380.} Id.

^{381. § 512(}c)(3)(A)(i).

^{382.} See § 512(c)(3)(A)(ii)–(iii).

^{383.} See § 512(c)(3)(A)(v)–(vi).

^{384.} See § 512(d).

^{385.} Id.

^{386.} Hess, *supra* note 351, at 99.

^{387.} See § 512(d)(3).

B. COURTS SHOULD CONSTRUE THE CDA MORE NARROWLY

Numerous courts' facile adoption of Zeran's overly expansive application of § 230 immunity to ISPs has largely stripped away individuals' rights to sue ISPs for defamation by third parties. These courts have failed to distinguish between publishers and distributors. In so doing, courts have ignored the different standards of review that each status invokes. Moreover, in construing § 230 of the CDA, these courts have failed to consider the legislative policies and objectives the statute sets forth. Finally, the courts following Zeran have failed to fully consider what § 230 does and does not state. When these factors are examined, it is apparent that a narrower interpretation of the CDA is warranted as it relates to ISPs and third parties.

In enacting § 230, Congress appears to have attempted to achieve *Cubby*'s result in cases involving ISPs and improper third party conduct. Congress certainly did not intend to follow what it deemed the "absurd" result of *Stratton*,³⁸⁸ which found an ISP liable as a "publisher."³⁸⁹ In fact, the legislative history confirms Congressional intent to overrule *Stratton*.³⁹⁰ Nothing, however, in the legislative history suggests Congress intended to overrule *Cubby*, which is specifically mentioned and factually distinguished in *Stratton*.³⁹¹ The court in *Cubby* determined that CompuServe, the ISP in the case, was a *distributor*, rather than a *publisher*.³⁹² The court equated CompuServe's editorial control over content on its Internet site to that of such traditional distributors as public libraries, book stores, and newsstands. As a distributor, CompuServe, like its traditional counterparts, could be held liable under traditional state defamation law if it "knew or should have known" of the presence of the defamatory material.³⁹³

The distinction between "publishers" and "distributors" is important because the caption to § 230(c)(1) is "Treatment of publisher or speaker." Moreover, § 230(c)(1) expressly provides that "[n]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider." Yet,

^{388.} Robert Cannon, *supra* note 167, at 61; *see also* Freiwald, *supra* note 1, at 596. *See generally* H.R. Rep. No. 104-458, at 194 (1996) (Conf. Rep.) (Cox-Wyden Proposal, Chris Cox (R-CA) and Ron Wyden (D-OR)).

^{389.} Stratton Oakmont v. Prodigy, 1995 WL 323710, at *4 (N.Y. Sup. Ct. May 24, 1995).

^{390.} Robert Cannon, *supra* note 167, at 61.

^{391.} See Barrett v. Rosenthal, 9 Cal. Rptr. 3d 142, 160 (Cal. Ct. App. 2004).

^{392.} See Cubby, Inc. v. CompuServe, Inc., 776 F. Supp. 135, 141 (S.D.N.Y. 1991).

^{393.} *Id.* at 140.

although the statute specifically forbids characterizing ISPs as publishers, it does not state or imply that a provider or user of an interactive computer service may not be treated as a distributor.

In defamation law, the distinction between publishers and distributors is well established.³⁹⁴ From the language of § 230, one can infer Congressional awareness of this distinction. Given that there is no discussion about distributors in the legislative history or mention in the statutory language, courts should not read § 230 to equate distributors with publishers. Such an expansive reading is particularly indefensible when it virtually eliminates the right of a private individual to seek redress for online defamation involving ISPs acting as distributors. Through this expansive reading, courts effectively grant distributors statutory immunity, even though distributors were not even included in the statute. Congress has not affirmatively fixed this problem.

A narrower reading of § 230 would not give rise to a flood of defamation claims against ISPs acting as distributors. Generally, the standard the plaintiff must meet to prove defamation by a distributor is different from the standard required for publishers. As discussed, a plaintiff must prove the distributor knew or reasonably should have known that the distributed material was defamatory.³⁹⁵ The plaintiff may prove awareness of the defamatory material by showing that the plaintiff informed the distributor of the defamatory content and the distributor continued to distribute the content. The heightened constitutional standards of New York Times v. Sullivan and Gertz also apply to content relating to matters of public concern. Thus, only with notice of defamatory materials can ISPs face liability for third-party content. As with traditional rules of defamation concerning distributors, once notice of the alleged defamatory content is received, the ISP has a duty to investigate and avoid further harm. Even then, the ISP can escape liability if it takes such action. ISP liability for third-party content applies only if the ISP knew or reasonably should have known of the defamatory content and failed to remove it.

Section 230 of the CDA is commonly referred to as the "Good Samaritan" provision because that term is included in the caption of § 230(c) and because § 230(c) grants immunity to ISPs that, on their own initiative, block or remove offensive content from their sites. Thus, both the title and effect of § 230(c) indicate Congressional intent to protect

^{394.} See, e.g., id. at 139.

^{395.} *Id.* at 140–41.

ISPs from liability if they voluntarily act to restrict or limit access to offensive material online. The link between "good faith" action and immunity accords with the narrower statutory construction of § 230, which would hold ISPs acting as distributors liable for third-party defamatory content only if they failed in good faith to ameliorate the wrong. This less-expansive view of the CDA remains consistent with the stated policy of protecting children from pornographic and otherwise obscene materials, while promoting self-regulation of the Internet with limited government interference. Holding ISPs liable for third-party defamatory content that the ISP knows or should know is on their sites would not dilute either of these stated goals.

C. Congress Should Revise § 230 of the CDA

Assuming Congress intended to grant general immunity to ISPs for third-party online content, as most courts have determined, Congress now should revise § 230 of the CDA to allow individuals to seek redress under state common law claims and allow state criminal laws to be enforced.³⁹⁶ Indeed, "[t]here is no reason inherent in technological features of cyberspace why First Amendment and defamation law should apply differently in cyberspace than in the brick and mortar world."397 The DMCA provides a model for how defamation law could be handled in an online world. The DMCA conditions ISP liability for online infringement of copyright-protected works on the service provider's actual or constructive knowledge of infringement.³⁹⁸ The CDA should be revised along similar lines. If that revision was made, ISPs would enjoy immunity from liability for defamation when, after sufficient notice, they removed defamatory material posted by third parties on their sites. Liability for such third-party defamation would arise only upon the plaintiff's demonstration that an ISP had actual or constructive knowledge of the defamatory content on its site and had failed to take it down.

^{396. § 230} serves as a "safe harbor" for provisions of the CDA that have been declared unconstitutional. Consequently, Congress should abolish this immunity provision. "[I]n July 2013, the attorneys general of forty-nine states wrote to Congress requesting that the CDA be amended to expressly state that it does not preempt *state* criminal statutes." Stephanie Silvano, Note, *Fighting A Losing Battle to Win the War: Can States Combat Domestic Minor Sex Trafficking Despite CDA Preemption?*, 83 FORDHAM L. REV. 375, 398 (2014) (emphasis in original).

^{397.} Batzel v. Smith, 333 F.3d 1018, 1020 (9th Cir. 2003) (acknowledging Congressional "policy reasons to immunize from liability for defamatory or obscene speech 'providers and users of interactive computer services' when the defamatory or obscene material is 'provided' by someone else").

^{398.} Id.

Like the CDA, the DMCA grants immunity to ISPs for information content provided by third parties.³⁹⁹ Unlike the CDA, however, the DMCA "provides specific notice, take-down, and put-back procedures that carefully balance the First Amendment rights of users with the rights of a potentially injured copyright holder."⁴⁰⁰ The DMCA provides a process for individuals to protect their interests in copyrighted works. When a copyrighted work is posted on a website, the ISP may not be aware the work is protected. The DMCA's notice provisions bring the work's protected status to the ISP's attention.⁴⁰¹ This relieves the ISP of the burden of policing third-party content. Working in tandem with the notice provisions, the take-down provisions allow individuals to seek redress from an ISP that refuses to remove protected work after a reasonable period of time.⁴⁰² Additionally, the DMCA provisions give the ISP the opportunity to protect itself from liability for posting the copyrighted work without permission.⁴⁰³

With relatively little tinkering, the CDA could be revised to create a similar scheme related to defamatory content. Indeed, the CDA's existing provisions relating to obscene material would not even have to be adjusted. The revision would merely require adding a provision listing the actions needed to characterize an ISP as a "distributor," while differentiating them from an ISP's actions making them a "publisher."

A safe harbor provision similar to those in the DMCA could also be added. Such a provision likely would require entities to follow a stipulated form to provide notice of defamatory content to ISPs. Upon receipt of such notice, the ISP would be required to take down the defamatory content within a reasonable time or face liability from the defamed party. Thus, an ISP would be immune once it voluntarily removed third-party defamatory content after appropriate notice.

An additional provision could be added to provide some protection for ISPs that do not take down the material within the stipulated time for removal. Such a provision would require the defamed party to file their defamation claim within a certain number of days after the time for removal had expired, in order to avoid the extinguishment of her claim.

^{399.} Id. at 1032 n.19.

^{400.} *Id.* (citing 17 U.S.C. § 512(c), (g) (2012)); H.R. REP. NO. 105-551, at 52–62 (1998) (describing the DMCA's take-down and put-back procedures); Comm. Print, Section-By-Section Analysis of H.R. 2281, at 25–36 (Sept. 1998).

^{401.} See Batzel, 333 F.3d at 1032.

^{402.} Id.

^{403.} Id.

The proposed revision would not affect the CDA's initial goals of protecting children from online obscenity and empowering parents to block objectionable content. Nor would the revision impose any greater governmental regulation upon ISPs than the CDA already imposes. Indeed, the revision imposes no burden on the ISPs until they receive notice of defamatory content and, even then, it grants them immunity in return for the minimal effort of removing the defamatory material from their sites. It should also be remembered that the ISPs already benefit from the constitutional protections that *New York Times* and *Gertz* provide in relation to the communication of public-interest content. What the revision would do, however, is provide relief to individuals who suffer the indignity of having defamatory materials posted online. In providing such relief, the revision imposes upon ISPs no greater burden than that imposed by state defamation law upon their traditional counterparts—the public libraries, newsstands, and booksellers.

There are several criticisms of the DMCA, including its effect on free speech and the potential for abuse in the extrajudicial notice and takedown process. 404 Another criticism is the potential chilling effect of the DMCA in academic and scientific research, particularly for publicly available software. 405 Another criticism of the DMCA is that its anticircumvention provision "creates new rights that ordinarily would not be afforded copyright owners under the traditional notions of copyright, such as a 'pseudo-copyright' in works whose true copyright may not even exist."406 Another concern with the DMCA subpoena power is that it does not adequately protect First Amendment interests in anonymous speech. 407 Further criticism is that the burden of monitoring the Internet is placed on the copyright owner who must then provide notice. Additionally, the DMCA process "treats the fair user and the infringing user exactly the

^{404.} See Rebecca Alderfer Rock, Fair Use Analysis in DMCA Takedown Notices: Necessary or Noxious?, 86 TEMP. L. REV. 691, 700 (2014).

^{405.} See Eric Maher, Defenseless in the Zombie Infested Internet: Why Audio-Visual Works Demand Exemption Under the Digital Millennium Copyright Act, B.C. INTELL. PROP. & TECH. F. 1, 5 (2013).

^{406.} Noelle S.A. Green, A Tale of Three EULAs: Why Some End User License Agreements Should Be Preempted by the Anticircumvention Provisions of the Digital Millennium Copyright Act of 1998, 57 HOW. L.J. 701, 708 (2014).

^{407.} Jason M. Shepard & Genelle Belmas, Anonymity, Disclosure and First Amendment Balancing in the Internet Era: Developments in Libel, Copyright, and Election Speech, 15 YALE J.L. & TECH. 92, 121–22 (2013).

same way; it denies both users the opportunity to defend their respective uses before takedown."408

D. INTERNATIONAL LAW AND ONLINE DEFAMATION

As in the United States, many OECD member nations also provide some form of exemption from liability for "ISPs and other information intermediaries who act as middlemen (i.e., merely deliver content) by creating liability exceptions for these entities, e.g., in their e-commerce or copyright laws."⁴⁰⁹ In the European Union, the European Data Protection Directive affords strong protection for individual privacy. ⁴¹⁰ In a 2014 privacy case originating in Spain, the European Court of Justice (ECJ) essentially determined that its citizens have the right to be forgotten and "ruled that search engines need to remove links to Web results if they contain information an individual deems should be 'forgotten."⁴¹¹

A man filed a privacy suit under Spain's data protection laws against Google Spain SL and Google, Inc., (collectively, Google) alleging harm to his reputation based on search engine results including ten year old newspaper stories about a real estate auction to settle a debt.⁴¹² The

^{408.} Charles K. Lane, The DMCA's Safe Harbor Provision: Is It Really Keeping the Pirates at Bay?, 14 WAKE FOREST J. BUS. & INTELL. PROP. L. 192, 205 (2013).

^{409.} Organisation for Economic Co-operation and Development (OECD), supra note 49, at 10. The OECD report identifies § 230 of the CDA and the DMCA, and states that Australia has "[s]imilar principles on the liability of online intermediaries" regarding violation of copyright law. Id. In Korea, ISPs may be exempt from liability under certain circumstances, pursuant to the "Act on Promotion of Information and Communications Network Utilization and Information Protection" and the "Copyrights Act." Id. In Japan and the European Union, respectively, "the Japanese Law of 2001 and the European Electronic Commerce Directive (ECD) of 2000 [were enacted] to establish a liability regime for some types of online intermediary activities." Id. at 11. Intermediary activities include providing, transmitting or storing "by, or at the request of, a recipient of the service" (in other words, the recipients of the service as those who publish information as well as those who access the information). Id. The ECD "establishes a horizontal exemption from liability for intermediary information society service providers when they play a technical role as a mere conduit of third party information and limits service providers' liability for the other intermediary activities of caching and hosting information." Id. (internal quotations omitted). Generally, "mere conduit" is the equivalent of "networks and access provision, 'caching' refers to creating temporary caches of material to make for more efficient operation of the network, and hosting refers to strong information." Id. at 11. For the exemption to be available, the "mere conduit" "must have neither knowledge nor control over the information." Id.

^{410.} See generally Patrick Van Eecke & Jim Halpert, The Right To Be Forgotten In Today's Information Age, WESTLAW J. COMPUTER & INTERNET, Nov. 20, 2014, at 1. 411. Id.

^{412.} *Id.* (citing Google Spain SL v. Agencia Española de Protección de Datos (AEPD), 2014 E.C.R. C-131/12 (Judgement of the Court)). "Under the European Data

newspaper declined to block the pages from being indexed by Google's search engines.⁴¹³ The Spanish reviewing agency concluded that Google must remove the data from their indexing process and make future access to the defamatory material impossible.⁴¹⁴ The Spanish high court submitted two questions to the ECJ: first, "the applicability of European privacy laws on processing personal data abroad," and second, "the proper balance between the rights of individuals and search engines under EU's current privacy legislation."⁴¹⁵

Acknowledging the impact of search engine technology and its "decisive role' in the worldwide dissemination of information," the ECJ held that European privacy laws apply "even if search engine indexing occurs in the United States." Specifically, Spain's privacy laws applied because Google "promotes and sells advertising space in Spain." Alternatively, Spanish law could also apply because Google used datacenters, servers, and cookies that stored data "on an EU member state user's computer." While the ECJ was faced with issues largely related to "Internet search engines, the ruling may also have significant consequences for Internet publishers and companies offering Internet-based services, whether they are located inside or outside of Europe."

The ECJ's "right to be forgotten" ruling is a significant departure from the law in the United States, especially in light of § 230 immunity and the First Amendment.⁴²⁰ These different jurisdictional outcomes result in

Protection Directive, processing personal data includes collecting, recording, storing, retrieving, consulting and using any type of information that can somehow be linked to a natural person." *Id.*

413. Id. The article describes Google's indexing process as follows:

The Web is like an ever-growing public library with billions of books and no central filing system. Google essentially gathers the pages during the crawl process and then creates an index, so we know exactly how to look things up. Much like the index in the back of a book, the Google index includes information about words and their locations. When you search, at the most basic level, our algorithms look up your search terms in the index to find the appropriate pages.

Id. at 4 n.2 (quoting *Inside Search: Crawling and Indexing*, GOOGLE, http://www.google.com/insidesearch/howsearchworks/crawling-indexing.html (last visited April 11, 2015)).

- 414. *Id.* at 1–2.
- 415. *Id.* at 1.
- 416. Id. at 2.
- 417. *Id*.
- 418. Id.
- 419. *Id.* at 1.
- 420. Id. at 4.

"libel tourism." Libel tourism is "a form of international forum shopping for defamation plaintiffs . . . allowing such plaintiffs 'to benefit from both favorable substantive and procedural law." Libel tourists flock to the United Kingdom because of its notorious pro-plaintiff defamation laws. The United Kingdom recently enacted the Defamation Act of 2013, which may impact libel tourism, as the Act "rebalances the law in favor of freedom of speech." The new law provides defenses for truth and honest opinions, "[r]eplacing the common law defenses of justification and fair comment." Recognizing the importance of editorial discretion, the new law also created a new public interest defense.

Canada's approach concerning intermediary liability and notice is comparable to the European Union's Electronic Commerce Directive and its implementing regulations.⁴²⁷ In Canada, case law likewise suggests that intermediary liability for online statements created by third parties is based on fault and requires actual or constructive knowledge of the defamatory content.⁴²⁸

^{421.} See Nicole M. Manzo, If You Don't Have Anything Nice To Say, Say It Anyway: Libel Tourism And The Speech Act, 20 ROGER WILLIAMS U. L. REV. 152, 158–59, 162–69 (2015); see also Anthony Lester, Two Cheers For The First Amendment, 8 HARV. L. & POL'Y REV. 177, 186 (2014) (discussing the enactment of the Defamation Act of 2013 and its key legal reforms).

^{422.} Manzo, *supra* note 421, at 159.

^{423.} See Lee Levine & Stephen Wermiel, *The Landmark That Wasn't: A First Amendment Play in Five Acts*, 88 WASH. L. REV. 1, 53 n.317 (2013); see also Corey Omer, *Intermediary Liability for Harmful Speech: Lessons from Abroad*, 28 HARV. J.L. & TECH. 289, 298 (2014) (commenting that "the United Kingdom was viewed as an attractive pick for plaintiff forum shoppers due to its flexible jurisdictional requirements and generous libel law").

^{424.} Anthony Lester, *supra* note 421, at 186. The Defamation Act is codified as the Defamation Act 2013. *Defamation Act 2013*, UK PARLIAMENT, http://services.parliament.uk/bills/2012-13/defamation.html (last updated Apr. 4, 2013).

^{425.} Anthony Lester, *supra* note 421, at 186.

^{426.} *Id.*

^{427.} *Id.* at 308–309, 314 (offering a comparative analysis of intermediary liability for user-created content and favoring "international harmonization and reduced reliance on intermediary knowledge, assessment, and monitoring").

^{428.} Corey Omer, *supra* note 423, at 305 ("To escape liability, an intermediary would have to show that it ha[d] no actual knowledge of an alleged libel, [was] aware of no circumstances to put [it] on notice to suspect a libel, and committed no negligence in failing to find out about the libel....") (quoting Soc. of Composers, Authors & Music Publishers of Can. v. Canadian Ass'n. of Internet Providers, 2 S.C.R. 427, para. 89 (Can. 2004) (modifications in original)).

The "right to be forgotten" will restrict free speech.⁴²⁹ As one scholar explained: "[1]iability for noncompliance with the right to be forgotten runs only if one refuses to delete, not if one deletes at the drop of a hat."⁴³⁰ He argues that mere negligence in "[r]emoving art and free expression" results in no penalty, while "the liability for failure to delete is fearsome: a fine of up to two percent of [the intermediary's] annual worldwide income."⁴³¹ Thus, the potential liability pursuant to the European Union right to be forgotten "transforms Facebook, Google, Reddit, and [other intermediaries] into censors, charged with evaluating whether a particular expression has artistic or journalistic merit or otherwise constitutes free expression."⁴³²

V. CONCLUSION

When Congress enacted § 230 of the CDA, it essentially eliminated individuals' ability to recover damages from Internet intermediaries for defamatory statements made by third-party users on the intermediaries' websites. As enacted and construed by the courts, § 230 is ineffective in its effort to limit access to pornography and other obscenities, and provides little or no incentives for intermediaries to engage in self-monitoring. The power of states to grant relief for reputational harm to its citizens should not yield to an inadequate and ineffective statute. Guided by the notice-based provisions of the DMCA, Congress should revise § 230 of the CDA to include notice and take-down provisions. The revised statute should clarify that intermediaries, as distributors, will be held liable for communicating defamatory material after receiving notice of the defamation. This result is consistent with traditional defamation law, where a distributor or secondary publisher is liable for communications when it has actual or constructive knowledge of defamatory content.

^{429.} See Anupam Chander & Uyên P. Lê, Free Speech, 100 IOWA L. REV. 501, 508 (2015).

^{430.} Id. at 539 (emphasis omitted).

^{431.} *Id*.

^{432.} Id.

EX ANTE VERSUS EX POST APPROACHES TO NETWORK NEUTRALITY: A COMPARATIVE ASSESSMENT

Rob Frieden[†]

ABSTRACT

This Article will compare and contrast ex ante network neutrality regulation by a sector-specific government agency and ex post review by a court or competition authority. The Article concludes that ex post enforcement should generally serve as the goal in a deregulatory glide path that links increases in facilities-based competition with incremental reductions in government oversight. However, current marketplace conditions show insufficient competition particularly for the first and last mile of Internet access, making it possible for Internet Service Providers (ISPs) to leverage market power in potentially harmful ways.

Many advocates for less intrusive government oversight of telecommunications support the migration from regulation by an expert agency to the use of adjudication remedies largely guided by antitrust or competition policy principles. They believe that competition authorities, or reviewing courts, can resolve disputes after they have occurred—ex post remedies—in lieu of having sector-specific regulatory agencies available to anticipate and resolve problems before they become acute—ex ante prevention. The use of ex post safeguards risks false negatives where anticompetitive conduct has occurred without detection, or lacking an effective remedy. Using ex ante safeguards risks false positives, where a regulatory agency wrongly anticipates or detects harmful conduct and imposes unnecessary remedies that could reduce incentives for more investment. Advocates for muscular ex ante regulation in the United States believe that an expert agency remains essential, because sufficiently robust facilities-based competition does not exist.

As ISPs serving end users may have both the incentive and ability to pursue anticompetitive strategies, the Article supports a limited role for an expert, national regulatory authority. However, the Article emphasizes that ex ante regulation should concentrate on procedural safeguards to ensure good faith negotiations and timely resolution of complaints in light of the immediate harm to consumers when content becomes blocked, or degraded by artificial congestion.

The Article also notes that the Supreme Court has eliminated ex post remedies when the expert regulatory agency concludes that rising competition justifies streamlining, or eliminating safeguards, including the requirement that competitors cooperate by

DOI: http://dx.doi.org/10.15779/Z386Z81

© 2015 Rob Frieden.

† Pioneers Chair and Professor of Telecommunications and Law, The Pennsylvania State University, rmf5@psu.edu.

interconnecting networks on fair, cost-based terms. Additionally, the Supreme Court has substantially limited consumers' rights to form a class of similarly harmed parties, or to object to compulsory arbitration clauses in service contracts.

TABLE OF CONTENTS

I.	INT	RODUCTION	1562
II.		ENGTHS AND WEAKNESSES IN EX ANTE	1570
	KE	MEDIES	15/0
	A.	STRENGTHS IN EX ANTE REGULATION	1570
	В.	THE NEED FOR CLEAR STATUTORY AUTHORITY	1574
	C.	DIFFICULTIES IN APPLYING EX ANTE REGULATION	1581
	D.	FALSE NEGATIVES AND POSITIVES IN EX ANTE NETWORK	
		NEUTRALITY RULES	1584
	E.	DIFFICULTIES IN CREATING AND ENFORCING EX ANTE	
		REGULATIONS TO ISPS	1589
	F.	INEFFICIENCY AND DEFECTIVE OUTCOMES OF EX ANTE	
		RULEMAKING	1591
	G.	THE INABILITY TO COMBINE EX ANTE AND EX POST	
		FUNCTIONS IN SOME COUNTRIES	1592
III.	c'T'	RENGTHS AND WEAKNESSES IN EX POST	
		MEDIES	1593
	Α.	LIMITED OR ELIMINATED EX POST REMEDIES	1594
	В.	NEAR TERM FACTORS SUPPORTING RETAINED EX ANTE	
		REGULATION	
		1. Technological and Marketplace Convergence	
		2. Regulatory Asymmetry	1604
		3. Incumbent Responses to New Internet-Mediated Service	
		Competition	1605
		4. Viability of a Glide Path from Ex Ante to Ex Post Safeguards	1605
		5. Changes in Consumer Expectations	
		6. Viability of Resale and Virtual Network Competition	1607
IV.	CO	NCLUSIONS AND RECOMMENDATIONS	1608

I. INTRODUCTION

Imposing ex ante rules and regulations anticipates the need to prevent anticompetitive practices that harm consumers and the national economy, but acting on the basis of unproven harms can impose unnecessary costs and stifle innovation. This Article reports that the potential for false positives has grown in light of the FCC's recent decision to reclassify broadband Internet access as a telecommunications service subject to common carrier regulation. The Article recommends that the FCC concentrate on resolving complaints and promoting timely and fair interconnection negotiations rather than apply the full array of ex ante regulatory safeguards.

To resolve both anticipated and actual marketplace conflicts in the telecommunications industry, most nations apply ex ante models of government oversight that impose regulation targeted toward a specific industry sector. Advocates for less intrusive government oversight of Internet broadband access, however, support either immediate or gradual replacement of expert agency oversight with adjudication and enforcement remedies applied if and when conflicts arise. Such ex post models rely primarily on existing regulatory agencies, new competition authorities, or the judiciary applying antitrust policy principles. Ex post remedies may not require the adjudicator to have expertise in every industry sector. Rather, courts, competition authorities, and regulatory agencies typically undertake an empirical assessment to determine whether a venture has engaged in anticompetitive practices that have harmed consumers and competitors.¹

Advocates for retaining ex ante regulation of broadband Internet access believe that a proactive expert agency remains essential in light of insufficient facilities-based competition among Internet Service Providers (ISPs). Supporters of Internet access regulation believe that, despite technological innovations, the broadband marketplace cannot self-regulate and prevent anticompetitive practices that would distort the marketplace and harm consumers.² Should a dominant telecommunications firm abuse

At the low end of throughput, 4 Mbps and 10 Mbps, the majority of Americans have a choice of only two providers. That is what

^{1.} Examples of anticompetitive practices aiming to drive competitors out of the market include efforts to raise competitors' costs of providing service, refusing to provide competitors with a service element they need to provide a complete service, and offering below-cost rates to consumers that competitors cannot afford to offer even in the short term. See Guide to Antitrust Laws, FED. TRADE COMM'N, http://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws (last visited Apr. 20, 2015); What is Competition Policy?, EUR. COMMISSION, http://ec.europa.eu/competition/consumers/what_en.html (last updated Apr. 16, 2012); U.S. DEP'T OF JUSTICE, ANTITRUST ENFORCEMENT AND THE CONSUMER (2012), available at http://www.justice.gov/atr/public/div_stats/antitrust-enfor-consumer.pdf.

^{2.} See Tom Wheeler, Chairman, Fed. Commc'ns Comm'n, The Facts and Future of Broadband Competition Address (Sept. 4, 2014), available at http://www.fcc.gov/document/chairman-remarks-facts-and-future-broadband-competition. Wheeler states:

its market power and engage in anticompetitive practices,³ ex post remedies would apply well after the onset of harm to competitors and the public. Additionally, ex ante advocates note that in some nations, such as the United States, courts have reduced consumers' opportunities to seek judicial ex post remedies by limiting their rights to form classes of similarly harmed parties.⁴ Some courts have refrained from acting at all if the respective expert regulatory agency has concluded that marketplace competition justifies streamlining or eliminating regulatory safeguards⁵

economists call a "duopoly," a marketplace that is typically characterized by less than vibrant competition. But even two "competitors" overstates the case. Counting the number of choices the consumer has on the day before their Internet service is installed does not measure their competitive alternatives the day after. Once consumers choose a broadband provider, they face high switching costs that include early-termination fees, and equipment rental fees. And, if those disincentives to competition weren't enough, the media is full of stories of consumers' struggles to get ISPs to allow them to drop service.

Id.

3. See Organisation for Econ. Co-Operation and Dev., Glossary of Industrial Organisation Economics and Competition Law 9 (2003), available at http://www.oecd.org/regreform/sectors/2376087.pdf (emphasis omitted). The Glossary explains:

The term abuse of dominant position has been explicitly incorporated in competition legislation of various countries such as Canada, EEC and Germany. In the United States, the counterpart provisions would be those dealing with monopoly and attempts to monopolize or monopolization of a market. Which of the different types of business practices are considered as being abusive will vary on a case by case basis and across countries. Some business practices may be treated differently in different jurisdictions as well. However, the business practices which have been contested... include[] the following: charging unreasonable or excess prices, price discrimination, predatory pricing, price squeezing by integrated firms, refusal to deal/sell, tied selling or product bundling and pre-emption of facilities.

Id.

- 4. See, e.g., Comcast Corp. v. Behrend, 133 S. Ct. 1426 (2013) (holding that the proposed plaintiff class could not generate a single, uniform claim of damages as required for class action law suits).
- 5. "The . . . extensive provision for access [in the Communications Act of 1934, as amended] makes it unnecessary to impose a judicial doctrine of forced access." Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 411 (2004) (holding that there are little if any grounds for an antitrust claim if no duty to deal exists even though the FCC had ordered wholesale broadband access be made available for resale); see also Pac. Bell Tel. Co. v. Linkline Commc'ns, Inc., 555 U.S. 438, 440 (2009) (finding no clear evidence of a price squeeze even though an incumbent carrier offered end users lower retail rates than the wholesale rate it offered competitors); Bell Atl. Corp.

that arguably provide greater consumer safeguards than what a court could offer using antitrust remedies.

Ex ante rules and regulations anticipate the need for safeguards to prevent anticompetitive practices in a specific sector of the economy, because of existing or potential harm to consumers and national economies. However, regulation based on speculative harms can impose costs and discourage investment in the upgrades needed to accommodate ever-increasing demand for faster and higher capacity broadband networks. National Regulatory Authorities (NRAs) should use caution, particularly because they may not have complete information about the potential for market failure, i.e., the inability of competitors to self-regulate.

This Article evaluates the strengths and weaknesses in ex ante and ex post enforcement of laws and regulations aiming to promote open and neutral access to the Internet. It considers whether countries should create and enforce ex ante network neutrality⁶ rules and regulations or continue to use ex post remedies, which include administrative procedures for receiving and resolving complaints, creation of new competition authorities, or reliance on litigation if and when disputes arise.

Network neutrality poses particularly vexing challenges. These challenges include the lack of a common definition of what safeguards the marketplace cannot provide, broad gaps in statutory interpretation, agitated and confused consumers, and conflicting framing of the issues and opposing views on the potential for harm to consumers and competitors absent regulatory intervention.⁷ Additionally, ISPs,

v. Twombly, 550 U.S. 544, 547 (2007) (antitrust suit dismissed due to insufficient evidence produced in the filing claiming harm).

^{6.} Network neutrality refers to government-mandated nondiscrimination, transparency, and other requirements on ISPs designed to foster a level competitive playing field among content providers and to establish consumer safeguards so that Internet users have unrestricted access, limited only by legitimate concerns such as ISP network management and national security. See Preserving the Open Internet, Report and Order, 25 F.C.C. Rcd. 17,905, 17,916 n.48 (2010) [hereinafter 2010 Open Internet Order], aff'd in part, vacated and remanded in part sub nom. Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014) (holding that FCC cannot impose common carrier duties on information service providers, but may impose some obligations to achieve statutory goals). On remand, the FCC released the 2014 Open Internet NPRM. Protecting and Promoting the Open Internet, Notice of Proposed Rulemaking, 29 F.C.C. Rcd. 5561 (2014) [hereinafter 2014 Open Internet NPRM].

^{7.} See, e.g., Marvin Ammori, Beyond Content Neutrality: Understanding Content-Based Promotion of Democratic Speech, 61 FED. COMM. L.J. 273 (2009); Adam Candeub & Daniel McCartney, Law and the Open Internet, 64 FED. COMM. L.J. 493 (2012); Rob

particularly those ventures providing first and last mile access to the Internet, largely operate free of competitive restraints due to high sunk investment costs favoring a limited number of ventures able to accrue scale efficiencies.

ISPs can operate as intermediaries between other upstream ISPs, content distributors and content creators on one side, and downstream retail broadband subscribers on the other. This double- or multi-sided market enables such ISPs to create a platform⁸ through which diverse

Frieden, Assessing the Merits of Network Neutrality Obligations at Low, Medium and High Network Layers, 115 PENN ST. L. REV. 49 (2010); Rob Frieden, Rationales for and Against Regulatory Involvement in Resolving Internet Interconnection Disputes, 14 YALE J.L. & TECH. 266 (2012); Dirk Grunwald, The Internet Ecosystem: The Potential for Discrimination, 63 FED. COMM. L.J. 411 (2011); Lixian Hantover, Creating Sustainable Regulation of the Open Internet, 20 UCLA ENT. L. REV. 107 (2013); Ivar A. Hartmann, A Right to Free Internet? On Internet Access and Social Rights, 13 J. HIGH TECH. L. 297 (2013); Amanda Leese, Net Transparency: Post-Comcast FCC Authority to Enforce Disclosure Requirements Critical to "Preserving The Open Internet," 11 NW. J. TECH. & INTELL. PROP. 81 (2013); Daniel A. Lyons, Net Neutrality and Nondiscrimination Norms in Telecommunications, 54 ARIZ. L. REV. 1029 (2012); Sascha D. Meinrath & Victor W. Pickard, Transcending Net Neutrality: Ten Steps Toward an Open Internet, 12 J. INTERNET L., No. 6, 1 (2008); Tim Wu & Christopher S. Yoo, Keeping the Internet Neutral?: Tim Wu and Christopher Yoo Debate, 59 FED. COMM. L.J. 575 (2007); Tim Wu, Network Neutrality, Broadband Discrimination, 2 J. ON TELECOMM. & HIGH TECH. L. 141 (2003); Christopher S. Yoo, Would Mandating Broadband Network Neutrality Help or Hurt Competition? A Comment on the End-to-End Debate, 3 J. ON TELECOMM. & HIGH TECH. L. 23 (2004).

8. See David S. Evans, The Antitrust Economics of Multi-Sided Platform Markets, 20 YALE J. ON REG. 325, 328 (2003). Evans writes:

Platform businesses compete in "multi-sided markets." For example, video game console companies such as Sony, Nintendo, and Microsoft compete for game developers and users, while payment card companies such as American Express, MasterCard, and Visa compete for merchants and cardholders. Platform businesses must deal with interdependent demand when devising pricing, production, and investment strategies. These strategies can be quite different from nonplatform businesses that do not serve mutually dependent customer groups. The optimal price on a particular side of the market, whether measured socially or privately, does not follow marginal cost on that side of the market. Many platform businesses charge one side little or nothing; for example, most operating system vendors collect scant revenue from software developers who use their intellectual property. In many cases, the joint provision of a good that services multiple groups of customers makes the assignment of costs to any one side arbitrary

Id.; see also David S. Evans, Governing Bad Behavior by Users of Multi-Sided Platforms, 27 BERKELEY TECH. L.J. 1201 (2012); Daniel M. Tracer, Overcharge but Don't

content and services travel. As platform operators, ISPs may accrue market power that can favor affiliates and disadvantage competitors. Internet service involves multiple ventures providing different services in the link from content source to end user, including ISPs that serve both downstream retail broadband subscribers and upstream ISPs and content sources. An NRA or court might have great difficulty in detecting and sanctioning an ISP that used techniques to tilt the competitive playing field in favor of an affiliate, or a venture agreeing to pay a surcharge for preferred treatment.

Ex ante regulation advocates have not produced a large empirical record of harm,⁹ instead noting the lack of adequate competition¹⁰ and citing a few high profile disputes between ISPs, such as Comcast, and content providers, such as Netflix.¹¹ Network neutrality proponents also argue that biased networks will reduce the future value, accessibility, and utility of the Internet. Opponents assert that regulatory intervention to

Overestimate: Calculating Damages for Antitrust Injuries in Two-Sided Markets, 33 CARDOZO L. REV. 807 (2011).

9. Madison River is a frequently cited example of harmful operation of a biased and discriminatory network. Madison River Commc'ns, LLC, 20 F.C.C. Rcd. 4295, 4297 (2005) (small independent telephone company agreed to a \$15,000 monetary forfeiture and consent decree agreeing not to block Digital Subscriber Link customers' access to competitor's Voice over the Internet Protocol telephone service).

10. See Susan Crawford, First Amendment Common Sense, 127 HARV. L. REV. 2343, 2352 (2014). Crawford notes:

It turns out that this belief in competition is not well founded, as the following section describes: for between 77 and 82% of Americans, their local cable monopoly is their only choice for high-capacity, high-speed connections, and dominant members of the cable industry never enter each others' territories; the phone companies have retreated almost entirely to wireless where their profits are still secure, and have mostly ceded the wired marketplace to the cable companies....

Id. (footnotes omitted); see also Tejas N. Narechania, Network Nepotism and the Market for Content Delivery, 67 STAN. L. REV. ONLINE 27 (2014); Tejas N. Narechania & Tim Wu, Sender Side Transmission Rules for the Internet, 66 FED. COMM. L.J. 467, 482–86 (2014).

11. See Barbara van Schewick, Network Neutrality and Quality of Service: What a Nondiscrimination Rule Should Look Like, 67 STAN. L. REV. 1, 6 (2015). Schewick discusses the potential impact of content-selective service:

Internet service providers like Verizon, AT&T, or Time Warner that connect users to the Internet are now free to block any content, service, or application they want. They can slow down selected applications, speed up others, or require application or content providers like Netflix or Spotify to pay fees to reach their users. These practices would fundamentally change how each of us experiences the Internet.

solve unproven harms imposes costs, including a net reduction in innovation and investment in Internet infrastructure, content and applications.¹²

Many NRAs, including the United States Federal Communications Commission (FCC) and regulatory authorities in the European Union, have concluded that the potential for biased broadband network access necessitates some degree of ex ante regulatory safeguards.¹³ Some governments authorize their NRA to operate as both an adjudicator as well as a creator of rules, policies, and regulations. This dual authority makes it possible to reduce the nature and scope of ex ante regulation without significant change in the general structure of telecommunications regulation by government. For example, the European Union has devised a mechanism that authorizes ex ante network neutrality oversight,¹⁴ but

^{12.} See, e.g., Babette E.L. Boliek, FCC Regulation versus Antitrust: How Net Neutrality is Defining the Boundaries, 52 B.C. L. REV. 1627 (2011); Shanika Chapman, Hands Off My Internet! Why the FCC Should Refrain from Regulating the Internet, 67 CONSUMER FIN. L.Q. REP. 375 (2013); Thomas W. Hazlett & Joshua D. Wright, The Law and Economics of Network Neutrality, 45 IND. L. REV. 767, 798 (2012); Lyons, supra note 7; Hon. Maureen K. Ohlhausen, Net Neutrality vs. Net Reality: Why an Evidence-Based Approach to Enforcement, and Not More Regulation, Could Protect Innovation on the Web, 14 ENGAGE: J. FEDERALIST SOC'Y PRAC. GROUPS 81 (2013); J. Gregory Sidak & David J. Teece, Innovation Spillovers and the "Dirt Road" Fallacy: The Intellectual Bankruptcy of Banning Optional Transactions for Enhanced Delivery Over the Internet, 6 J. COMP. L. & ECON. 521 (2010); Dennis L. Weisman & Robert B. Kulick, Price Discrimination, Two-Sided Markets, and Net Neutrality Regulation, 13 TUL. J. TECH. & INTELL. PROP. 81 (2010); Christopher S. Yoo, Network Neutrality and the Economics of Congestion, 94 GEO. L.J. 1847, 1901 (2006); Christopher S. Yoo, Beyond Network Neutrality, 19 HARV. J.L. & TECH. 1 (2005).

^{13.} See, e.g., 2010 Open Internet Order, supra note 6; Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C. Rcd. 13,028 (2008), vacated, Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010) (deeming FCC exceeded its statutory authority when responding to a complaint and imposing network neutrality rules); Proposal for a Regulation of the European Parliament and of the Council Laying Down Measures Concerning the European Single Market for Electronic Communications and to Achieve a Connected Continent, and Amending Directives 2002/20/EC, 2002/21/EC and 2002/22/EC, and Regulations (EC) No 1211/2009 and (EU) No 531/2012, COM (2013) 627 final (Nov. 9, 2013); Toshiya Jitsuzumi, Discussion on Network Neutrality: Japan's Perspective, 3 COMMS. & CONVERGENCE REV. 71 (2011).

^{14.} See Eur. Comm'n, EU Actions, DIGITAL AGENDA FOR EUR., https://ec.europa.eu/digital-agenda/en/eu-actions (last updated Mar. 2, 2015); Martin Cave & Pietro Crocioni, Does Europe Need Network Neutrality Rules?, 1 INT'L J. COMM. 669, 673, 677 (2007); Catherine Jasserand, Critical Views on the French Approach to "Net Neutrality," J. INTERNET L., Mar. 2013, at 18, 23–24; Christopher T. Marsden, Net Neutrality: The European Debate, J. INTERNET L., Aug. 2008, at 1; Daithí Mac Síthigh,

primarily relies on assessments of whether sufficient competition exists in a specific market segment.¹⁵ In other nations, such as the United States, the NRA must apply legislatively-crafted service definitions to determine the lawfulness of ex ante regulations.

This Article concludes that countries should generally favor ex post enforcement over ex ante remedies. Countries should employ a deregulatory "glide path" that links increases in facilities-based competition with incremental reductions in government oversight. However, current marketplace conditions evidence limited competition—particularly for the first and last mile of Internet access—in many locales. Because ISPs serving end users still have both the incentive and ability to pursue anticompetitive strategies, this Article supports a well-calibrated and limited role for expert NRAs. The Article emphasizes that ex ante regulation should concentrate on procedural safeguards rather than the creation and enforcement of substantive rules and service definitions. Ex

Regulating the Medium: Reactions to Network Neutrality in the European Union and Canada, J. INTERNET L., Feb. 2011, at 3.

- 15. See Consolidated Version of the Treaty on the Functioning of the European Union art. 102, May 9, 2008, 2008 O.J. (C 115) 47; ARIEL EZRACHI, EU COMPETITION LAW: AN ANALYTICAL GUIDE TO THE LEADING CASES (3d ed. 2012).
- 16. A similar strategy is set out in ECORYS, FUTURE ELECTRONIC COMMUNICATIONS MARKETS SUBJECT TO EX-ANTE REGULATION (2013), *available at* http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=3148.
- 17. See Verizon v. FCC, 740 F.3d 623, 646 (D.C. Cir. 2014) (citing 2010 Open Internet Order, supra note 6). Therein, the D.C. Circuit court states:

The Commission also convincingly detailed how broadband providers' position in the market gives them the economic power to restrict edge-provider traffic and charge for the services they furnish edge providers. Because all end users generally access the Internet through a single broadband provider, that provider functions as a "terminating monopolist," with power to act as a "gatekeeper" with respect to edge providers that might seek to reach its end-user subscribers.

Id.

18. See id. at 646. The D.C. Circuit court continues with respect to competition: [T]here appears little dispute that broadband providers have the technological ability to distinguish between and discriminate against certain types of Internet traffic.... As the Commission reasonably explained, this ability to act as a "gatekeeper" distinguishes broadband providers from other participants in the Internet marketplace—including prominent and potentially powerful edge providers such as Google and Apple—who have no similar "control [over] access to the Internet for their subscribers and for anyone wishing to reach those subscribers."

Id. (alteration in original) (citing 2010 Open Internet Order, *supra* note 6, at 17,923, 17,935).

ante regulators should ensure that ventures involved in interconnection and compensation disputes negotiate in good faith. Additionally, NRAs should provide a forum for timely complaint resolution in light of the immediate harm to consumers when Internet content delivery becomes intentionally degraded or blocked.

II. STRENGTHS AND WEAKNESSES IN EX ANTE REMEDIES

Ex ante rules establish a regulatory regime for anticipating and resolving actual disputes and problems. Typically, a national legislature enacts a law providing the basic structure under which an NRA creates policies, rules and regulations.¹⁹ As a threshold matter, a legislature must contemplate regulatory needs and create a mechanism for an NRA to define services warranting government oversight and establish rules constraining their commercial operation.

The baseline justification for regulation lies in the determination that an unfettered marketplace would fail to achieve certain goals, which in the telecommunications arena include reasonable rates, widespread availability, and the inability of any single venture or group to control the price or availability of service. Put another way, ex ante regulation exists because legislatures and NRAs conclude that consumers and competition will suffer without a proactive regulatory presence. Such vigilance appears necessary in light of the incentive and ability of ventures—especially ones with market power—to engage in anticompetitive practices.

A. STRENGTHS IN EX ANTE REGULATION

Advocates for network neutrality regulation assume that, absent ex ante regulatory safeguards, the public and new market entrants will suffer. In light of the growing concentration of information, communications and entertainment (ICE) in the marketplace and increased reliance on the Internet for many essential services, network neutrality proponents believe that the government should erect proactive safeguards. They believe the broadband access market lacks sufficient competition to prevent incumbents from operating in ways that hamper competition and reduce the value of an Internet access subscription.

^{19.} See, e.g., Communications Act of 1934, Pub. L. No. 73–416, 48 Stat. 1064 (amended 1996); Communications Act, 2003, c. 21 (U.K.); Telecommunications Act 1997 (Cth) (Austl.). The most recent substantial revision of the Communications Act of 1934 took place in 1996. See Telecommunications Act of 1996, Pub. L. No. 104–104, 110 Stat. 56.

For example, network neutrality proponents worry that "Retail ISPs" providing the first and last mile of service to broadband subscriber end users can exploit their exclusive link to extract supracompetitive rates, i.e., compensation above what a competitive marketplace would permit. Such above-market revenues can accrue from two sources: 1) retail broadband subscribers and 2) upstream ISPs and content distributors obligated to pay surcharges to secure reliable traffic delivery to end-users.²⁰

Such price discrimination upstream from the Retail ISP creates a new dichotomy between upstream ventures relying on traditional "best efforts"²¹ traffic routing and new "better than best efforts" service for ventures seeking higher quality of service and "Most Favored Nation" treatment. Many network neutrality advocates believe this dichotomy in service will result in high-cost fast lanes, available only for ventures able to afford and willing to pay surcharges, with slow lanes available to everyone else, including startup ventures offering bandwidth-intensive video content.²²

20. See Daniel L. Brenner & Winston Maxwell, The Network Neutrality and the Netflix Dispute: Upcoming Challenges for Content Providers in Europe and the United States, 23 INTELL. PROP. & TECH. L.J. 3 (2011); Frieden, supra note 7; Drew Fitzgerald & Shalini Ramachandran, Netflix-Traffic Feud Leads to Video Slowdown, WALL ST. J. (Feb. 18, 2014), http://online.wsj.com/news/articles/SB10001424052702304899704579391223249896550; Shalini Ramachandran, Netflix to Pay Comcast for Smoother Streaming, WALL ST. J. (Feb. 23, 2014), http://online.wsj.com/news/articles/SB10001424052702304834704579401071892041790.

21. See Philip J. Weiser, The Next Frontier for Network Neutrality, 60 ADMIN. L. REV. 273, 277–78 (2008). Weiser's article explains:

The Internet developed initially as an academic curiosity, based on a commitment to the "end-to-end principle." This principle requires that all Internet traffic, whether an email, a Voice over Internet Protocol (VoIP) "call," or a video stream, be treated equally and managed through "best efforts" connections. In such a network, data packets pass from one router to another without the prioritization of any particular packets. In practice, this means that Internet traffic reaches its destination at varying times, depending on the traffic levels of the relevant Internet communications links.

Id.

22. See Michael Weinberg, How The FCC's Proposed Fast Lanes Would Actually Work, PUB. KNOWLEDGE BLOG (May 16, 2014), https://www.publicknowledge.org/newsblog/blogs/how-the-fccs-proposed-fast-lanes-would-actually-work. Weinberg discusses slow and fast lanes on the internet:

Once there is a split Internet, ISPs have the incentive to push every new innovation towards the fast lane. Innovation in the fast lane means extra revenue, while innovation in the slow lane gets them nothing. Investments that would have gone into the entire network before the split will now only go into the fast lane. That means that the forces that Network neutrality advocates note that plain vanilla service has sufficed in the past, but now ISPs appear willing and able to generate artificial congestion²³ to nudge, or force, upstream ventures to pay for "more reliable" service.²⁴ They also contend that absent ex ante regulatory oversight, ISPs will engage in unreasonable discrimination that favors corporate affiliates and surcharge payers.²⁵ Should this occur, new ventures with limited finances might fail simply because they could not afford to

have traditionally increased speeds for everyone will now be reserved for those who can pay extra. All the while, the slow lane just keeps getting slower in comparison. After all, a slow slow lane makes the premium fast lane an even better value!

Id. Specifically, video has greater potential to cause disruptions in service in light of the substantial amount of content that ISPs must handle quickly so that frames of content arrive in time for immediate display. *See* Henry H. Perritt, Jr., *Technologies of Storytelling: New Models for Movies*, 10 VA. SPORTS & ENT. L.J. 106, 132 (2010). Video delivery standards call for the presentation of 30 discrete frames of content per second:

Video cameras, whether film or digital, take a series of still photographs at a rate determined by the frame-rate for the resulting movie. Thomas Edison is credited with discovering that a series of still images displayed at a sufficiently high frame rate produce the illusion of smooth motion. The typical frame rate is 24 frames/second for movies and 30 frames/second for U.S. television.

Id.

- 23. "The routing of data on the Internet is a zero-sum game. Unless there is continual congestion, no website would pay for priority treatment. This means the FCC's proposed rules will actually produce a strong incentive for ISPs to create congestion through artificial scarcity." Press Release, Free Press, FCC Proposal for a Payola Internet Would End Net Neutrality (Apr. 25, 2014), *available at* http://www.freepress.net/press-release/106177/fcc-proposal-payola-internet-would-end-net-neutrality.
- 24. See Marguerite Reardon, Level 3 Accuses Six Broadband Providers of Degrading Network Traffic, CNET (May 5, 2014 4:41 PM), http://www.cnet.com/news/level-3-accuses-six-broadband-providers-of-degrading-network-traffic/. Reardon's article provides an example degraded network traffic:

Internet backbone provider Level 3 claims that five US consumer broadband providers are refusing to upgrade their peering connections for the past year in a move that is causing consumers to get sub par Internet access.

. . . .

The dispute Level 3 has with these six broadband providers is part of an ongoing debate over so-called network peering arrangements. Companies like Level 3, Cogent Communications, and Netflix, which have brought the issue out in public, argue that more government oversight is needed to ensure big broadband companies are not abusing their power. Meanwhile, broadband providers say these disputes are part of an established way of doing business on the Internet.

Id.

25. See, e.g., Fitzgerald & Ramachandran, supra note 20.

pay surcharges for access to consumers. Similarly, all ventures would become vulnerable to surcharge payment demands to remedy artificial and induced congestion that an ISP might create by rationing ample switching and transmission capacity to discipline or punish a specific ISP or content source.

Ex ante network neutrality rules put Internet access providers on notice that they provide essential services to the public.²⁶ A vigilant government stands ready to remedy instances where providers have abused market power including access from and to the Internet cloud²⁷ via facilities that may have characteristics of an essential facility,²⁸ or bottleneck.²⁹

- 26. The essentialness of a service does not necessarily result in a concentrated or monopolized market. For example, the concept of common carriage, which NRAs incorporate as part of their ex ante nondiscrimination regulation of telecommunications services, also applies to unconcentrated markets such as hotels. See Barbara A. Cherry, Maintaining Critical Rules to Enable Sustainable Communications Infrastructures, 24 GA. ST. U. L. REV. 947, 948–49 (2008); Barbara A. Cherry, Misusing Network Neutrality to Eliminate Common Carriage Threatens Free Speech and the Postal System, 33 N. KY. L. REV. 483, 505–06 (2006).
- 27. The Internet cloud refers to the vast array of interconnected networks that make up the Internet and provide users with seamless connectivity to these networks and the content available via these networks. "The increasing functionality of the Internet is decreasing the role of the personal computer. This shift is being led by the growth of 'cloud computing'—the ability to run applications and store data on a service provider's computers over the Internet, rather than on a person's desktop computer." William Jeremy Robison, Free at What Cost?: Cloud Computing Privacy Under the Stored Communications Act, 98 GEO. L.J. 1195, 1199 (2010).
- 28. Essential facility refers to the classification of private property as so important to public welfare that the owner must share it by providing access. For example, in *United States v. Terminal Railroad Association of St. Louis*, 224 U.S. 383 (1912), the Supreme Court held that the operator of the only facilities available for transporting railroad trains across the Mississippi river had to provide access to competitors. The Court identified public benefits and operating synergies in accruing from compulsory sharing. Over time the Court has abandoned this precedent in response to severe criticism and based on the view that antitrust law generally proscribes competitors from collaborating as well as the belief that a refusal to deal claim under Section 2 of the Sherman Act, 15 U.S.C. § 2 (2012), constitutes a better cause of action. The Court rejected and all but disavowed the existence of an essential facilities rationale in *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) (refusing to apply antitrust remedies where no duty to deal exists and the expert regulatory agency has declined to impose ex ante access requirements). *See also* Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841 (1989).
- 29. Even as the United States has abandoned the essential facilities doctrine, the European Union has recognized its importance in digital and information markets where a single venture may dominate and control access to many markets.

B. THE NEED FOR CLEAR STATUTORY AUTHORITY

Ex ante regulation works best when the NRA has clear statutory authority to act. Absent such specificity, stakeholders can claim that the NRA lacks jurisdiction to impose rules. When an NRA invokes questionable statutory authority, as the FCC has done on at least two occasions on the matter of network neutrality rulemaking,³⁰ stakeholders also can assert that the FCC has created regulatory uncertainty and disincentives for incumbent ventures to make necessary investments in network upgrades needed to support bandwidth intensive services such as video.

Network neutrality advocates see the need for a legislative mandate that authorizes NRAs to assert jurisdiction over broadband Internet access, preferably with specific and direct statutory authority to impose common carrier³¹ ex ante regulation.³² Such a mandate typically would require new or amended language in the statute that creates the NRA and defines the services subject to its regulatory oversight. Such statutory drafting constitutes a most difficult undertaking because the legislature has

More recently, however, European courts have aggressively extended the concept of an essential facility to include intellectual property. This can be seen as a departure from U.S. practice, although it might be more accurate to say that the European Commission is entering territory where U.S. precedents are thin to nonexistent. In the process, European courts have raised important issues about the extent to which essential facilities based on intellectual property can and should be treated differently from physical assets.

Stephen M. Maurer & Suzanne Scotchmer, *The Essential Facilities Doctrine: The Lost Message of* Terminal Railroad, 5 CALIF. L. REV. CIRCUIT 278, 296 (2014); *see also* ORGANISATION FOR ECON. CO-OPERATION AND DEV., POLICY ROUNDTABLES: THE ESSENTIAL FACILITIES CONCEPT (1996), *available at* http://www.oecd.org/competition/abuse/1920021.pdf.

- 30. See 2010 Open Internet Order, supra note 6; Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C Rcd. 13,028 (2008), vacated, Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010) (FCC deemed to have exceeded its statutory authority when responding to a complaint and imposing network neutrality rules).
- 31. In the United States, the FCC currently requires that telecommunications service providers comply with the requirements established in Title II of the Communications Act of. See 47 U.S.C. §§ 201–276 (2012). These regulations impose common carriage duties including the obligation to provide service on a nondiscriminatory basis.
- 32. See, e.g., Cat Zakrzewski, Senators Push for Broadband Reclassification That Would Protect Net Neutrality, TECHCRUNCH (July 15, 2014), http://techcrunch.com/2014/07/15/senators-push-for-broadband-reclassification-that-would-protect-net-neutrality/.

to craft definitions triggering regulation based on a then-current understanding of technology that surely will change soon after enactment of the law. Many legislatures see the need to use broad service definitions that attempt to create a dichotomy between services that fit and do not fit within the NRA's jurisdiction.

The United States Congress created such a dichotomy with information services, constituting a largely unregulated category, and telecommunications services, subject to the FCC's jurisdiction over public utility common carrier service providers.³³ This dichotomy does not always create mutual exclusivity for two reasons. First, many service providers offer both service categories, e.g., wireless carriers offer voice telephony and texting, two legacy telecommunications services, but they also offer data service, such as broadband Internet access, and that constitutes an information service.³⁴ Second, both technological and market convergence³⁵ support the commingling of both service types by vertically-

33. The Communications Act of 1934, as amended, defines telecommunications service as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." § 153(46). Telecommunications is defined as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." § 153(43). Title II applies nondiscrimination and other common carrier requirements on telecommunications service providers. §§ 201–276. On the other hand, information service is defined as:

the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.

§ 153(20). These services qualify for a largely unregulated status.

- 34. See Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking 17 F.C.C. Rcd. 4798, 4823 (2002), aff'd sub nom. Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 977–78 (2005); see also Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks, Declaratory Ruling, 22 F.C.C. Rcd. 5901 (2007); United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service as an Information Service, Memorandum Opinion and Order, 21 F.C.C. Rcd. 13,281 (2006); Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking, 20 F.C.C. Rcd. 14,853, 14,863–64 (2005) [hereinafter DSL Reclassification Order], petition for rev. denied, Time Warner Telecom, Inc. v. FCC, 507 F.3d 205 (3d Cir. 2007).
- 35. Technological convergence refers to the ability to combine previously separate services, such as voice and data, using a single medium, such as a digital network. Market

integrated ventures and the dissolution of any "bright line" distinction. Notwithstanding evidence of significant convergence, the FCC has determined that it must treat these two services as mutually exclusive, despite the absence of any explicit statutory mandate to do so.³⁶

The FCC's attempt to create ex ante rules and regulations for Internet access provides a case study in the extreme challenges in using static service dichotomies to segment markets for purposes of identifying the proper scope of regulatory coverage. On two separate occasions, a reviewing court largely rejected efforts by the FCC to assert jurisdiction to establish rules that anticipate, sanction, and remedy anticompetitive and discriminatory ISP practices. The court held that the FCC lacked statutory authority to establish rules prohibiting discrimination and content-blocking by ISPs in light of the FCC's own determination that broadband Internet access constituted a largely unregulated information service instead of a regulated common carrier telecommunications service.³⁷

convergence refers to the ability of a venture to offer a combination of services previously only available if the venture operated multiple networks.

36. "The language and legislative history of [the Communications Act of 1996] indicate that the drafters... regarded telecommunications services and information services as mutually exclusive categories." Federal-State Joint Board on Universal Service, Report to Congress, 13 F.C.C. Rcd. 11,501, 11,522–23 (1998); see also Vonage Holdings Corp. v. Minn.Pub. Utils. Comm'n, 290 F. Supp. 2d 993, 994, 1000–01 (D. Minn. 2003) (applying the FCC's dichotomy). A major reviewing court does not see the need for the FCC to expect mutual exclusivity in the inventory of carrier services:

[E]ven if a regulatory regime is not so distinct from common carriage as to render it inconsistent with common carrier status, that hardly means it is so fundamentally common carriage as to render it inconsistent with private carrier status. In other words, common carriage is not all or nothing—there is a gray area in which although a given regulation might be applied to common carriers, the obligations imposed are not common carriage *per se*.

Cellco P'ship v. FCC, 700 F.3d 534, 547 (D.C. Cir. 2012).

37. Verizon v. FCC, 740 F.3d 623, 650 (D.C. Cir. 2014). The Verizon opinion states:

We think it obvious that the Commission would violate the Communications Act were it to regulate broadband providers as common carriers. Given the Commission's still-binding decision to classify broadband providers not as providers of "telecommunications services" but instead as providers of "information services," such treatment would run afoul of section 153(51): "A telecommunications carrier shall be treated as a common carrier under this [Act] only to the extent that it is engaged in providing telecommunications services."

Id. (citations omitted and alteration in original).

In 2010, the D.C. Circuit Court of Appeals first held that the FCC could not sanction Comcast for using software to disable peer-to-peer file sharing by subscribers.³⁸ Even though the company did not need to remedy congestion and had financial incentives to prevent subscribers from sharing movies they might otherwise lease from Comcast on a payper-view basis,³⁹ the court determined that the FCC had no express statutory authority to impose network neutrality obligations on information service providers.⁴⁰ The court also rejected the FCC's attempt to assert "ancillary jurisdiction"⁴¹ based on its duty to ensure that new technologies do not adversely impact regulated services.

In its review of the FCC's second attempt to establish jurisdiction over ISPs in 2014, the D.C. Circuit Court of Appeals again rejected as unlawful common carrier rules that prohibited discrimination and traffic blocking.⁴² However, the court affirmed the FCC's assertion that it could impose non-common carrier rules based on the FCC's reading of Section

- 38. Comcast Corp. v. FCC, 600 F.3d 642, 644 (D.C. Cir. 2010).
- 39. Id. at 660.
- 40. "On the record before us, we see 'no relationship whatever,' between the [FCC's network neutrality] *Order* and services subject to Commission regulation." *Id.* at 654 (citation omitted).
- 41. On numerous occasions, the FCC has attempted to claim ancillary jurisdiction when no direct statutory authority exists. For example, the FCC successfully invoked ancillary jurisdiction to regulate cable television even before the Commission received a statutory mandate to do so. United States v. Midwest Video Corp., 406 U.S. 649 (1972); United States v. Sw. Cable Co., 392 U.S. 157 (1968); see also Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984). The Supreme Court does not support deferral to the expertise of a regulating agency "if the intent of Congress is clear." Chevron, 467 U.S. at 842–43. If "Congress has not directly addressed the precise question at issue," and the agency has acted pursuant to an express or implied delegation of authority, the agency's statutory interpretation is entitled to deference, as long as it is reasonable. Id. at 843–44; see also United States v. Mead Corp., 533 U.S. 218, 226–27 (2001).
- 42. Verizon v. FCC, 740 F.3d 623, 628 (D.C. Cir. 2014). The court discusses the common carrier rules:

[E]ven though the Commission has general authority to regulate in this arena, it may not impose requirements that contravene express statutory mandates. Given that the Commission has chosen to classify broadband providers in a manner that exempts them from treatment as common carriers, the Communications Act expressly prohibits the Commission from nonetheless regulating them as such. Because the Commission has failed to establish that the anti-discrimination and anti-blocking rules do not impose *per se* common carrier obligations, we vacate those portions of the *Open Internet Order*.

706 in the Communications Act,⁴³ which authorizes the FCC to assess the availability of nationwide access to advanced services, such as the Internet, and to take steps to promote more access if market forces prove inadequate.⁴⁴

Rather than act on a reviewing court's invitation to impose non-common carrier network neutrality rules, the Democratic majority of the FCC opted for clearer and more muscular ex ante rules on remand. In a controversial decision already subject to appeal,⁴⁵ the FCC opted to reclassify elements of Internet access as a Title II regulated common carrier service⁴⁶ with no distinction between wireline and wireless ISPs.⁴⁷ On appeal, the FCC will need to demonstrate that its reclassification

- 43. 47 U.S.C. § 1302 (2012).
- 44. Verizon, 740 F.3d at 628. The opinion discusses the Telecommunications Act: [T]he Commission has established that section 706 of the Telecommunications Act of 1996 vests it with affirmative authority to enact measures encouraging the deployment of broadband infrastructure. The Commission, we further hold, has reasonably interpreted section 706 to empower it to promulgate rules governing broadband providers' treatment of Internet traffic, and its justification for the specific rules at issue here—that they will preserve and facilitate the "virtuous circle" of innovation that has driven the explosive growth of the Internet—is reasonable and supported by substantial evidence.

Id.

- 45. *In re* Protecting and Promoting the Open Internet, GN Docket No. 14-28. Order Denying Stay Petitions, 30 FCC Rcd. 4681 (2015); Joint Brief for Petitioners USTelecom, NCTA, CTIA, ACA, WISPA, AT&T, and CenturyLink, United States Telecom Ass'n. v. FCC, No. 15-1063 (and consolidated cases), (D.C. Cir. July 30, 2015), *available at* http://www.ustelecom.org/sites/default/files/documents/Joint%20 Brief%20of%20Petitioners%20073015.pdf; Motion for Stay or Expedition, United States Telecom Ass'n v. FCC, No. 15-1063 (and consolidated cases), (D.C. Cir. May 15, 2015), *available at* http://www.fhhlaw.com/1501063.net%20neutrality%20stay%20 request.2015.05.13.PDF.
- 46. Protecting and Promoting the Open Internet, GN Docket No. 14-28, Report and Order on Remand, Declaratory Ruling, and Order, F.C.C. 15-24, ¶ 25 (Mar. 12, 2015), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0403/FCC-15-24A1.pdf [hereinafter 2015 Open Internet Order].
- 47. The FCC previously had imposed less stringent rules on wireless carriers in light of spectrum use, greater potential for congestion and recent entry in broadband markets. The 2015 Open Internet Order treats wireless ISPs no differently than wireline ISPs:

Today, we find that changes in the mobile broadband marketplace warrant a revised approach. We find that the mobile broadband marketplace has evolved, and ... conclude that it would benefit the millions of consumers who access the Internet on mobile devices to apply the same set of Internet openness protections to both fixed and mobile networks.

decision resulted from rational decision-making based on a complete record evidencing substantially changed circumstances occurring in the ten years running from 2005, when the FCC opted to classify Internet access as an information service.⁴⁸

The FCC emphasized the need for narrowly crafted rules designed to "prevent specific practices we know are harmful to Internet openness—blocking, throttling, and paid prioritization—as well as a strong standard of conduct designed to prevent the deployment of new [anticompetitive] practices that would harm Internet openness."⁴⁹ The FCC highlighted that ISPs have both the incentive and ability to leverage access in ways that can thwart the virtuous cycle of innovation and investment in the Internet ecosystem:

The key insight of the virtuous cycle is that broadband providers have both the incentive and the ability to act as gatekeepers standing between edge providers and consumers. As gatekeepers, they can block access altogether; they can target competitors, including competitors to their own video services; and they can extract unfair tolls.⁵⁰

The FCC emphasized that, while subjecting ISPs to Title II common carrier oversight, the FCC will use its statutory authority quite narrowly as evidenced by the decision to forbear⁵¹ from applying "27 provisions of Title II of the Communications Act, and over 700 FCC rules and regulations."⁵² The FCC recognized the need to explain how the new

The [Supreme] Court's application of [the] *Chevron* test in *Brand X* makes clear our delegated authority to revisit our prior interpretation of ambiguous statutory terms and reclassify broadband Internet access service as a telecommunications service. . . . Where a term in the Act "admit[s] of two or more reasonable ordinary usages, the Commission's choice of one of them is entitled to deference."

- *Id.* ¶ 332 (third alteration in original).
 - 49. *Id.* ¶ 4.
 - 50. *Id.* ¶ 20.
- 51. 47 U.S.C § 160(a) (2012) authorizes the FCC to streamline the scope of its Title II oversight by forbearing from applying many common carrier requirements.
- 52. 2015 Open Internet Order, *supra* note 46, ¶ 5. The major provisions of Title II that the Order will apply are: nondiscrimination and no unjust and unreasonable practices under Sections 201 and 202; authority to investigate complaints and resolve disputes under section 208 and related enforcement provisions, specifically sections 206, 207, 209, 216 and 217; protection of consumer privacy under Section 222; fair access to poles and conduits under Section 224, protection of people with disabilities under Sections 225 and

^{48. &}quot;It is also well settled that we may reconsider, on reasonable grounds, the Commission's earlier application of the ambiguous statutory definitions of 'telecommunications service' and 'information service." Id. ¶ 334.

requirements satisfy pressing needs, but in the most narrow and well-calibrated matter in light of virulent opposition from most ISPs and the two Republican Commissioners. The Order reports that:

[T]here will be fewer sections of Title II applied than have been applied to Commercial Mobile Radio Service (CMRS), [the regulatory classification for wireless voice telecommunications service] where Congress expressly required the application of Sections 201, 202, and 208, and permitted the Commission to forbear from others. In fact, Title II has never been applied in such a focused way.⁵³

In addition to the specific prohibitions on blocking, throttling, and paid prioritization, the FCC will consider on a case-by-case basis whether an ISP has engaged in a practice "that unreasonably interfere[s] with or unreasonably disadvantage[s] the ability of consumers to reach the Internet content, services, and applications of their choosing or of edge providers to access consumers using the Internet." The FCC opted to apply this more open-ended evaluative standard rather than the strict legal standard of prohibiting commercially unreasonable practices, which it had proposed in the 2014 Open Internet NPRM. The FCC concluded that it should "adopt a governing standard that looks to whether consumers or edge providers face unreasonable interference or unreasonable disadvantages, and makes clear that the standard is not limited to whether a practice is agreeable to commercial parties." 55

The FCC reported that it will use the "no-unreasonable interference/disadvantage" standard to evaluate controversial subjects, including the lawfulness of "sponsored data" arrangements where an ISP accepts advertiser payment in exchange for an agreement not to meter and debit the downstream traffic delivery. The FCC also will use this standard to consider the lawfulness of data caps that tier service by the amount of

^{255;} and providing universal funding for broadband service, but not the requirement to collect contributions to such funding through partial application of Section 254.

^{53.} *Id.* ¶ 38.

^{54.} *Id.* ¶ 135.

^{55.} Id. ¶ 150. The FCC identified a number of factors it will consider in future evaluations. These include an assessment whether a practice allows end-user control and is consistent with promoting consumer choice, its competitive effect, whether consumers and opportunities for free expression are promoted or harmed, the effect on innovation, investment, or broadband deployment, whether the practice hiders the ability of end users or edge providers to use broadband access to communicate with each other and whether a practice conforms to best practices and technical standards adopted by open, broadly representative, and independent Internet engineering, governance initiatives, or standards-setting organization. Id. ¶¶ 139–45.

permissible downloading volume. In both instances, the FCC sees the potential for an ISP to create artificial scarcity to extract higher revenues, to favor corporate affiliates and third parties willing to pay a surcharge, and to disadvantage competitors, e.g., using data caps to harm new vendors of video programming that compete with an ISP service. On the other hand, the FCC recognizes that service tiering can promote innovation and the creation of new, customized services.

The Order expresses the view that reclassifying Internet access as a telecommunications service, combined with a secondary reference to Section 706 of the Telecommunications Act of 1996 and a tertiary reference to Title III (which addresses the use of radio spectrum and applies common carriage regulation to wireless voice carriers), provides the strongest legal foundation for the Open Internet regulations.⁵⁶ By using the stronger Title II foundation, the FCC asserts that it can not only establish a clear and unconditional statutory authority, but can also use the flexibility contained in Title II to forbear from applying most common carrier requirements not relevant to modern broadband service, just as it does for wireless telephone service. However, with a Title II regulatory foundation, the Order makes it possible for the FCC to create an Open Internet conduct standard that prohibits ISPs from harming consumers or edge providers with the use of enforcement tools available to sanction violations.⁵⁷

The FCC's decision to treat aspects of Internet access as common carriage has triggered a third judicial appeal and review of whether such reclassification constitutes a reasonable decision based on a complete evidentiary record. By opting for reclassification, the FCC underscores the riskiness in imposing ex ante regulation without an explicit legislative mandate.

C. DIFFICULTIES IN APPLYING EX ANTE REGULATION

An NRA that is legally obligated to apply ex ante regulation using service definitions will likely experience great difficulty and require extraordinary finesse in applying the regulations. For example, the FCC's

^{56. &}quot;We ground the open Internet rules we adopt today in multiple sources of legal authority—section 706, Title II, and Title III of the Communications Act." Id. ¶ 273.

^{57.} With an eye toward providing timely, certain and flexible enforcement of its open Internet rules, the FCC announced its intention to use advisory opinions similar to those issued by the Department of Justice's Antitrust Division. "Advisory opinions will enable companies to seek guidance on the propriety of certain open Internet practices before implementing them, enabling them to be proactive about compliance and avoid enforcement actions later." Id. ¶ 229.

only option to impose clear common carrier duties on ISPs is to reclassify them as telecommunications service providers, either unilaterally or in light of new legislation.⁵⁸ The former has triggered substantial opposition and litigation while the latter has little chance of occurring.⁵⁹ Now, the FCC faces the challenge of creating ex ante rules that will be effective. The FCC appears willing to accord ISPs flexibility to engage in commercial negotiations that will provide specialized, arguably "better than best" routing options for single ventures, but without so balkanizing and dichotomizing the Internet into fast and slow lanes, with fast lanes available only to ventures with deep pockets, leaving slow lanes to ventures (including most startups) lacking the financial resources to pay surcharges.

By creating and applying mutually exclusive service categories, the FCC faces a regulatory quandary. Having determined that all forms of broadband access constitute information services, it abandoned the option of applying limited, calibrated, and streamlined common carrier rules to ISPs even though it has determined that the public interest warrants such safeguards. Upon determining that ISPs have both the incentive and ability to engage in anticompetitive practices, the FCC has opted for the controversial but clearer option of reclassifying Internet access as subject to Title II ex ante oversight. The alternative to re-classification would require shoehorning lawful regulations that are effective, but do not impose on ISPs common carrier, telecommunications service regulations that are impermissible in the absence of re-classification.

The FCC's decision to opt for regulatory reclassification implies that it did not think it could prevent unreasonable blockage and discrimination by ISPs under their prior classification of broadband Internet access as a largely unregulated information service. The FCC had at its disposal

^{58.} See Verizon v. FCC, 740 F.3d 623, 628 (D.C. Cir. 2014). The court states: [E]ven though the Commission has general authority to regulate in this arena, it may not impose requirements that contravene express statutory mandates. Given that the Commission has chosen to classify broadband providers in a manner that exempts them from treatment as common carriers, the Communications Act expressly prohibits the Commission from nonetheless regulating them as such.

Id

^{59.} On the contrary, a "U.S. lawmaker has introduced legislation that would prohibit the Federal Communications Commission from reclassifying broadband as a common-carrier utility, a move many net neutrality advocates have called for." Grant Gross, *Bill Would Prohibit FCC from Reclassifying Broadband as Utility*, PC WORLD (May 29, 2014), http://www.pcworld.com/article/2303080/bill-would-prohibit-fcc-from-reclassifying-broadband-as-utility.html.

precedent from the D.C. Circuit Court of Appeals supporting the implementation of significant ex ante regulation, so long as it did not rise to the level of common carriage oversight when considered in aggregate.⁶⁰ In *Cellco Partnership v. FCC* the court approved the FCC's decision to require wireless carriers to negotiate commercial "roaming agreements,"⁶¹ making it possible for subscribers located outside their local service area to access Internet services via another carrier.⁶² The court reasoned that even though wireless data access constitutes an information service provided by private carriers, the FCC can impose reasonable, non-common carrier duties. The court noted that the FCC only required wireless carriers to negotiate commercially reasonable terms, meaning that terms and conditions need not be uniform, and roaming need not even be offered, if technically infeasible.⁶³

60. See Verizon v. FCC, 740 F.3d at 642. In *Verizon*, the court reasons: We think it quite reasonable to believe that Congress contemplated that the Commission would regulate this [broadband] industry, as the agency had in the past, and the scope of any authority granted to it by section 706(b)—limited, as it is, both by the boundaries of the Commission's subject matter jurisdiction and the requirement that any regulation be tailored to the specific statutory goal of accelerating broadband deployment—is not so broad that we might hesitate to think that Congress could have intended such a delegation.

Ιd

- 61. "Roaming occurs when wireless subscribers travel outside the range of their own carrier's network and use another carrier's network infrastructure to make a call." Cellco P'ship v. FCC, 700 F.3d 534, 537 (D.C. Cir. 2012).
- 62. The FCC previously imposed roaming requirements on cellular radio telephone carriers providing voice and data services:

We codify the automatic roaming obligations of CMRS carriers into a rule requiring that they provide automatic roaming to any requesting technologically compatible CMRS carrier outside of the requesting CMRS carrier's home market on reasonable and nondiscriminatory terms and conditions. This rule applies to CMRS carriers that offer real-time, two-way switched voice or data service over digital network that is interconnected with the public switched network and utilize an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. We also note that codification of an automatic roaming obligation gives CMRS carriers another avenue to redress roaming disputes, benefiting mobile telephony subscribers.

Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, Report and Order and Further Notice of Proposed Rulemaking, 22 F.C.C. Rcd. 15,817, 15,841 (2007).

63. Cellco Pship, 700 F.3d at 548. The court describes the FCC rule as follows:

D. FALSE NEGATIVES AND POSITIVES IN EX ANTE NETWORK NEUTRALITY RULES

Ex ante rules imposing network neutrality requirements have the potential to trigger false positives (i.e., a determination that a rule violation has occurred, despite the absence of harm to consumers and competitors), as well as false negatives (i.e., a failure to make a determination detecting and remedying conduct that violates a rule and causes harm). A false positive would occur if the FCC sanctioned an ISP for engaging in price and quality of service discrimination that enhanced consumer welfare and accrued revenues without adversely affecting the Internet access marketplace, e.g., offering an enhanced filtering system to guard against excessive and unsolicited content, commonly referred to as spam.

The FCC previously attempted to avoid false positives by exempting reasonable network management and specialized networks from ex ante Open Internet rules.⁶⁴ However, in carving out exemptions for "good

The rule itself actually spells out sixteen different factors plus a catchall "other special or extenuating circumstances" factor that the Commission must take into account in evaluating whether a proffered roaming agreement is commercially reasonable. The Commission has thus built into the "commercially reasonable" standard considerable flexibility for providers to respond to the competitive forces at play in the mobile-data market. Although the rule obligates Verizon to come to the table and offer a roaming agreement where technically feasible, the "commercially reasonable" standard largely leaves the terms of that agreement up for negotiation.

Id. (citing Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, Second Report and Order, 26 F.C.C. Rcd. 5411, 5452–53 (2011)).

64. See 2010 Open Internet Order, supra note 6, at 17,951 n.48, affd in part, vacated and remanded in part sub nom. Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014). The Order states:

The open Internet rules we adopt today expressly provide for and define "reasonable network management" in order to provide greater clarity to broadband providers, network equipment providers, and Internet end users and edge providers regarding the types of network management practices that are consistent with open Internet protections.

Id. The Order continues by responding to commenter concerns:

We agree with the many commenters who advocate that the Commission exercise its authority to closely monitor and proceed incrementally with respect to specialized services, rather than adopting policies specific to such services at this time. We will carefully observe market developments to verify that specialized services promote

discrimination," the FCC risks false negatives. For example, an ISP intent on favoring its video content services, or that of an unaffiliated venture paying a surcharge, might claim that it engaged in reasonable network management to prevent congestion caused by subscribers with the largest consumption of carrier services.⁶⁵

Ostensibly to promote fair access to, and sharing of bandwidth among all subscribers, a Retail ISP might slow down and degrade traffic based on the identity of either the source of traffic, or the intended recipient. The ISP might justify slowing inbound traffic on grounds that the upstream carrier has generated "too much" traffic in light of the downstream capacity it had secured from the ISP. The Retail ISP also could throttle, or degrade traffic delivery to one of its subscribers on grounds that he or she exceeded a monthly downloading allotment available for the service tier selected by the subscriber.⁶⁶ In doing so, an ISP could tilt the competitive playing field in its favor for such services as consumer access to video programming. Subscribers to Netflix and users of legally questionable peer-to-peer file sharing services, such as BitTorrent,⁶⁷ would experience degraded or blocked service unless they shifted to a more expensive service offering faster download speeds and a higher monthly allotment of permissible downloading volume. Worst yet, upstream ISPs

investment, innovation, competition, and end-user benefits without undermining or threatening the open Internet.

Id. at 17,965–66 (citations omitted).

65. ISPs have referred to such high volume users as "bandwidth hogs," despite the option of tiering service and raising rates. "Usage-based pricing thus can temper the activities of "bandwidth hogs" whose heavy consumption could impose substantial congestion costs on their neighbors." Daniel A. Lyons, *Internet Policy's Next Frontier: Usage-Based Broadband Pricing*, 66 FED. COMM. L.J. 1, 32 (2013).

66. "Federal officials on Tuesday sued AT&T, the nation's second-largest cellular carrier, for allegedly deceiving millions of customers by selling them supposedly 'unlimited' data plans that the company later 'throttled' by slowing Internet speeds when customers surfed the Web too much." Brian Fung & Craig Timberg, *The FTC is Suing AT&T for Throttling Its Unlimited Data Customers*, WASH. POST (Oct. 28, 2014), http://www.washingtonpost.com/blogs/the-switch/wp/2014/10/28/the-ftc-is-suing-att-for-throttling-its-unlimited-data-customers/; *see also* Press Release, Fed. Trade Comm'n, FTC Says AT&T Has Misled Millions of Consumers with 'Unlimited' Data Promises (Oct. 28, 2014), *available at* http://www.ftc.gov/news-events/press-releases/2014/10/ftc-says-att-has-misled-millions-consumers-unlimited-data.

67. "Each computer in a BitTorrent 'swarm' is able to download content from the other computers in the swarm, and in turn each computer also makes available content for those same peers to download, all via TCP connections." Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C. Rcd. 13,028, 13,029 (2008), vacated, Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010).

and content providers as well as end users might not know why service degradation has occurred, because the Retail ISP could obscure its traffic prioritization and degradation tactics.⁶⁸

Bear in mind that when the FCC investigated Comcast for allegedly meddling with subscriber's traffic leading to sanctions and litigation that overturned the FCC's first set of network neutrality regulations, Comcast initially claimed that it had nothing to do with the problem.⁶⁹ The company later characterized its actions as lawful network management needed to abate congestion.⁷⁰ Even though the FCC failed to establish rules for lawfully sanctioning Comcast, they compiled an evidentiary

68. For example, the FCC determined that retail broadband subscribers of Comcast broadband service experienced service degradation and disruption without explanation from the company which in fact caused the problems to occur. The FCC took the position:

The record leaves no doubt that Comcast's network management practices discriminate among applications and protocols rather than treating all equally. To reiterate: Comcast has deployed equipment across its networks that monitors its customers' TCP connections using deep packet inspection to determine how many connections are peer-to-peer uploads. When Comcast judges that there are too many peer-to-peer uploads in a given area, Comcast's equipment terminates some of those connections by sending RST packets. In other words, Comcast determines how it will route some connections based not on their destinations but on their contents; in laymen's terms, Comcast opens its customers' mail because it wants to deliver mail not based on the address or type of stamp on the envelope but on the type of letter contained therein.

Id. at 13,500–01 (citations omitted).

Comcast's claim that it has always disclosed its network management practices to its customers is simply untrue. . . . And although Comcast eventually disclosed some elements of its network management practices to customers, Comcast's first reaction to allegations of discriminatory treatment was not honesty, but at best misdirection and obfuscation. If Comcast actually believed its practices were reasonable, it should not have behaved in this manner.

Id. at 13,059.

69. The FCC's opinion further states:

Comcast subscribers began to notice that they had problems using BitTorrent and similar technologies over their Comcast broadband connections. Last year, their complaints began to receive widespread attention in the press. When first confronted with these press reports, Comcast—the nation's second largest provider of broadband Internet access services—misleadingly disclaimed any responsibility for the customers' problems.

Id. at 13,030.

70. *Id.* at 13,031–32.

record conclusively showing that Comcast had no legitimate reason to interfere with subscribers' video content downloading. The FCC determined that Comcast had never experienced network congestion despite having resorted to bandwidth conservation tactics designed to abate congestion, even as it inconvenienced certain subscriber groups.⁷¹ In this instance the FCC identified the need for ex ante safeguards, but lacked statutory authority to remedy a true positive and not a false positive that network neutrality opponents consider more likely.

Regulators risk both false positives and false negatives, because multiple carriers, with increasingly divergent motivations, participate in the complete link between content sources and consumers. Rather than share a single goal of providing the best possible service, ISPs have to consider how they can accommodate ever increasing demand for bandwidth and faster transmission speeds while also recouping costs and profiting from providing service. An ISP serving end users might balk at satisfying the increased capacity requirements of upstream content sources without a commensurate increase in financial compensation. If the parties cannot reach closure on new interconnection and compensation arrangements, the potential exists for congestion to degrade service quality. Regulatory authorities may lack the tools for conducting a forensic investigation whether such congestion naturally occurred in light of vastly more traffic, or was artificially generated by an ISP seeking greater negotiation leverage.

Two service options, proposed or offered by one or more ISPs, provide examples where the absence of ex ante safeguards made it possible for congestion and degraded service to occur without clear evidence of the cause.

In 2012, Comcast announced that it would exempt from monthly caps on retail broadband data carriage traffic, including full length movies, content that Comcast delivers to its subscribers who also have a paid

Id. at 13,032 (alteration in original).

^{71.} The FCC found in its analysis of Comcast's network congestion:

Comcast claimed that it sent RST packet "only during periods of peak network congestion" and "only... during periods of heavy network traffic." Evidence in the record, however, contradicts this claim... Comcast changed its story yet again, and admitted that its "current P2P management is triggered... regardless of the level of overall network congestion at th[e] time, and regardless of the time of day."

monthly subscription to Xbox video game online services.⁷² Comcast claimed that its delivery of such traffic used specialized network routing and not the Internet thereby qualifying such traffic for exemption from network neutrality rules.⁷³

The FCC readily could create a false positive by rejecting the specialized network routing rationale on grounds that this option violates network neutrality policy even though the traffic arguably traversed private broadband networks and not the "public" Internet. However, the FCC just as readily could have accepted the network exemption rationale, even though other stakeholders could persuasively claim a false negative by showing that Comcast simply tailored the service to appear specialized even though the traffic would traverse the same network facilities used by Comcast to switch and route "plain vanilla" Internet traffic.⁷⁴

A second example evidences the FCC's quandary when a particular source of content agrees to pay an ISP to route specific bitstreams without metering the traffic and debiting a specific subscriber's monthly data traffic allotment. AT&T has proposed such a "sponsored data" plan for reaching wireless subscribers reluctant to watch advertisements and other

72. See Joel Hruska, The New Comcast Xbox Xfinity App is the First Nail in Net Neutrality's Coffin, EXTREMETECH (Mar. 28, 2012), http://www.extremetech.com/extreme/124041-the-new-comcast-xbox-xfinity-app-is-the-first-nail-in-net-neutralitys-coffin. Kruska discusses the relationship between Comcast and Microsoft Xbox users:

Comcast recently announced that Xbox users who subscribe to the company's Xfinity TV service will now be able to access Xfinity On Demand content on their Xbox 360s—and that doing so won't count against your 250GB data cap. The cable provider's new policy has touched off a firestorm of criticism from net neutrality advocates, who point to the decision as proof of just how toothless the FCC's Open Internet rules are.

Id.; see also Amy Schatz, Why an Apple-Comcast Deal Stirs Net Neutrality Concerns, RE/CODE (Mar. 25, 2014), http://recode.net/2014/03/25/why-an-apple-comcast-deal-stirs-net-neutrality-concerns/.

73. "Comcast says streaming its video on demand service via the Xbox won't count against its monthly caps because the traffic doesn't go over the public Internet." Stacey Higginbotham, *The Technical and Legal Realities of Comcast's Xbox Cap Spat*, GIGAOM (Mar. 27, 2012), http://gigaom.com/2012/03/27/the-technical-and-legal-realities-of-comcasts-xbox-cap-spat/.

74. "What Comcast has done through its agreement with Microsoft is to create a specialized path through the public Internet. By conceding to Comcast's demands over authentication and whatever else, Microsoft has extended Comcast's network onto its device and created a fast lane over which Comcast bits can travel." *Id.*

content that would quickly deplete monthly data traffic allotments.⁷⁵ If the FCC were to permit this type of service sponsorship, opponents would claim a false negative on grounds that the subsidy constitutes a type of "pay to play" preference in violation of network neutrality rules. On the other hand, AT&T and willing sponsors would claim a false positive if the FCC were to deem the option an unfair preference constituting unreasonable price discrimination and a violation of network neutrality policy. Arguably, an advertiser subsidy promotes wider overall Internet access, particularly by previously underrepresented consumers.

E. DIFFICULTIES IN CREATING AND ENFORCING EX ANTE REGULATIONS TO ISPS

Even with a conscientious and well-trained staff, an NRA may lack the technical competency that qualifies it to make "expert" judgments on the commercial and technological reasonableness of a new pricing and traffic routing initiative. Ex ante regulations require an NRA to anticipate future problems and to identify potential causes for conflicts and harms to consumers. Typically an NRA becomes aware of a problem only after it has become acute and consumers complain that "mission critical" bitstreams of "must see" video have become degraded. The NRA must undertake a forensic investigation to identify the technical reasons for service degradation as well as who, or what caused the problem. Predictably stakeholders will dispute cause and effect thereby forcing the NRA to assume twin roles as fact finder and adjudicator.

NRAs have achieved mixed success in crafting regulations that anticipate problems and provide appropriate remedies.⁷⁶ Even if they

^{75.} See Brian X. Chen, AT&T Allows Advertisers to Sponsor Mobile Data, N.Y. TIMES (Jan. 6, 2014), http://bits.blogs.nytimes.com/2014/01/06/att-allows-advertisers-to-sponsor-mobile-data. The N.Y. Times reported on sponsored data streams:

Say you want to watch a trailer for "The Wolf of Wall Street" on your smartphone. Why should you pay for the data required to display it when you are essentially viewing an advertisement? That's the idea behind a program that AT&T calls Sponsored Data. Businesses working with AT&T can pay for the data that is used to consume their content or services so that it does not show up on a customer's phone bill.

Id.

^{76.} See, e.g., Douglas H. Ginsburg, Synthetic Competition, 16 MEDIA L. & POL'Y 1, 11–15 (2006); Howard A. Shelanski, Adjusting Regulation to Competition: Toward a New Model for U.S. Telecommunications Policy, 24 YALE J. ON REG. 55 (2007); Adam Thierer, Technopanics, Threat Inflation, and the Danger of an Information Technology Precautionary Principle, 14 MINN. J.L. SCI. & TECH. 309, 385–86 (2013).

succeed in achieving a fair, "rough justice" process, NRAs have no certainty that they can "future proof" the rules so that they remain viable and effective in light of technological change as well as the convergence and robust change in markets. NRAs will attempt to fashion flexible rules that can respond to changed circumstances, but they may not be able to keep up with technological and marketplace change, or they may generate too much ambiguity in rules ostensibly designed to promote flexibility.

Alternatively NRAs may strive for certainty at the risk of creating inflexible rules and static definitions. Specificity helps an NRA draw a bright line distinction between regulated and unregulated services, but such a dichotomy may not survive technological innovations and market convergence that create incentives for ventures to offer an inventory of both regulated and unregulated services.

Additionally NRAs may experience difficulty in establishing the cause and responsible party for a harmful outcome. Internet-mediated services present a particularly vexing problem for NRA forensic investigations in light of the fact that numerous network operators typically participate in the switching and routing of content from source to end user. When retail broadband service subscribers experience frozen, blurred or disrupted service, they cannot readily determine the cause of the problem and the responsible party.

For example, in early 2014, many Netflix customers experienced degraded service when attempting to download and immediately view "streaming" video content.⁷⁷ Netflix asserted that ISPs such as Comcast and Verizon deliberately caused congestion, by refusing to make timely network capacity upgrades, or by rationing plentiful transmission, switching, and port capacity in ways that increased the probability of congestion for Netflix traffic alone. ISPs rejected this scenario and suggested that Netflix should blame itself for releasing an entire season's worth of a program at once instead of the conventional weekly release of just one episode.⁷⁸ Consumers and regulators alike may find it difficult to

^{77.} See Drew Fitzgerald & Shalini Ramachandran, Netflix-Traffic Feud Leads to Video Slowdown, WALL ST. J. (Feb. 18, 2014), http://online.wsj.com/news/articles/SB10 001424052702304899704579391223249896550.

^{78. &}quot;The hit political drama series of Netflix kept about 60,000 subscribers glued onto their screens on Valentine's Day to watch the whole 13-hour production. However, the shifting behavior of consumers to watch videos on demand over the Internet is causing some clogged pipes on the information highway." Randell Suba, Netflix-Verizon Standoff: Only Net Neutrality Can Now Stop Video Slowdown, TECH TIMES (Feb. 23, 2014), http://www.techtimes.com/articles/3670/20140223/netflix-verizon-standoff-only-net-neutrality-can-now-stop-video-slowdown.htm.

identify the cause of congestion and degraded service. Sophisticated network tracking techniques are needed to identify whether congestion was created artificially, or the result of unanticipated peak demand. Because many networks participate in the carriage of traffic from source to destination, NRAs may not easily identify the network operating the weakest link with the lowest available bandwidth and switching capacity that can cause end users to experience delays in downloads and even dropped packets of content.

F. INEFFICIENCY AND DEFECTIVE OUTCOMES OF EX ANTE RULEMAKING

Before an NRA establishes final and binding rules, it typically initiates a process to compile a complete evidentiary record by inviting any interested parties to participate. This process, often termed a rulemaking⁷⁹ or public consultation,⁸⁰ takes significant time and effort. Given the stakes, the most comprehensive filings come from ventures likely to be adversely affected by new rules. These stakeholders often incur sizeable expenses in retaining the services of lawyers, economists and other experts to assist in the preparation of document that will become part of the NRA's record. Often the work product of these experts masquerade as scientific fact finding, research and analysis, despite being no more than sponsored advocacy.⁸¹

Stakeholders have both great incentives to delay the onset of new burdens and many ways to achieve such outcomes including litigation, lobbying the legislature and using procedural tactics. Additionally, parties anticipating a bad outcome will attempt to reframe the issues in a proceeding as less about creating safeguards and more about misguided efforts that will harm consumers by creating regulatory uncertainty and disincentives for risk taking and new infrastructure investment. Stakeholders opposed to ex ante regulation will attempt to persuade the legislature to preempt or constrain NRA initiatives on grounds that rules

^{79.} See, e.g., 2014 Open Internet NPRM, supra note 6.

^{80.} See, e.g., Press Release, Eur. Comm'n, Digital Agenda: Commission Opens Public Consultation on Preservation of the Open Internet (Net Neutrality) (July 23, 2012), available at http://ec.europa.eu/digital-agenda/en/news/commission-opens-public-consultation-preservation-open-internet-neutrality.

^{81.} See Rob Frieden, Case Studies in Abandoned Empiricism and the Lack of Peer Review at the Federal Communications Commission, 8 J. ON TELECOMM. & HIGH TECH. L. 277 (2010).

impose unnecessary costs to both service providers and consumers.⁸² The process can easily get sidetracked into a dispute about the robustness and competitiveness of the marketplace and the virtue in maintaining the least amount of government intrusion in the lives of consumers and corporations.

G. THE INABILITY TO COMBINE EX ANTE AND EX POST FUNCTIONS IN SOME COUNTRIES

Some national governments foreclose the option for an NRA to use both ex ante and ex post regulation. In the United States, the Communications Act of 1934, as amended,⁸³ requires the FCC to make a threshold determination of whether a particular service fits within a definition that permits ex ante regulation, or not. Such a definition-driven regulatory process has forced the FCC to reclassify broadband internet access as a Title II telecommunications service, despite having previously determined that all forms of broadband Internet access constitute largely unregulated information services.⁸⁴

The FCC's determination that telecommunications services and information services are mutually exclusive makes it nearly impossible for it to apply network neutrality rules to providers of information services. Having determined that Internet-mediated service is not the functional equivalent of a telecommunications service, the FCC largely abandoned

^{82.} See C. Scott Hemphill, Network Neutrality and the False Promise of Zero-Price Regulation, 25 YALE J. ON REG. 135, 148, 152–59 (2008).

^{83.} The Communications Act imposes different regulatory requirements for common carriers in Title II, 47 U.S.C. §§ 201–276 (2012), broadcasters in Title III, 47 U.S.C. §§ 301–399b (2012), and cable operators in Title VI, 47 U.S.C. §§ 521–573 (2012). See also supra note 36.

^{84.} Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, Declaratory Ruling, 22 F.C.C. Rcd. 5901 (2007) (broadband via wireless smartphones and tablets deemed an information service); United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of Broadband Over Power Line Internet Access Service as an Information Service, Memorandum Opinion and Order, 21 F.C.C. Rcd. 13,281 (2006) (broadband via the electricity grid deemed an information service); Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, 17 F.C.C. Rcd. 4798, 4821 (2002), aff'd sub nom. Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 977–78 (2005) (affirming the FCC decision to apply the information service classification to broadband Internet access); Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking, 20 F.C.C. Rcd. 14,853, 14,863 (2005), petition for rev. den., Time Warner Telecom, Inc. v. FCC, 507 F.3d 205 (3d Cir. 2007) (FCC classifying wire-based broadband Internet access as an information service).

the option of applying ex ante regulation. It also may have given up the option of applying ex post, adjudicatory remedies. Reviewing courts have already reversed the FCC's attempts to impose ex ante regulations and sanctions for violations of those regulations. Going forward, a similar legal reasoning can extend to ex post remedies of any sort based on the premise that if the FCC cannot assert jurisdiction—willingly or otherwise—adjuratory bodies similarly should not assert jurisdiction over an apparently well-performing and self-regulating market.

Nations in the European Union combine a market power assessment with the option of applying ex ante safeguards on an as needed basis.⁸⁵ Unlike the process for applying regulation types based on service classification, EU nations assess the need for ex ante regulation based on whether an operator, or group possesses significant market power. Ex ante regulation applies only for market segments where the lack of competition makes it possible for one or more ventures to accrue significant market power. Stakeholders may disagree on the how to define and segment the telecommunications marketplace. They can also dispute the definition and calculation of whether market power exists. However, they cannot secure a court order declaring as off limits the option for an NRA to apply ex ante rules and regulations where necessary.

III. STRENGTHS AND WEAKNESSES IN EX POST REMEDIES

Ex post remedies apply when an aggrieved party can supply evidence supporting claims that a particular venture caused specific harm in violation of one or more laws enacted to promote full and fair competition.

The European approach to telecommunications regulation provides a framework for encouraging diversity through market entry. If a national regulator finds that a firm possesses Significant Market Power (SMP) within a defined market, it may impose obligations including transparency, non-discrimination, accounting separation, access to and use of specific network facilities, and price controls. If there is no SMP, such obligations must be rolled back. The current review of the E.U. Framework Directive indicates that European regulators continue to be mindful of diversity as an important component of a healthy communications system. It proposes that regulators will focus their resources on the market sectors in which the dominance of incumbents has been least challenged.

^{85.} See Pierre de Vries, The Resilience Principles: A Framework for New ICT Governance, 9 J. ON TELECOMM. & HIGH TECH. L. 137, 170 (2011). de Vries discusses the European approach:

The ex post remedy applies to real and proven harms. While the specificity of harms largely prevents awarding damages and prescribing remedies for false positives, the potential for false negatives is significant. Ex post adjudication works best when an aggrieved party can identify the cause of harm and quantify it. For violations of network neutrality, aggrieved parties may not easily identify the cause of traffic congestion that has resulted in service outages, or degraded network performance. Even if it can identify the culprit, an aggrieved party may not be able to readily quantify the damages incurred in terms of lost subscriptions, revenues and profits. For example, even if a party proved that an ISP deliberately degraded service, it might have difficulty quantifying how many existing customers terminated service and how many prospective customers opted not to take service as a result. Existing customers may opt out of service, a process commonly referred to as churn, for a number of reasons. A venture seeking damages from an ISP could not readily prove that ISP meddling with bitstreams constituted the primary and proximate cause for the nonrenewal.

The cost of ex post remedies and the likely time it takes to secure relief can have a potentially debilitating impact even for ventures that can prove causation and damages. For startup ventures, the risk from biased networks lies in both higher costs for a delivery of service to end users, and strategies that tilt the competitive playing field in favor of a surcharge payer, or affiliate of the ISP providing the last mile of content delivery. New ventures without deep pockets to pay surcharges may fail to achieve a fair market trial based simply on having been targeted for higher content delivery payments. Proving such targeting may require a comprehensive and possibly expensive reverse forensic investigation to determine why a market entrant's customers are suddenly experiencing inferior service that can be remedied only with payment of a surcharge.

A. LIMITED OR ELIMINATED EX POST REMEDIES

In the United States, the Supreme Court has expressed growing reluctance to provide a judicial forum for conflict resolution if the expert regulatory agency, with the power to impose ex ante rules, has opted for deregulation. The absence of an ex post, antitrust remedy has the consequences of providing no place for aggrieved parties to seek relief once the FCC has determined that it lacks jurisdiction, or considers

competition sufficiently robust to abandon oversight.⁸⁶ The FCC has reestablished a forum for conflict resolution by resorting to a questionable reassessment of marketplace conditions finding that self-regulation insufficient to protect consumers and promote competition. An appellate court may not accept the FCC's reconsideration as rational and supported by a complete evidentiary record.

Notwithstanding the FCC's renewed interest in ex ante regulatory safeguards, a now significant body of case law supports the conclusion that ex post antitrust remedies are unavailable if the FCC has jurisdiction over a disputed service and has opted not to regulate it.⁸⁷ The Court concluded that because industry sector-specific legislation provides the FCC with authority to craft ex ante regulatory remedies, when the FCC refuses to act, presumably based on the existence of sufficient and sustainable competition, appellate courts have no legal basis for imposing additional antitrust safeguards. The Court reasoned that when the FCC has determined that a carrier has no duty to deal with an actual or prospective competitor, a court applying antitrust law should not impose such a duty either.⁸⁸ The potential for false positives appears to justify a reluctance to support ex post action even at the greater risk for false negatives.

The Supreme Court's deference to the FCC has gone so far as to allow an incumbent carrier to offer end users lower retail rates than the wholesale rate it might voluntarily charge competitors, an apparent predatory and anticompetitive practice commonly referred to as a price squeeze.⁸⁹ In 2003, several ISPs filed suit against Pacific Bell Telephone

^{86.} Nations in the European Union have not abandoned ex post adjudication of telecommunications disputes. See, e.g., Commission Decision 2003/707/EC of May 21, 2003, Relating to a proceeding under Article 82 of the EC Treaty, 2003 O.J. (L 263) 9 (European Court of Justice affirming lower court's decision upholding the European Commission's determination that the incumbent operator of the German fixed telephone network had abused its dominant position by engaging in a margin squeeze); Commission Decision 2008/C 83/05 of 4 July 2007, Case COMP/38.784, Wanadoo España v. Telefónica, 2008 O.J. (C 83) 5, affd, Case T-398/07, Spain v. Comm'n, 2012 ECJ EUR-Lex LEXIS 231 (Mar. 29, 2012) (affirming a finding that dominant wireline carrier engaged in a price squeeze when pricing wholesale rates it had a legal duty to offer); see also Caroline Cavaleri Rudaz, Did Trinko Really Kill Antitrust Price Squeeze Claims? A Critical Approach to the Linkline Decision Through a Comparison of E.U. and U.S. Case Law, 43 VAND. J. TRANSNAT'L L. 1077 (2010).

^{87.} The Supreme Court also affirmed the FCC's decision to classify all types of broadband Internet access as information services thereby eliminating the prospect for ex ante regulation.

^{88.} Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004).

^{89.} Pac. Bell Tel. Co. v. Linkline Commc'ns, Inc., 555 U.S. 438 (2009).

Co., contending that it attempted to monopolize the market for Digital Subscriber Line (DSL)⁹⁰ broadband Internet access by creating a price squeeze requiring ISP competitors to pay a higher wholesale price than the complete DSL service Pacific Bell offered on a retail basis to its broadband subscribers. Both the District Court and the Ninth Circuit Court of Appeals agreed that the ISPs could present their price squeeze claim, despite the Supreme Court's *Trinko* decision that severely constrained the scope of antitrust remedies in lieu of, or in addition to FCC regulatory safeguards.⁹¹

The Supreme Court assumed that Pacific Bell had no duty to deal with any ISPs based on the FCC's premise that ample facilities-based competition existed and on the FCC's refusal to order any remedy even when presented with clear evidence that Pacific Bell offered retail users rates below wholesale rates offered to competitors. But for a voluntary concession to secure the FCC's approval of AT&T's acquisition of BellSouth, the court noted that Pacific Bell would not have even had the duty to provide ISPs wholesale services. The court agreed to hear the case to answer whether ISP plaintiffs can bring a price squeeze claim under Section 2 of the Sherman Act⁹² when the defendant carrier has no mandatory duty to deal with the plaintiffs. The lower court concluded that the *Trinko* precedent did not bar such a claim, 93 but the Supreme Court reversed this holding. 94

90. See *Digital Subscriber Line Definition, Types of Broadband Connections*, FCC, http://www.fcc.gov/encyclopedia/types-broadband-connections#dsl (last visited Apr. 17, 2015). The FCC describes digital subscriber line service:

DSL is a wireline transmission technology that transmits data faster over traditional copper telephone lines already installed to homes and businesses. DSL-based broadband provides transmission speeds ranging from several hundred Kbps to millions of bits per second (Mbps). The availability and speed of your DSL service may depend on the distance from your home or business to the closest telephone company facility.

Id

91. Pac. Bell Tel. Co., 555 U.S. at 444-45.

92. Sherman Antitrust Act, 15 U.S.C. § 2 (2012); see also U.S. DEP'T OF JUSTICE, ANTITRUST DIVISION MANUAL (3d ed. 2014), available at http://www.justice.gov/atr/public/divisionmanual/chapter2.pdf (providing an outline of antitrust law enforcement practice and procedure).

93. Law Offices of Curtis V. Trinko, LLP v. Bell Atlantic Corp., 305 F.3d 89, 111 (2d Cir. 2002), rev'd sub nom. Verizon Comme'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004). Verizon reasons:

It is unlikely that allowing antitrust suits would substantially disrupt the regulatory proceedings mandated by the Telecommunications Act. In

The Supreme Court's decision upbraided the ISP plaintiffs for changing the nature of their claim from a price squeeze to one characterizing Pacific Bell's tactics as predatory pricing, a practice where one competitor charges below-cost rates with an eye toward driving out competitors after which rates can rise. 95 On substantive grounds, the court noted that a new emphasis on predatory pricing would have required determination whether the retail price was set below cost, a claim the ISPs did not make. 96

The Supreme Court determined that the case did not become moot, because of the change in economic and antitrust arguments. However, the decision evidenced great skepticism as to whether the ISPs had any basis for a claim because the Court concluded that the ISPs failed to make a claim that Pacific Bell's retail DSL prices were predatory, and because the ISPs failed to refute the conclusion that Pacific Bell had no duty to deal, i.e., to offer cost-based wholesale service that typically costs less than retail service. The Court apparently could ignore the voluntary concession AT&T made that it did have a duty to deal, because that concession only triggered FCC oversight, without affecting whether an antitrust law duty to deal arises. The Court read the *Trinko* case as foreclosing any antitrust claim if no antitrust duty to deal exists, even if the FCC had ordered wholesale broadband access be made available for resale.

The Supreme Court remanded the case to the District Court to determine whether the ISP plaintiffs have any viable predatory pricing claim. The Supreme Court expressed the need for clear antitrust rules and apparently views consumer access to low retail prices as sufficient reason for courts to refrain from intervention.⁹⁷ The Court stated that

discussing the impact such suits would have on the regulatory process, it is useful to discuss separately suits seeking damages and suits for injunctive relief. Awarding damages for the willful maintenance of monopoly power would not substantially interfere with the regulatory scheme envisioned by the Telecommunications Act.

Id

- 94. Pac. Bell Tel. Co., 555 U.S. at 457.
- 95. *Id.* at 451–52.
- 96. *Id.* at 455–57.
- 97. Pac. Bell Tel. Co. states:

To avoid chilling aggressive price competition, we have carefully limited the circumstances under which plaintiffs can state a Sherman Act claim by alleging that prices are too low. Specifically, to prevail on a predatory pricing claim, a plaintiff must demonstrate that: (1) "the prices complained of are below an appropriate measure of its rival's

"[i]nstitutional concerns also counsel against recognition of such claims... [because of the need for] clear rules in antitrust law... [and]... [n]o court should impose a duty to deal that it cannot explain or adequately and reasonably supervise."98

The Supreme Court does not seem troubled even if all ISP competitors exited the market, an event that surely would enable the surviving incumbent carrier to raise rates: "For if AT&T can bankrupt the plaintiffs by refusing to deal altogether, the plaintiffs must demonstrate why the law prevents AT&T from putting them out of business by pricing them out of the market."99

This case evidences a strong reluctance on the part of the Supreme Court to support any sort of ex post judicial review over the pricing strategies of carriers and analysis of the FCC's determinations about the appropriateness of such prices and the viability of competition. Judicial deference to the FCC and the FCC's failure to detect and remedy a price squeeze, or predatory pricing surely will result in the near-term elimination of competition unless ISPs quickly replace expensive leased lines with their own facilities, a desirable but commercially impractical goal at least in the short term. The FCC's assumptions about competition and its viability do not make sense if incumbent carriers can drive competitors out of business by offering predatory, below cost retail rates.

Courts in the United States have also curtailed the ability of individuals claiming the same harm to join together in a class action lawsuit against a telecommunications carrier.¹⁰¹ By a 5–4 vote the Supreme Court, in *Comcast Corp. v. Behrend*, 133 S. Ct. 1426 (2013), held that cable television subscribers in the Philadelphia market could not join in a

costs"; and (2) there is a "dangerous probability" that the defendant will be able to recoup its "investment" in below-cost prices.

Id. at 451 (citing Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222–24 (1993)). "Low prices benefit consumers regardless of how those prices are set, and so long as they are above predatory levels, they do not threaten competition." *Id.* (quoting Atl. Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 340 (1990)).

^{98.} *Id.* at 452 (citations and quotation marks omitted).

^{99.} *Id.* at 456–57.

^{100.} Facilities-based competition in telecommunications requires ventures with substantial financial and operational resources and infrastructure installation takes significant time. Additionally market entrants start with no market share, but typically use equipment with large capacity.

^{101.} See Bell Atl. Čorp. v. Twombly, 550 U.S. 544 (2007) (dismissing the antitrust suit due to insufficient evidence produced in the filing claiming harm).

class action lawsuit alleging that Comcast caused anticompetitive harm to the video programming marketplace through a "clustering" strategy of buying up all cable television franchises in a metropolitan area. Writing for the majority, Justice Scalia asserted that expert witness studies, relied upon by the plaintiff class, could not measure damages that applied uniformly to all members throughout a broad metropolitan area as is required for certification of class on issues pertaining to law or fact. This means that individual cable television subscribers will have no opportunity to seek redress in the courts in light of the cost they would incur by having to file individual lawsuits to recover damages for the anticompetitive harm that would allegedly result from Comcast's acquisition of the Adelphia Communications cable systems.

The Court rejected the lower court's acceptance that an expert witness's regression analysis could quantify the total financial harm, in the amount of \$875,576,662, resulting when Comcast's clustering strategy deterred market entrants from offering a competitive alternative to Comcast in the Philadelphia video market:

By refusing to entertain arguments against respondents' damages model that bore on the propriety of class certification, simply because those arguments would also be pertinent to the merits determination, the Court of Appeals ran afoul of our precedents requiring precisely that inquiry. And it is clear that, under the proper standard for evaluating certification, respondents' model falls far short of establishing that damages are capable of measurement on a classwide basis.¹⁰⁴

Justice Scalia characterized the case as simply one that turned on the straightforward application of class-certification principles. He noted that

Comcast Corp., 133 S. Ct. at 1430 (citations omitted) (alteration in original). 104. *Id.* at 1432–33.

^{102.} Comcast Corp. v. Behrend, 133 S. Ct. 1426 (2013) (holding that plaintiff class could not measure damages that applied uniformly to all members throughout the Philadelphia metropolitan area as is required for certification of class).

^{103.} Pursuant to Federal Rule of Civil Procedure 23(b)(3), a class action lawsuit can proceed only if the court finds that the questions of law or fact common to class members predominate over any questions affecting only individual members. To meet the predominance requirement respondents had to show:

⁽¹⁾ that the existence of individual injury resulting from the alleged antitrust violation (referred to as "antitrust impact") was "capable of proof at trial through evidence that [was] common to the class rather than individual to its members"; and (2) that the damages resulting from that injury were measurable "on a class-wide basis" through use of a "common methodology."

the damages estimate factored in four antitrust claims: decreased penetration by satellite providers, market entry deterrence, lack of benchmark competition, and increased bargaining power; and not the one claim that the lower court accepted as the sole basis for certifying the plaintiff class. The Court concluded that "[i]n light of the model's inability to bridge the differences between supra-competitive prices in general and supra-competitive prices attributable to the deterrence of overbuilding [i.e., facilities-based competition in the same locality], Rule 23(b)(3) cannot authorize treating subscribers within the Philadelphia cluster as members of a single class." 105

The dissenting opinion chided the majority for formulating a more difficult burden that a plaintiff must satisfy in order to allow a class action lawsuit to proceed to trial. Instead of having to prove a preponderance of common damages among all parties in the class action lawsuit, the dissent interprets the majority as changing the facts of the case, ignoring settled law on antitrust, and now requiring extreme accuracy in the calculation of financial harm that cannot deviate even when the geographical size of the market includes subscribers residing in urban, suburban and even less concentrated outlying areas.

Courts also allow carriers to insert binding arbitration clauses in service contracts thereby eliminating the option for consumers to seek a court-ordered remedy even if the conduct of an ex ante regulated carrier approaches unconscionability. In AT&T Mobility v. Concepcion, 563 U.S. 321 (2011), the Supreme Court invalidated the formation of a class action lawsuit, not because of the inability to evidence common harm, but because AT&T's "take it or leave it" contract mandated binding arbitration. The Court held that Federal Arbitration Act of 1925

^{105.} Id. at 1435.

^{106.} See generally David Horton, Unconscionability Wars, 106 NW. U. L. REV. 387 (2012); James Parrinello, Arbitration at the Tipping Point: Challenging Claim-Suppressing Arbitration Clauses, 65 HASTINGS L.J. 1441 (2014); Peter B. Rutledge & Christopher R. Drahozal, "Sticky" Arbitration Clauses? The Use of Arbitration Clauses After Concepcion and Amex, 67 VAND. L. REV. 955 (2014); Andrew Tutt, Note, On the Invalidation of Terms in Contracts of Adhesion, 30 YALE J. ON REG. 439 (2013).

^{107.} AT&T Mobility LLC v. Concepcion, 131 S. Ct. 1740, 1748 (2011). The Court in *AT&T Mobility* reasoned:

The overarching purpose of the FAA, evident in the text of §§ 2, 3, and 4, is to ensure the enforcement of arbitration agreements according to their terms so as to facilitate streamlined proceedings. Requiring the availability of classwide arbitration interferes with fundamental attributes of arbitration and thus creates a scheme inconsistent with the FAA.

preempts state laws that prohibit contracts from disallowing class-wide arbitration, such as the law previously upheld in California. 108

B. NEAR TERM FACTORS SUPPORTING RETAINED EX ANTE REGULATION

Using an assessment whether significant market power exists in the broadband access marketplace, one cannot yet conclude that a robustly competitive marketplace exists in the United States in all market sectors. The FCC recently recanted a previous determination that all Americans, regardless of location and income, have adequate access to broadband services.¹⁰⁹

Sustained and robust facilities-based competition may not persist, because the telephone company DSL option cannot provide sufficiently fast bit transmission to generate one or more adequate video displays in a single location. Far faster hybrid fiber/copper cable and dedicated fiber optic options have replaced DSL, but only in selected markets. Google has demonstrated the commercial viability of gigabit per second delivery speeds, albeit in a handful of urban locales, with no plans for widespread deployment. Satellite broadband providers offer comparatively slower bit

Id.

108. "Because it 'stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress,' . . . California's *Discover Bank* rule is preempted by the FAA." *Concepcion*, 131 S. Ct. at 1753 (citing Hines v. Davidowitz, 312 U.S. 52, 67 (1941)).

109. See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fifteenth Report, 28 F.C.C. Rcd. 10,496 (2013).

110. FCC Chairman Wheeler emphasized DSL's inability to be competitive in the developing market in his 2014 statement. Tom Wheeler, Chairman, Fed. Comme'ns Comm'n, The Facts and Future of Broadband Competition (Sept. 4, 2014), *available at* http://www.fcc.gov/document/chairman-remarks-facts-and-future-broadband -competition.

111. The Verizon coverage area for its FiOS fiber optic broadband network serves 20 cities throughout the United States. FiOS Availability, VERIZON, http://fios.verizon.com/fios-coverage.html (last visited Apr. 18, 2015); see also Finally a Verizon FiOS Availability Map, FIBER FOR ALL, http://fiberforall.org/fios-map/ (last visited Apr. 18, 2015). The company ended most of its construction in 2010 and has no expansion plans. See Roger Cheng, Verizon to End Rollout of FiOS, WALL ST. J. (Mar. 30, 2010), http://online.wsj.com/articles/SB10001424052702303410404575151773432729614. AT&T combines fiber optic cable with existing copper wire to offer its broadband Uverse service in parts of twenty-two states. At the end of 2011, AT&T U-verse passed approximately 30.3 million homes. Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fifteenth Report, 28 F.C.C. Rcd. 10,496, 10,550 (2013).

112. In 2014, Google Fiber served three metropolitan areas: Kansas City, Provo, and Austin. Cities and Plans, GOOGLE FIBER, https://fiber.google.com/cities/ (last visited

transmission speeds, have lower caps on monthly use, charge higher rates and require payments for necessary receiving equipment. Additionally, higher latency,¹¹³ caused by the distance to and from satellites, can disrupt some uses.¹¹⁴ The newest generation of terrestrial wireless service provides a broadband option, albeit one with data caps typically at rates of 1–2 gigabytes per month per handset,¹¹⁵ making the per megabyte cost of service significantly higher than wireline options that offer 250 gigabytes per month or higher at lower rates.¹¹⁶

Even when consumers have broadband choices, most subscribe to one carrier that provides an exclusive link between content providers and the Retail ISP's subscribers.¹¹⁷ Should a service disruption occur upstream, almost all upstream ISPs, operating in the Internet cloud, can activate or procure alternative interconnection arrangements quickly. But in the retail sector, even consumers with competitive options will encounter some delay and expense in migrating from one carrier to another.

Apr. 19, 2015). The venture has plans to serve nine additional metropolitan areas. *Expansion Plans*, GOOGLE FIBER, https://fiber.google.com/newcities/ (last visited Apr. 22, 2015).

113. Satellite service latency is explained in an FCC report:

Communicating with a geosynchronous satellite orbiting the earth at a distance of greater than 36,000 km results in a round trip latency of about 500 [milliseconds]. The necessary signaling between the set-top box and the satellite controller, to request assignment of a communication channel, can double this to over 1000 ms, which would precluded [sic] use of many latency-sensitive services.

OFFICE OF ENG'G & TECH. & CONSUMER & GOVERNMENTAL AFFAIRS BUREAU, FCC, 2014 MEASURING BROADBAND AMERICA FIXED BROADBAND REPORT: A REPORT ON CONSUMER FIXED BROADBAND PERFORMANCE IN THE U.S. 18 (2014) (footnote omitted), *available at* http://data.fcc.gov/download/measuring-broadband-america/2014/2014-Fixed-Measuring-Broadband-America-Report.pdf.

- 114. See, e.g., Package Comparison Chart, WILDBLUE, http://www.wildblue.com/options/comparison-chart (last visited Apr. 17, 2015).
- 115. See, e.g., The More Everything Plan, VERIZON WIRELESS, http://www.verizonwireless.com/wcms/consumer/shop/shop-data-plans/more-everything.html (last visited Apr. 21, 2015).
- 116. See, e.g., Questions and Answers About Our Data Usage Plan, XFINITY, http://customer.comcast.com/help-and-support/internet/common-questions-datapolicy (last visited Apr. 17, 2015).
- 117. By functioning as a "terminating monopolist" and "gatekeeper" between edge-providers and end users, the broadband providers maintain economic power "to restrict edge-provider traffic and charge for the services they furnish edge providers." Verizon v. FCC, 740 F.3d 623, 646 (D.C. Cir. 2014) (citing the 2010 Open Internet Order, *supra* note 6, at 17,919).

In light of the possibly limited competitive options available for retail Internet access and subscribers' sole reliance on one carrier, the chosen ISP has significant negotiating power with both end users and upstream ISPs. End users may balk at the inconvenience of changing carriers¹¹⁸ and upstream ISPs will have no migration option at all if they want to secure access to all end users. Put another way, if a single ISP enjoys a dominant share of the retail market, which occurs in many localities, a substantial portion of the market exclusively relies on that single ISP making it absolutely necessary for upstream ISPs to secure an agreement with that ISP for delivery of content. A single ISP has the potential to exert exclusive control, as a terminating monopoly,¹¹⁹ over access to a majority of the end user market in many places. Content providers and distributors are captive to that ISP in the sense that they must secure delivery to the televisions, computer monitors, smartphones and tablets that access the Internet solely via a single ISP.¹²⁰

Additionally a number of factors cast doubt on the ability of an unregulated Internet access marketplace to avoid the tactics an ISP might use to secure an unfair and anticompetitive advantage.

1. Technological and Marketplace Convergence

Technological convergence refers to the ability to combine previously separate services, such as voice and data, using a single medium, such as a digital network.¹²¹ Market convergence refers to the ability of a venture to offer a combination of services previously only available if the venture operated multiple networks.¹²² Convergence makes it difficult for NRAs to define specific services and to apply different regulatory regimes. For

^{118. &}quot;[M]any end users may have no option to switch, or at least face very limited options" *Id.* at 647.

^{119.} See 2010 Open Internet Order, supra note 6, at 17,924–25.

^{120.} For a summary of major peering disputes, see Jon Brodkin, *Why YouTube Buffers: The Secret Deals that Make—and Break—Online Video*, ARS TECHNICA (July 28, 2013), http://arstechnica.com/information-technology/2013/07/why-youtube-buffers-the-secret-deals-that-make-and-break-online-video/.

^{121. &}quot;A related, and equally disruptive, phenomenon is technology convergence, the ability to offer multiple telecommunications services on the same platform." Daniel A. Lyons, *Technology Convergence and Federalism: Who Should Decide the Future of Telecommunications Regulation?*, 43 U. MICH. J.L. REFORM 383, 401 (2010).

^{122.} The "convergence of formerly single purpose communications media, [means that] video programming can be transported over the Internet (by wireline or wireless connections) to viewers by use of a high-speed broadband connection. This integration facilitates independence of services (such as video and voice) from the physical transmission network." John B. Meisel, *Legal and Economic Challenges to the Business Model of the Television Industry*, 36 HASTINGS COMM. & ENT L.J. 451, 454 (2014).

example, the United States uses ex ante regulation based on interpretation of statutory authority by the FCC, which uses static definitions such as telecommunications service and information service. The FCC has created a regulatory dichotomy with information services largely exempt from regulation even as providers of these services compete with incumbents treated as regulated common carrier, telecommunications service providers.¹²³

Convergence makes it difficult for nations to use ex post remedies. As markets combine, an adjudicator (competition authority or court) might have difficulty defining the relevant market for purposes of determining whether one or more ventures have significant market power.

2. Regulatory Asymmetry

Regulatory asymmetry refers to inconsistent government oversight that may or may not have reasonable and lawful justifications. Reasonable regulatory asymmetry occurs when ventures providing competitive services trigger different degrees of regulatory oversight based on their potential to engage in anticompetitive conduct and to acquire market power. Unreasonable regulatory asymmetry occurs when different regulatory oversight occurs between competing ventures. This is because one can qualify for less or no regulation even though it might have market power, or the ability to generate higher revenues based on comparatively lower regulatory oversight.

Incumbents increasingly complain about regulatory asymmetry from Internet-mediated services such as Voice over Internet Protocol¹²⁵ and

^{123.} See supra note 36.

^{124.} For example, the "FCC has not imposed regulatory burdens on IPTV [Internet Protocol Television] service providers, despite the fact that these ventures provide a competitive alternative to broadcast, satellite, and cable television. The Commission has allowed regulatory asymmetry to occur, apparently disinclined to apply equal levels of government oversight between competing ventures." Rob Frieden, *The Rise of Quasi-Common Carriers and Conduit Convergence*, 9 I/S: J.L. & POL'Y FOR INFO. SOC'Y 471, 476 (2014).

^{125.} VoIP is the real-time carriage and delivery of data packets that correspond to voice. VoIP services range in quality, reliability, and price and can link both computers and ordinary telephone handsets. For technical background on how VoIP works, see Susan Spradley & Alan Stoddard, *Tutorial on Technical Challenges Associated with the Evolution to VoIP*, FCC (Sept. 22, 2003), http://www.fcc.gov/events/tutorial-technical-challenges-associated-evolution-voip. *See generally* Charles J. Cooper & Brian Stuart Koukoutchos, *Federalism and the Telephone: The Case for Preemptive Federal Deregulation in the New World of Intermodal Competition*, 6 J. ON TELECOMM. & HIGH TECH. L. 293 (2008).

Internet Protocol Television.¹²⁶ These services can qualify for comparatively less or no regulation, even as incumbents continue to incur costs from legacy government oversight.

3. Incumbent Responses to New Internet-Mediated Service Competition

Incumbents and market entrants alike continue to rely on ex ante regulatory remedies and procedures for securing less burdensome government oversight. For example, in the United States incumbent providers of wireline voice telephony seek expedited consideration of reduced or eliminated regulation when these carriers migrate from copper wire Time Division Multiplexed telephone service to VoIP.¹²⁷ In other nations, incumbents have sought regulation of VoIP service providers to ensure a "level competitive playing field." While incumbents in particular may want to eliminate ex ante regulation they are quite adept at using every procedural vehicle in this regulatory regime to secure competitive advantages, or to reduce the cost and impact of regulatory requirements.

4. Viability of a Glide Path from Ex Ante to Ex Post Safeguards

In nations that rely on a regulatory model that uses significant market power assessments to identify the need for ex ante government regulations, NRAs may have more difficulty defining convergent markets and assessing market power. This task becomes quite difficult when assessing the market power possessed by incumbent firms that engage in vertical and horizontal

126. IPTV offers consumers with broadband connections options to download video files or view (streaming) video content on an immediate "real time" basis. Sky Angel U.S., LLC, Emergency Petition for Temporary Standstill, 25 F.C.C. Rcd. 3879 (2010). Some of the available content duplicates what cable television subscribers receive therein triggering disputes over whether cable operators can secure exclusive distribution agreements and prevent an IPTV service provider from distributing the same content. "Sky Angel has been providing its subscribers with certain Discovery networks for approximately two and a half years, including the Discovery Channel, Animal Planet, Discovery Kids Channel, Planet Green, and the Military Channel. Sky Angel submits that these channels are a significant part of its service offering." Id. at 3879–80. For background on IPTV, see In-Sung Yoo, The Regulatory Classification of Internet Protocol Television: How the Federal Communications Commission Should Abstain From Cable Service Regulation and Promote Broadband Deployment, 18 COMMLAW CONSPECTUS 199 (2009).

127. Technology Transitions, Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, 29 F.C.C. Rcd. 1433 (2014); see also Rob Frieden, The Mixed Blessing of a Deregulatory Endpoint for the Public Switched Telephone Network, 37 TELECOMM. POL'Y, 400 (2013); Kevin Werbach, No Dialtone: The End of the Public Switched Telephone Network, 66 FED. COMM. L.J. 203 (2014).

integration to include convergent, Internet-mediated services. Vertical market integration occurs when a single firm enters into two or more related market segments, e.g., video content production, syndication, packaging and delivery to end users. Horizontal integration occurs when a single firm provides two or more competing options, e.g., when a television broadcast network diversifies into cable television programming, or acquires a venture that does. Incumbent firms seek to offer service bundles that exploit synergies and efficiencies accruing from vertical and horizontal integration.¹²⁸

The possibility exists that an incumbent coming close to qualifying for ex post regulation might have such a successful integration strategy that it acquires new market power in convergent markets, possibly leveraged by its significant but declining market power in a market segment previously served. This scenario might occur when an incumbent telephone company, facing projections of even greater customer attrition and declining voice service revenues, acquires ventures that can combine broadband access and "over the top" (OTT) services¹²⁹ achieving significant market power in new market segments.

5. Changes in Consumer Expectations

Consumers increasingly have no tolerance for attempts by ventures to ration access to content based on willingness to pay. Incumbents prefer to use "windows" to extract maximum revenues from content by using a linear sequence of access over time, e.g., theatrical display of a movie, followed by DVD sale, on demand access, rental, premium channel display and broadcast. Consumers have little patience for "appointment television" that uses possibly exclusive, time-based windows in lieu of platforms for access at anytime, anywhere, via any device and in any delivery and presentation format. Consumers also evidence technology agnosticism in the sense that they appear to have little concern about the

^{128.} See, e.g., FiOS Deals, VERIZON, http://www.verizon.com/home/bundles/fios/(last visited Apr. 25, 2015).

^{129. &}quot;Over-the-top VoIP [and other] services require the end user to obtain broadband transmission from a third-party provider, and providers of over-the-top... [services] can vary in terms of the extent to which they rely on their own facilities." 2010 Open Internet Order, *supra* note 6, at 17,916 n.48.

^{130.} See Rob Frieden, The Impact of Next Generation Television on Consumers and the First Amendment, 24 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 61 (2013).

medium used to deliver content and to some extent the size and resolution of the presentation screen and degree of signal compression used.¹³¹

The proliferation of new Internet-centric services increases concerns about whether the Internet can remain sufficiently open and neutral absent government oversight. More services will traverse fewer networks making it likely that higher reliance helps surviving network operators acquire and sustain market power. Nations may determine that broadband network operators, providing last mile content delivery, possess significant market power. Consumers typically have limited broadband delivery options and usually rely on one venture to serve all their traffic carriage requirements. NRAs may have to link market power assessments with the need for ex ante network neutrality rules and regulations.

In any event, the rise in OTT options raises the stakes in the network neutrality debate. Ventures providing video content, e.g., Netflix and other IPTV providers, may assert that ex ante regulation remains essential even without a determination of significant market power based on the potential for anticompetitive treatment of their content by carriers.

6. Viability of Resale and Virtual Network Competition

Most OTT service providers lease broadband capacity for service delivery. Without safeguards for resellers and virtual network operators, the potential exists for owners of the transmission facilities to engage in anticompetitive practices, e.g., price squeezes, predatory pricing and refusals to deal. For nations, including the United States, that have determined broadband service providers should not bear conventional common carrier obligations, a refusal to deal may be lawful even as it could hamper, or preclude non-facilities based network competition.

The ways to distribute video content to consumers have begun to diversify, as the Internet becomes an increasingly attractive option for delivering programming, and provides an alternative to broadcast, satellite and cable networks. Viewers no longer need to tolerate "appointment television," with access to content at a prescribed time, available on a single channel and delivered to a single receiving device using only one acceptable transmission format. Access primarily will become a matter of using one of several software-configured interfaces capable of decoding live and recorded content anytime, anywhere, to any device, and through many different transmission and presentation formats.

Id. at 62 (footnotes omitted).

^{131.} For example, consumers increasingly expect to have access to the same video content via television sets, computer monitors, smartphone screens and tablets.

IV. CONCLUSIONS AND RECOMMENDATIONS

The decision whether to impose ex ante regulations, or ex post remedies depends in large part on a government's tolerance for instances where its chosen administrative and legal mechanism fails to detect an anticompetitive practice, or wrongly sanctions as anticompetitive a benign practice. An NRA's decision to impose ex ante regulations reflects the agency's emphasis on the need to prevent or reduce false negatives, while opting for ex post safeguards eliminates the potential for false positives generated by proactive regulatory oversight.

The FCC has opted for ex ante network neutrality rules and regulations on three occasions. The FCC has concluded that absent such proactive vigilance, ISPs would act on their ability and incentive to engage in anticompetitive practices. The FCC does have some empirical evidence to support its conclusion that ISPs can and will use techniques to block traffic, drop packets and otherwise target selected types of subscribers' traffic for degraded service. If the FCC had no positive evidence of ISP meddling of subscriber traffic, then it would have had a far more difficult case to make that absent ex ante regulation, false negatives would occur.

In the Netherlands, a country which has legislated ex ante network neutrality rules,¹³⁴ the incumbent carrier KPN also provided concrete evidence that it would disadvantage competitors and harm consumers by using deep packet inspection¹³⁵ to identify subscribers using services, which

^{132. &}quot;Today, broadband providers have incentives to interfere with the operation of third-party Internet-based services that compete with the providers' revenue-generating telephony and/or pay-television services. This situation contrasts with the first decade of the public Internet, when [common carrier provided] dial-up was the primary form of consumer Internet access." 2010 Open Internet Order, *supra* note 6, at 17,916.

^{133. &}quot;On a number of occasions, broadband providers have blocked lawful traffic without informing end users or edge providers. In addition to the Madison River and Comcast-BitTorrent incidents described above, broadband providers appear to have covertly blocked thousands of BitTorrent uploads in the United States throughout early 2008." 2010 Open Internet Order, *supra* note 6, at 17,937 n.168.

^{134.} Wet van 10 mei 2012 tot wijziging van de Telecommunicatiewet ter implementatie van de herziene telecommunicatierichtlijnen, Stb. 2012, 235; see also Kevin J. O'Brien, Dutch Lawmakers Adopt Net Neutrality Law, N.Y. TIMES (June 22, 2011), http://www.nytimes.com/2011/06/23/technology/23neutral.html; Sara Webb, Dutch Pass Law to Ensure Open Internet Access, REUTERS (June 22, 2011), http://www.reuters.com/article/2011/06/22/us-dutch-telecoms-idUSTRE75L6Z120110622.

^{135.} Deep packet inspection technology permits network providers to identify both the applications used on their networks and the content that the network delivers. Using DPI, a network operator has the ability to decide which applications or content will be transmitted and at what speed. See Rob Frieden, Invoking and Avoiding the First

migrated traffic and revenues from KPN, for traffic blocking, or higher rates.¹³⁶ In early 2015, the Netherlands Authority for Consumers and Markets fined KPN for €250,000 and Vodafone for €200,000 for violating the net neutrality laws by blocking access to VoIP services via the companies' Wi-Fi hot spots.¹³⊓

In stark contrast to the approach of the FCC and other NRAs, the United States Supreme Court has emphasized the harms from false positives, particularly when courts apply antitrust safeguards prematurely or without firm legal and economic rationale. In *Trinko*, Justice Scalia concluded that the social costs from detection of false positives greatly outweighed instances where false negatives give ventures the opportunity to engage in anticompetitive practices:

Mistaken inferences and the resulting false condemnations "are especially costly, because they chill the very conduct the antitrust laws are designed to protect." The cost of false positives counsels against an undue expansion of § 2 liability. One false-positive risk is that an incumbent LEC's failure to provide a service with sufficient alacrity might have nothing to do with exclusion. 138

When ISPs operate as intermediaries in a two-sided market the potential for false negatives increases¹³⁹ at the same time as ex post

Amendment: How Internet Service Providers Leverage Their Status as Both Content Creators and Neutral Conduits, 12 U. PA. J. CONST. L. 1279, 1311–12 (2010); Rob Frieden, Internet Packet Sniffing and Its Impact on the Network Neutrality Debate and the Balance of Power Between Intellectual Property Creators and Consumers, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J., 633, 644 (2008).

136. Milton Mueller, "We Will Not Block; We Will Monetize:" KPN's Foray into DPI, INTERNET GOVERNANCE PROJECT (May 23, 2011), http://www.internetgovernance.org/2011/05/23/we-will-not-block-we-will-monetize-kpns-foray-into-dpi/.

137. Fines Imposed on Dutch Telecom Companies KPN and Vodafone for Violation of Net Neutrality Regulations, NETHERLANDS AUTHORITY FOR CONSUMERS & MARKETS (Jan. 27, 2015), https://www.acm.nl/en/publications/publication/13765/Fines-imposed-on-Dutch-telecom-companies-KPN-and-Vodafone-for-violation-of-net-neutrality-regulations/.

138. Verizon Comme'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 414 (2004) (quoting Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 594 (1986)).

139. See Howard A. Shelanski, Information, Innovation, and Competition Policy for the Internet, 161 U. PA. L. REV. 1663, 1667 (2013). Shelanski explains:

At the heart of the critiques of antitrust enforcement in digital industries is the mismatch between the conventional, price-oriented antitrust framework and the more innovation-based competition that characterizes markets for digital goods and services. Fast changing markets, such as those related to the Internet, might be hard to define and less subject to the structural presumptions of conventional antitrust

antitrust remedies become less likely in the United States. ISPs control a platform through which a variety of content, applications and content traverse. ISPs can use flexibility to determine how best to recoup investment costs, possibly erecting subsidies that enhance consumer welfare by facilitating access to free or low cost services. On the other hand, such flexibility can provide ISPs with the ability to price access in ways that favor their own ventures and affiliates. Bear in mind that in reviewing the FCC's open Internet rules, the D.C. Circuit Court of Appeals did not dispute the FCC's conclusion that ISPs have the incentive and ability to engage in anticompetitive practices that harm both competitors and consumers.¹⁴⁰

The elimination of ex ante, telecommunications regulation should serve as a goal tempered by the reality that current marketplace conditions may not generate sufficiently robust competition to ensure effective self-regulation.¹⁴¹ Nations should make the migration from ex ante regulation

analysis. More fundamentally, the usual price-oriented antitrust analysis may be irrelevant in markets where many consumers pay nothing for the services they use and in which firms compete more through technological advancements than through lower prices.

Id.

- 140. See Verizon v. FCC, 740 F.3d 623, 645–46 (D.C. Cir. 2014). The court found: [T]he Commission has adequately supported and explained its conclusion that, absent rules such as those set forth in the Open Internet Order, broadband providers represent a threat to Internet openness and could act in ways that would ultimately inhibit the speed and extent of future broadband deployment. First, nothing in the record gives us any reason to doubt the Commission's determination that broadband providers may be motivated to discriminate against and among edge providers. . . .
 - ... [B]roadband providers have the technical and economic ability to impose such restrictions.

Id.

141. See Tom Wheeler, Chairman, Fed. Commc'ns Comm'n, More Competition Needed in High-Speed Broadband Marketplace (Sept. 4, 2014), available at http://www.fcc.gov/document/fcc-chairman-more-competition-needed-high-speed-broadband-market. The FCC report discusses marketplace conditions as follows:

to ex post remedies when and if the likelihood for anticompetitive outcomes become negligible. If there remain significant risks of harm to competition and consumers, ex ante regulation should persist. However the nature of ex ante regulation should change on an incremental basis as market conditions make self-regulation more plausible.

Government regulation should not operate from an absolute dichotomy with sector-specific regulation inferred as intrusive but necessary and ex post adjudication considered an ineffective or delayed option. In light of changed circumstances, ex ante regulation may remain necessary, but the scope and burdens imposed should shift toward dispute resolution when and if an NRA receives a complaint, instead of proactive regulations and rulemaking.

Ex ante regulation of Internet access should concentrate on procedural safeguards rather than the creation and enforcement of substantive rules and service definitions. The FCC lost flexibility to craft a limited and well-calibrated remedy to anticompetitive practices, because it has to apply legislatively drawn definitions, such as information services and telecommunications services. Having determined that all types of broadband Internet access constituted an information service, the FCC abandoned a direct and uncontestable ex ante regulatory mandate. In hindsight the FCC now recognizes that whether it should regulate Internet access depends on evidence of harm to consumers, rather than on a blanket conferral of jurisdiction.

Additionally ex ante regulators should ensure that ISPs negotiate interconnection and compensation arrangements in good faith with upstream ISPs and content distributors. Arguably the FCC does not need to apply Title II common carrier status to ISPs in order to have legal authority to remedy interconnection disputes. Instead the FCC could have imposed lawful, private carrier obligations on ISPs and created a dispute resolution forum for complaints. NRAs do not need to deem Internet access a public utility common carrier function in order to establish lawful

The FCC's current definition of broadband is 4 Mbps download speed/1 Mbps upload speed. But 60 percent of peak-period Internet activity consists of delivering bandwidth-intensive content, like video.... The average U.S. Internet-connected homes have six connected devices—televisions, desktops, laptops, tablets, smartphones, etc. When those devices are in use at the same time, it's not difficult to strain the capacity of a 25 Mbps connection, and completely overwhelm a 4 Mbps connection.

regulatory authority to resolve complaints on a timely basis, in light of the immediate harm to consumers when the delivery of Internet content becomes intentionally degraded, or blocked.

Currently there exist many factors that work against the onset and sustainability of facilities-based broadband competition. Broadband networks require such substantial investment in plant that few firms have the financial and operational wherewithal to provide service. The Internet access marketplace tends to support limited competition with incumbents able to exploit economies of scale, converging media technologies and consolidating markets.

One cannot accurately predict what existing and new factors will affect the level of broadband service competition. Accordingly, NRAs should undertake a cautious and incremental shift toward eventual ex post remedies tied to the pace of market entry and the elimination of bottlenecks and other structural impediments to a neutral and open Internet.

INVENTORSHIP, DOUBLE PATENTING, AND THE AMERICA INVENTS ACT

N. Scott Pierce[†]

ABSTRACT

The Leahy-Smith America Invents Act of 2011 (AIA) defines an "inventor" as "the individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention." Prior art that consists of a "disclosure... made by the inventor or joint inventor" or "subject matter [that] had, before such disclosure, been publicly disclosed by the inventor or a joint inventor," when disclosure is "made 1 year or less before the effective filing date of a claimed invention," is excepted from the novelty requirement. However, there is nothing in the AIA or its legislative history that specifies whether the "disclosure" by the inventor or joint inventor must be the work of the inventive entity of the invention claimed, or need only be the work of an individual member or subgroup of that inventive entity. Guidelines developed by the United States Patent and Trademark Office (USPTO) do not clarify this issue. Early commentary on the AIA suggests that the work "disclosed" need not be that of the entire inventive entity. Such an interpretation, if confirmed by the courts, would be a radical and unnecessary departure from judicial precedent and would fundamentally change the effect of prior work by individuals on claimed joint inventions to which they contributed. The judicially created doctrine of obviousness-type double patenting, which limits inventors to a single patent for each invention considered patentably indistinct in view of another, would also be implicated, as would a recently proposed statutory alternative.

DOI: http://dx.doi.org/10.15779/Z38ZG2T © 2015 N. Scott Pierce.

[†] Principal at Hamilton, Brook, Smith & Reynolds, P.C. in Concord, Mass., and Adjunct Professor at Suffolk University Law School. The Author can be reached by email at scott.pierce@HSBR.com and by telephone at (978) 341-0036. The author is solely responsible for the views of this article, which do not necessarily represent those of his Firm, or any client or organization.

TABLE OF CONTENTS

I.	INT	RODUCTION	1615
II.	TH	E MEANING OF "PRIOR ART"	1620
	А.	DISCLOSURE BY A "JOINT INVENTOR" UNDER THE AMERICA INVENTS ACT (AIA)	1620 1625
III.		UBLE PATENTING AND THE SEVERABILITY OF E WORK OF INDIVIDUAL INVENTORS	1643
	A. B.	EVOLUTION OF A DOCTRINEPROBLEMS RESOLVED BY THE ADVENT OF TERMINAL DISCLAIMERS	
IV.	AMENDMENTS TO THE PATENT ACT OF 1952 TO ACCOMMODATE OVERLAP OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP		
	Α.	THE PROBLEM OF A COMMON INVENTOR AMONG DISTINCT INVENTIVE ENTITIES	1656
	В.	THE PROBLEM OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP	
	C.	LEGISLATIVE RESPONSE TO THE PROBLEMS OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP	1662
	D.	IMPLEMENTATION OF THE PATENT ACT OF 1984	
	2.	1. Rules and Guidelines by the Patent Office	
		2. The Federal Circuit Takes Note	
V.	IMPLICATIONS FOR OBVIOUSNESS-TYPE DOUBLE PATENTING		1770
		EXTENDING THE LOGIC OF SEVERABILITY TO THE AIA	10/2
	Α.	AND OBVIOUSNESS-TYPE DOUBLE PATENTING	1673
	В.	RECENT DEVELOPMENTS IN OBVIOUSNESS-TYPE DOUBLE	
	ъ.	PATENTING IN VIEW OF OVERLAPPING INVENTIVE	
		ENTITIES AND COMMON OWNERSHIP	1674
	C.	PROPOSED CODIFICATION OF OBVIOUSNESS-TYPE DOUBLE	
		PATENTING UNDER THE AIA AND ITS INTERPRETATION	
		FROM THE HISTORICAL VIEWPOINT OF SEVERABILITY AND	
		COMMON OWNERSHIP	1682
VI.	COI	NCLUSION	1685

I. INTRODUCTION

The America Invents Act (AIA)¹ radically changed several fundamental concepts of patent law as they existed under the Patent Act of 1952. It also provided definitions for several terms that, historically, had no statutory basis. Failure to properly understand the roots of these definitions, where they exist, may have profound implications on the concept of inventorship. Specifically, the term "inventor" is defined under § 100(f) of United States Code, Title 35, to mean "the individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention."2 The terms "joint inventor" and "coinventor" are defined for the first time under 35 U.S.C. § 100(g) to mean "any 1 of the individuals who invented or discovered the subject matter of a joint invention." A "claimed invention" is defined under 35 U.S.C. § 100(j) to mean "the subject matter defined by a claim in a patent or an application for a patent." But it is not clear from the AIA or its legislative history whether the independent work of a joint inventor is "severable" from the collective invention or discovery to which that joint inventor contributed. In other words, is the prior work of an individual legally distinct from that of a joint inventive entity of which that individual is a member? It is also unclear whether the AIA was intended to be different in this respect from its predecessor, the Patent Act of 1952,⁵ or whether jurisprudence of inventorship or joint inventorship is affected by the new law.

For example, § 102 of the Patent Act of 1952⁶ was replaced under the AIA.⁷ In providing the conditions for novelty, § 102 of the AIA provides for what generally qualifies as "prior art" in subsection (a)⁸ and exceptions to those general qualifications under subsection (b).⁹ Among the

^{1.} Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified at 35 U.S.C.) [hereinafter AIA]. In many sources, "AIA 35 U.S.C." is used to refer to the now-codified updated provisions, while "Pre-AIA 35 U.S.C." is used to refer to the provisions in place prior to the AIA amendments.

^{2.} *Id.* sec. 3(a), § 100(f).

^{3.} *Id.* sec. 3(a), § 100(g).

^{4.} *Id.* sec. 3(a), § 100(j).

^{5.} Patent Act of 1952, ch. 950, 66 Stat. 792 (1952) [hereinafter Patent Act of 1952].

^{6.} *Id.* sec. 3(b), § 102.

^{7.} AIA, *supra* note 1, sec. 3(b), § 102.

^{8.} *Id.* sec. 3(b), § 102(a).

^{9.} Id. sec. 3(b), § 102(b).

exceptions under subsection (b) are disclosures made one year or less before the effective filing date of a claimed invention where any such disclosure was made "by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor." A similar exception is provided for subject matter where "the subject matter disclosed had, before such public disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor." Exceptions are also provided for disclosures appearing in applications and patents one year or less before the effective filing date of an applicant's claimed invention. 12

"Grace periods" play an important role under the AIA because disclosure of components that are the work of the same inventive entity as the claimed combination can be excepted from prior art under the AIA, as they were under the provisions of the Patent Act of 1952.¹³ What is not clear from the provisions of the new Act is whether exceptions from the general scope of prior art embrace only disclosures made by a joint inventor of the joint work or, instead, embrace any disclosure of the work of the joint inventor, even if that work was done independently of the joint invention. For example, assume A independently conceived a novel ceramic material, and inventors A and B, working together jointly conceive a door handle of A's novel ceramic material. Would the exceptions to prior art under the AIA extend to inventor A's prior disclosure (within the one-year grace period preceding the effective filing date of a joint patent application) of the novel ceramic material alone? Or rather, would only inventor A's prior public disclosure of the joint invention, namely the door handle made of the novel ceramic material (again within the one-year grace period preceding the effective filing date of the joint patent application) be excepted from consideration as prior art under the AIA?

The "Examination Guidelines For Implementing the First Inventor to File Provisions of the Leahy-Smith American Invents Act" (the "Guidelines"),¹⁴ promulgated by the United States Patent and Trademark Office (USPTO, or the "Patent Office"), do not parse inventorship of so-

^{10.} *Id.* sec. 3(b), § 102(b)(1)(A).

^{11.} *Id.* sec. 3(b), § 102(b)(1)(B).

^{12.} Id. sec. 3(b), § 102(b)(2)(A)–(B).

^{13.} Patent Act of 1952, 35 U.S.C. § 102.

^{14.} USPTO Examination Guidelines for Implementing the First Inventor to File Provisions of the Leahy-Smith America Invents Act, 78 Fed. Reg. 31, 11059 (2013) [hereinafter Guidelines] (to be codified at 37 C.F.R. pt. 1).

called "grace period" disclosures so long as they were by either an "inventor or joint inventor" of the subject application. The Guidelines state:

Specifically, Office personnel will not apply a disclosure as prior art under AIA 35 U.S.C. § 102(a)(1) if the disclosure: (1) Was made one year or less before the effective filing date of the claimed invention; (2) names the inventor or joint inventor as an author or inventor; and (3) does not name additional persons or authors on a printed publication or inventors on a patent. This means that in circumstances where an application names additional persons as inventors relative to the persons named as authors in the publication (e.g. the application names as inventors A, B, and C, and the publication names as authors A and B), and the publication is one year or less before the effective filing date, it is apparent that the disclosure is a grace period inventor disclosure, and the publication would not be treated as prior art under AIA 35 U.S.C. § 102(a)(1).¹⁵

Therefore, regardless of whether it is some subgroup of an inventive entity that is responsible for a disclosure made within the statutory grace period of AIA 35 U.S.C. § 102(b)(1), that disclosure will not be treated as prior art under AIA 35 U.S.C. § 102(a)(1). In other words, disclosure by the subgroup of inventors is not "severable" (i.e., legally distinct) from that of the inventive entity of the patent application as a whole as "prior art" under AIA 35 U.S.C. §102(a) and (b). The salient question, however, is whether the *subject matter* of the disclosure, as opposed to the *act of disclosing*, must be the product of the inventorship entity as a whole, or need only be the work of the subgroup responsible for the disclosure.

Lack of severability of a coinventor's own work from a joint invention to which he has contributed has implications beyond the scope of disqualification of his own prior public disclosure as prior art. For example, under pre-AIA law, the Court of Appeals for the Federal Circuit ("Federal Circuit") held in *In re Hubbell* that an earlier-filed patent application having, in this case, a pair of coinventors in common with a later-filed, but first-to-issue, patent was subject to rejection under the doctrine of obviousness-type double patenting rejection (i.e., rejection of claims for lack of patentable distinction, such as by being obvious over the claims of an issued patent). The Federal Circuit affirmed the rejection of the patent despite the non-identical inventorship entities of the claimed subject matter in the first-filed application and the later-filed (but first-to-

^{15.} *Id.* at 11076 (emphasis added). Similar provisions exist for exceptions to AIA in 35 U.S.C. § 102(a)(2), 35 U.S.C. § 102(b)(2).

^{16.} In re Hubbell, 709 F.3d 1140, 1147 (Fed. Cir. 2013).

issue) patent, and despite a lack of co-ownership of the first-filed patent application and the issued patent (such as by being subject to a qualifying joint research agreement).¹⁷ The court affirmed the decision by the Board of Patent Appeals and Interferences (BPAI or "Board") to maintain the rejection by the Patent Office for obviousness-type double patenting by taking judicial notice of a provision of the Manual of Patent Examining Procedure (MPEP) of the Patent Office that the existence of a common inventor in an issued patent and a pending application was sufficient basis for an obviousness-type double patenting rejection.¹⁸ Further, the court approved of the Board's underlying rationale of asserting obviousness-type double patenting rejections where there is a "concern over potential harassment of infringement by multiple assignees asserting essentially the same patented invention." Of particular significance was that, because there was no common ownership, the obviousness-type double patenting rejection of the earlier-filed application could not be overcome by filing a terminal disclaimer. Normally, a terminal disclaimer would overcome a double patenting rejection by disclaiming the "terminal" portion of a patent extending beyond the expiration date of another patent.²⁰

Judge Newman, in dissent, stated, "double patenting does not apply when the application and patent are of separate ownership and have separate inventive entities." Instead, according to Judge Newman, where there is no common inventorship entity or common ownership, such as by

^{17.} *Id*.

^{18.} Id. at 1146.

^{19.} *Id.* at 1144 (reciting MANUAL OF PATENT EXAMINING PROCEDURE § 804(I)(A) (8th ed. Rev. 7, Sept. 2008) [hereinafter MPEP], which states, "double patenting may exist between an issued patent and an application filed by the same inventive entity, or by a *different inventive entity having a common inventor*, and/or by a common assignee/owner" (emphasis added)).

^{20.} Terminal disclaimers for "double-patenting" are discussed in greater detail *infra* Section III.B, but generally provide that the portion of the term of a patent extending beyond the expiration date of another patent has been dedicated to the public, and that both patents will expire upon division of ownership between them. For a general discussion of the history of statutory disclaimers predating modern "terminal disclaimers" filed in response to obviousness-type double patenting rejections, see, for example, PASQUALE J. FREDERICO, STATUTORY DISCLAIMER IN PATENT LAWS (Paul Perlman, 1935). FREDERICO mentions "double patenting," but only with reference to disclaimer in an issued patent *of claims* to the "same invention" claimed in an earlier patent. *Id.* at 28. Statutory provision for disclaimer *of the remaining term* of a patent was first provided for in 35 U.S.C. § 253 of the Patent Act of 1952, and stated, "any patentee or applicant may disclaim or dedicate to the public the entire term, or any terminal part of the term, of the patent granted or to be granted." This provision still exists in the AIA. *See* 35 U.S.C. § 253(b).

^{21.} *Hubbell*, 709 F.3d at 1150–51 (Fed. Cir. 2001) (Newman, J., dissenting).

virtue of a qualifying joint research agreement, disputes should be resolved "on the merits of the invention, or through the interference [for priority of invention] or derivation [of the source of an invention] procedures, or other standard protocol as may apply in the particular situation."²²

Nothing in the AIA changes the availability of obviousness-type double patenting rejections. As a result such rejections can still be asserted against earlier-filed patent applications in view of later-filed but earlier-toissue patents on the basis of the existence of a common coinventor, despite there being no common ownership between the patent and the patent application. The lack of severability of an inventor's own work from that of a joint invention, by embracing the work of a common coinventor within the same umbrella as that of the work of "joint inventors," greatly expands the scope of "prior art" that can be excluded as "exceptions" under the AIA, just as the existence of a common inventor among inventive entities greatly increases the scope of obviousness-type double patenting. Such an interpretation of the effect of an inventor's own work under the AIA would be an unnecessary departure from judicial precedent. Recognition, on the other hand, that the independent work of an inventor is distinct from that of a joint inventive entity would be consistent with judicial precedent and would also be consistent with a proposed statutory provision limiting obviousness-type double patenting rejections to patents and patent applications that "name the same individual or individuals."23

Part II of this Article describes how the concept of "prior art" in patent law is affected by changes made under the AIA, including the possible effect of statutory definitions of "inventor" and "joint inventors" in the absence of historical context. Part III traces the evolution of "obviousness-type double-patenting" as a judicial doctrine and the notion of "terminal disclaimer" in the context of inventorship. Part IV addresses problems raised by common inventors among distinct inventive entities and how courts and, ultimately, Congress responded to the associated issue of common ownership among distinct inventive entities. Finally, Part V advocates for extending the logic of severability of inventorship as it evolved prior to the AIA, and compares and contrasts that approach with inventorship under the judicially created doctrine of obviousness-type double patenting. Part V discusses recent developments in obviousness-type double patenting and a proposed codification of this doctrine under the Innovation Act, which was introduced in the 114th Congress.

^{22.} Id. at 1151 (Newman, J., dissenting).

^{23.} Innovation Act, H.R. 9, 114th Cong. (2015) [hereinafter Innovation Act].

II. THE MEANING OF "PRIOR ART"

The meaning of the terms "inventor," "joint inventor," and "coinventor," despite the definitions provided under 35 U.S.C. § 100 of the AIA, must be read in the context of 35 U.S.C. § 102, the so-called "novelty" portion of the Act, which prescribes the conditions for novelty in relation to "prior art." Exceptions to patentability are provided under § 102 in terms of "disclosure" by an *inventor* or *joint inventor*. The meanings of the terms, "inventor" and "joint inventor," as they relate to an "inventive entity," therefore, are critical to an understanding of the AIA. Section II.A discusses the relevant portions of the AIA, as well as the legislative history and early commentary directed to the meaning of "prior art" and excepted "disclosure." Section II.B reviews the development of the "inventive entity" as a judicial construct prior to implementation of the new Act.

A. DISCLOSURE BY A "JOINT INVENTOR" UNDER THE AMERICA INVENTS ACT (AIA)

The term "prior art" existed under the Patent Act of 1952 only under the "obviousness" portion of the statute, 35 U.S.C. § 103, and only with reference to § 102, which made no mention of this term. Under the AIA, "prior art" is defined under 35 U.S.C. § 102(a) in terms of disqualification from entitlement to patentability. Exceptions are provided under the remaining paragraphs of § 102, based in part on inventorship and timing of disclosures. The structure of § 102 under the AIA is discussed in Section II.A.1, which is followed in Section II.A.2 by an analysis of the legislative history and principal early commentary on statutory inventorship.

1. Exclusions from Novelty Under the AIA by the United States Patent and Trademark Office

Under the AIA, 35 U.S.C. § 102 expresses novelty as distinction over "prior art." There are four subsections of § 102: subsection (a) broadly defines novelty and "prior art," subsection (b) provides exceptions to the prior art identified in subsection (a), subsection (c) qualifies joint research agreements under the common ownership provision of subsection (b), and subsection (d) delineates what patents and published patent applications are effective as "prior art" under subsection (a).²⁴

Reflecting the parallel section of the statute under the Patent Act of 1952, conditions for patentability under AIA § 102(a) are stated in the negative:

- §102. Conditions for patentability; novelty
- (a) Novelty; Prior Art.—A person shall be entitled to a patent unless—
 - (1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention; or
 - (2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under § 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.²⁵

Exceptions to "prior art" under subsection (a)(1) are described under § 102(b)(1) as "disclosures made 1 year or less before the effective filing date of a claimed invention," so long as,

- (A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or
- (B) the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.²⁶

Similarly, exceptions to descriptions of the claimed invention in issued patents or published patent applications under AIA § 102(a)(2) are set forth under subsection (b)(2), which states that:

A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—

- (A) the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor;
- (B) the subject matter disclosed had, before such subject matter was effectively filed under subsection (a)(2), been

^{25.} Id. sec. 3(b), § 102(a).

^{26.} Id. sec. 3(b), § 102(b)(1).

publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor ²⁷

Subsection (b)(2) also excepts prior art where: "(C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person." Therefore, all exceptions to prior art under AIA § 102 include disclosures made by the "inventor or a joint inventor," and subject matter disclosed that, prior to public disclosure of that subject matter, had been publicly disclosed by "the inventor or a joint inventor."

A fundamental question immediately arises from an internal discrepancy of § 102 in that the negative conditions of patentability specified in § 102(a) refer to the *claimed invention*, ²⁹ while exceptions under § 102(b) are stated in terms of disclosure by the inventor or joint inventor.30 The term "claimed invention" is defined at § 100(j) as: "the subject matter defined by a claim in a patent or an application for patent."31 The term "inventor" is defined at § 100(f) as "the individual, or if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention,"32 while a "joint inventor" is defined as "any 1 of the individuals who invented or discovered the *subject matter of a joint* invention."33 The phrases "subject matter of the invention" and "subject matter of a joint invention" link the "claimed invention" of § 102(a) to the terms "inventor" and "joint inventor" of § 102(b), thereby partially resolving the discrepancy. However, there is no requirement that the term "disclosure" of § 102(b) must be coterminous with "the subject matter" of the "claimed invention" of § 102(a). One question, then, is whether the "disclosure" of § 102(b) can be a sub-combination of the elements constituting the "claimed invention" of § 102(a). The Guidelines promulgated by the Patent Office do not answer this question.³⁴

According to the Guidelines, because the AIA provides no definition, the Patent Office is "treating the term 'disclosure' as a generic expression

^{27.} Id.

^{28.} *Id.* sec. 3(b), § 102(b)(2)(C).

^{29.} Id. sec. 3(b), § 102(a).

^{30.} *Id.* sec. 3(b), § 102(b).

^{31.} *Id.* sec. 3(a), § 100(j) (emphasis added).

^{32.} *Id.* sec. 3(a), § 100(f) (emphasis added).

^{33.} *Id.* sec. 3(a), § 100(g) (emphasis added).

^{34.} See generally Guidelines, supra note 13.

intended to encompass the documents and activities enumerated in AIA 35 U.S.C. § 102(a)."35 The "exception" under 35 U.S.C. § 102(b)(1)(A), referenced by the Patent Office as the "grace period inventor or inventororiginated disclosure exception," includes disclosures made: "(1) One year or less before the effective filing date of the claimed invention; and (2) by the inventor or a joint inventor, or by another who obtained the subject matter directly or indirectly from the inventor or joint inventor."36 Where the disclosure names some subset of the inventors of the patent application as authors, the Guidelines state that the Patent Office will presume that the "disclosure is a grace period inventor disclosure, and the publication would not be treated as prior art under AIA 35 U.S.C. § 102(a)(1)."37 On the other hand, where the situation is reversed, i.e., the application names as inventors a subset of the authors listed in the publication, the Guidelines state that "it would not be readily apparent from the publication that it is by the inventor or a joint inventor and the publication would be treated as prior art under AIA 35 U.S.C. § 102(a)(1)."38 The Guidelines do not state in either case, however, whether the "disclosure" need be of the "claimed invention" of the patent application, or only some component of it. In other words, would a "disclosure" of invention X by inventor A less than one year before a claim by A of invention XY be an exception to prior art under 35 U.S.C. AIA § 102(b)(1)(A), as it would be under 35 U.S.C. § 102(b) of the Patent Act of 1952? More importantly, the Guidelines do not state whether the "disclosure" must be the work of the inventive entity of the claimed invention, or need only be the independent work of a coinventor of that inventive entity. Interpreted literally, the disclosure could be the work of either the joint inventive entity or the independent work of a member of that joint inventive entity. For example, would "disclosure" by A of X within one year of a claim by A and B to joint invention XY be an exception to prior art under 35 U.S.C. § 102(b)(1)(A)?

A parallel exception exists for disclosure of subject matter that occurs after the subject matter has been publicly disclosed by the inventor under AIA 35 U.S.C. §102(b)(1)(B), namely, where "the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter

^{35.} Id. at 11075.

^{36.} Id. at 11075-11076.

^{37.} Id. at 11076.

^{38.} *Id*.

disclosed directly or indirectly from the inventor or a joint inventor."³⁹ The exception is referred to by the Guidelines as the "inventor or inventor-originated prior public disclosure exception."⁴⁰ Here, the explanation by the Guidelines is more explicit. Where the subject matter disclosed had previously been publicly disclosed by the inventor or a joint inventor, only those elements previously disclosed by the inventor or joint inventor are disqualified. Other elements of intervening disclosure that are part of the claimed invention are not excepted and continue as prior art. As stated by the Guidelines:

For example, [if] the inventor or a joint inventor had publicly disclosed elements A, B, and C, and a subsequent intervening grace period disclosure discloses elements A, B, C, and D, then only element D of the intervening grace period disclosure is available as prior art under AIA 35 U.S.C. 102(a)(1).⁴¹

In assessing the relevance of the prior disclosure by the inventor or a joint inventor to intervening disclosure, the Guidelines clearly state that no comparison is to be made between the subject matter of the claimed invention and either the subject matter disclosed by the inventor or a joint inventor or the intervening disclosure:

A determination of whether the exception in AIA 35 U.S.C. 102(b)(1)(B) is applicable to subject matter in an intervening grace period disclosure does not involve a comparison of the subject matter of the claimed invention to either the subject matter disclosed by the inventor or a joint inventor, or to the subject matter of the subsequent intervening grace period disclosure.⁴²

The relevance of an intervening grace period disclosure must be measured only by comparison of that intervening disclosure to the prior disclosure by the inventor or a joint inventor.

The Guidelines, therefore, do not state whether prior disclosure by the inventor or a joint inventor must be of the claimed invention as a whole or need only be of elements or some sub-combination of elements of the claimed invention in order to be excepted from consideration as prior art

^{39.} Guidelines, supra note 13, at 11076.

 $[\]cdot 0$. Id.

^{41.} *Id.* at 11077 (An "intervening grace period disclosure of a genus is not available as prior art," while, conversely, an "intervening grace period disclosure of the species would be available as prior art," as would be an intervening grace period disclosure of "alternative species not also disclosed by the inventor or joint inventor.").

^{42.} *Id*.

under AIA 35 U.S.C. § 102(b)(1)(A) or (B). Nor is there any discrimination under the Guidelines between prior disclosure that represents the work of the inventive entity (i.e., all joint inventors collectively) of the claimed invention and prior disclosure that represents the work of only a joint inventor of the claimed invention under § 102(b)(1)(A) or (B). The same issues apply to disclosures appearing in previously filed patent applications and patents as exceptions to prior art under AIA 35 U.S.C. § 102(b)(2)(A) and (B).

2. Legislative History and Principal Early Commentary on Inventorship Under the AIA

The legislative history of the AIA does not shed light on whether the contribution of a coinventor is severable from that of a joint inventorship entity of which he or she is a part. According to Joe Matal, who served as a Judiciary Committee Counsel to Senator Jon Kyl, and as Minority General Counsel of the Judiciary Committee while the American Invents Act was proceeding through Congress, the definitions of "inventor," "joint inventor," and "claimed invention" were introduced in an early version of the patent reform legislation that ultimately became part of the AIA and remained part of every bill introduced thereafter.⁴³ Matal reports that the "only commentary on any of these definitions that appears in the legislative history" is found in a section-by-section analysis of the 2007 House Committee Report and states:

The term "inventor" refers to a single individual who has, working alone, invented or discovered an invention. In cases where two or more individuals are responsible for inventing or discovering an invention, the term inventor applies to all individuals collectively.

The term "joint-inventor" is applied to any one of the individuals who have invented or discovered an invention together. Such a term is necessary since the term inventor is used to refer to either a single inventor or, collectively, to all the joint inventors of an invention made or discovered by more than one person.

• • •

^{43.} Joe Matal, A Guide to the Legislative History of the America Invents Act: Part I of II, 21 FED. CIR. B.J. 435, 447 (2012).

The term "claimed invention" is any invention defined by a claim in a particular patent or patent application, as required by § 112(b) as amended by this Act.⁴⁴

As can be seen, none of the above commentary clarifies whether the disclosure of an "inventor" or "joint inventor" under the exceptions to prior art of AIA 35 U.S.C. § 102(b)(1) or (2) is of the subject matter of the claimed invention or some sub-combination of the elements of the claimed invention. The commentary also does not indicate whether the "disclosure" of a "joint inventor" is the joint work of the inventive entity, or whether the disclosure could be the work of the joint inventor alone. Similarly, the legislative history of the AIA, as represented by Matal, does not clarify whether a "disclosure" within the exceptions of § 102 (b)(1) and (2) made by the "inventor" or "joint inventor" must be commensurate in scope with the "claimed invention" described in § 102(a), and if such disclosure is not commensurate in scope with the "claimed invention," whether the disclosure must be the work of the inventive entity, or need only be the work of a "joint inventor" alone.

Robert Armitage, who was one of the principal architects of the AIA, states that a qualifying "disclosure" under subsection 102(b) need only be the work of a "joint inventor," and not necessarily the work of the inventive entity of the joint invention.⁴⁵ In particular, in explaining the subparagraph (A) exceptions to prior art of § 102(b)(1)(A) and (2)(A), Armitage states:

Both subparagraph (A) provisions reach the identical result of disqualifying a disclosure of the inventor's own work as prior art. Using functionally identical language, both provisions exempt from prior art subject matter disclosed, if obtained directly or indirectly from the inventor or a joint inventor. However, the actual structure of the two subparagraphs differs.⁴⁶

After explaining that the difference between the two subparagraph (A) provisions is that § 102(a)(1), and therefore § 102(b)(1)(A), differs from § 102(a)(2), and therefore § 102(b)(2)(A), in that "§ 102(a)(1) applies broadly to public disclosures by *any person*," while "§ 102(a)(2) is specifically limited to patent filings *naming another inventor*," Armitage continues:

^{44.} *Id.* at 448 (quoting H.R. Rep. No. 110-314, at 56 (2007)).

^{45.} See Robert A. Armitage, Understanding the American Invents Act and its Implications for Patenting, 40 AIPLA Q.J. 1 (2012).

^{46.} Id. at 71.

^{47.} *Id.* at 71–72 (emphases in original).

Therefore, although containing wording differences, the two subparagraph (A) exceptions contain no substantive differences from one another in the sense that a disclosure reflecting *the work* of the inventor (or a joint inventor), rather than an independent creator of the *subject matter disclosed*, made during the one-year "grace period" prior to the effective filing date of the inventor's claimed invention, is excepted from prior art.⁴⁸

As an explanation of his meaning of the word "work," Armitage states in a footnote:

To be most precise, the "work" of the inventor or the work of inventing or creating is a reference to the intellectual work—the intellectual contribution or origin of the subject matter in question. Thus, the term "obtained... directly or indirectly from the inventor" means that the inventor must be the intellectual originator of the subject matter. This is further apparent from the quotation to follow from the *Facius* appeal. *See In re Facius*, 408 F.2d 1396, 1407 (C.C.P.A. 1969).⁴⁹

The quotation from *In re Facius* referenced by Armitage is repeated below. In particular, Armitage substitutes the word "appellant" in the original language with the phrase, "the named inventor of the claimed invention":

The real question is whether, in addition to establishing derivation of the relevant disclosure from himself, [the named inventor of the claimed invention] has also clearly established the fact that he invented the relevant subject matter disclosed in the [prior art] patent. If he merely brought the prior art to the attention of the patentee, then the disclosure in the [prior art] patent is available against [the claimed invention] even though [the named inventor] was, in a fashion, responsible for that particular disclosure (i.e., it was his "contribution" to the disclosure since he "communicated" the subject matter to the patentee). If on the other hand, [the named inventor actually] invented the subject matter upon [which] [sic] the relevant disclosure in the [prior art] patent was based, then the [prior art] patent may not be used as a reference against him notwithstanding the [prior art] patent's silence as to the patentee's source of that subject matter.⁵⁰

^{48.} Id. at 72 (emphasis added).

^{49.} Id. at 72 n.279.

^{50.} *Id.* at 73 (emphasis added, alterations in original) (quoting *In re* Facius, 408 F.2d 1396, 1402–03 (C.C.P.A. 1969)). The word "appellant" from the opinion was substituted in all instances except one, with "the named inventor of the claimed invention" or "the

The bracketed language fundamentally changes the potential meaning of the passage because, by substituting the word, "appellant," with the phrase, "the named inventor," Armitage is equating the "named inventor" with the inventorship entity of the appellant when, in fact, they may be different.

Moreover, Armitage states that the requirement under AIA 35 U.S.C. § 102(b) that disclosure need only represent the work of a joint inventor in the case of a joint invention, is "no more and no less than a new codification of the pre-AIA grace period."⁵¹ As stated by Mr. Armitage:

Wherever the inventor's (or a joint inventor's) work is disclosed—either by the inventor or joint inventors themselves, or by someone who derived the same from them—the exception applies. Under subparagraph (A), therefore, nothing changes from the existing law, particularly as understood by the USPTO and as applied by the courts.⁵²

This statement presumes that the work of a joint inventor is inseparable from the work of the inventive entity of which he is a part; the disclosure of the independent work of a joint inventor is tantamount to disclosure of the joint invention to which he contributed, thereby qualifying disclosure of the joint inventor's own independent work as an exception to "prior art" of a joint claimed invention under AIA 35 U.S.C. § 102(b)(1)(A). Armitage thus relies on *Facius* to support judicial precedent for codification under the AIA that "grace period" disclosure of the independent work of a joint inventor cannot be considered separately from disclosed work of the joint inventive entity of which the joint inventor is a member.

In re Facius⁵³ was a decision by the Court of Customs of Patent Appeals (CCPA) under the Patent Act of 1952. The court held that the disclosed work of an inventor "may not be used as a reference against him notwithstanding the [prior art] patent's silence as to the patentee's source of that subject matter."⁵⁴ The presumption in this quotation by Armitage from Facius is that the inventive entity and the originator of the work disclosed in the reference are the same. Armitage confuses this issue by substituting the term "appellant" from the original language of the case

named inventor." In one instance he instead used the phrase "the named inventor actually." The phrase "prior art" was added by Armitage.

^{51.} *Id.* at 72 ("Given this understanding, the subparagraph (A) provisions provide no more and no less than a new codification of the pre-AIA grace period.").

⁵² Id

^{53.} In re Facius, 408 F.2d 1396 (C.C.P.A. 1969).

^{54.} Armitage, *supra* note 45, at 73. (quoting *Facius*, 408 F.2d at 1407 and adding the language "prior art").

with the phrase, "[the named inventor *actually*],"⁵⁵ thereby leaving open the possibility that, in the case of a joint invention, the disclosed independent work of a joint inventor would be disqualified as a reference against the claimed invention of a joint inventive entity of which the "joint inventor" was a part when, as will be discussed, the case law at the time of *Facius* was to the contrary.

The court in *Facius*, in fact, did not address the severability of disclosure of the work of a joint inventor from that of a joint inventive entity. Rather, in dicta, the court stated that one's own work cannot be used as a reference against him, which is true only to the extent that the inventive entity responsible for the work disclosed is the same as that of the claimed invention. The appellant in *Facius* actually lost his bid to remove his own prior disclosure as prior art because, as stated by the court, "Appellant has not established inventorship... since he did not claim the relevant subject matter in the patent [reference] but rather only claimed an improvement thereon." In other words, the appellant failed to remove the patent reference as "prior art" because he did not establish that the disclosed but unclaimed subject matter of the referenced patent was his own work. As we shall see, other case law contemporary with *Facius*, such as *In re Land*, supported the notion that a joint inventor's own disclosure could be prior art to jointly invented subject matter.

Armitage is not alone in understanding that disclosure representing the independent work of a joint inventor qualifies as an exception to prior art under AIA § 102(b) of a claimed invention by a joint inventive entity of which he is a part. For example, Lewis et al.⁵⁹ state that, in the situation where "A and B are listed as the authors or inventors of the reference, and A and C are named as inventors on the rejected application," then, "[p]resumably, if inventorship was done properly... any disclosure from

^{55.} The original language of the opinion read: "If on the other hand, *appellant invented* the subject matter upon which the relevant disclosure in the patent was based, then the patent may *not* be used as a reference against him notwithstanding the patent's silence as to the patentee's source of that subject matter." *Facius*, 408 F.2d at 1407 (emphasis removed).

^{56.} *Id.*

^{57.} *Id.* ("However, failure to claim the invention disclosed in the reference is not fatal to a showing of inventorship; that fact [of inventorship] may be established by any evidence of record." (emphasis removed)).

^{58.} See In re Land, 368 F.2d 866 (C.C.P.A. 1966).

^{59.} Nathan T. Lewis et al., Considerations for Handling Closely Related Subject Matter in Patent Portfolios in Light of Therasense and the America Invents Act of 2011, 53 IDEA 63 (2013).

^{60.} Id. at 93.

A and B that is relevant to the claims of A and C's application would be based on A's contribution to the publication."⁶¹ The presumption is that, "so long as [the publication by A and B] is within one year of the filing date, it would ostensibly fall under the exception of § 102(b)(1)(A) because a joint inventor A made the disclosure,"⁶² and therefore, the prior disclosure by joint inventor A would be tantamount to disclosure by the joint inventive entity of A and C. In the case of "the reference being a patent or patent application that was published after the filing date of A and C's application, but filed before it," Lewis et al. assert that an exception would be provided under § 102(b)(2)(C) if the application were "owned or under obligation of assignment to the same client at the time of filing."⁶³

Lewis et al. do not mention that, following the line of reasoning applied by them to § 102(b)(1)(A), an exception would also be found under § 102(b)(2)(A) because any description by a joint inventor of his own work would be excluded from consideration as prior art to a laterfiled application naming an inventorship entity of which he was a member under 35 U.S.C. § 102(a)(2). Moreover, their reasoning stands in contrast to their description of the treatment of disclosures in prior-published publications and prior-filed patent applications under the Patent Act of 1952. For example, they acknowledge that the Court of Customs and Patent Appeals in the 1966 case of *In re Land* had explicitly rejected claims under 35 U.S.C § 102(e) and § 103 in view of prior disclosure in earlierfiled patent applications by members of the inventive entity of the patent application because, as stated by Lewis et al., "[t]here was no evidence that the parts of the references relied on in the rejection were disclosures of anything the inventors did jointly."64 Lewis et al. then state that the new law under the "AIA greatly simplifies the [pre-AIA] § 102(e)-type situations for clients that have similar subject matter," because "[t]he identity of the inventors in this situation no longer matters."65 These representations of the law, before and after enactment of the AIA, if true, do not indicate a "simplification," but rather a fundamental shift in patent law, contrary to Mr. Armitage's statement that "the subparagraph (A)

^{61.} Id. at 94.

^{62.} *Id.* at 93–94.

^{63.} Id. at 94.

^{64.} *Id.* at 88 (quoting *In re* Land, 368 F.2d 866, 881).

^{65.} Id. at 95 (emphasis added).

provisions provide no more and no less than a new codification of the pre-AIA grace period."66

The scenario provided by Lewis et al., wherein a reference authored solely by A is removed by ascertaining that the relevant teaching is the work of either A or B of the joint inventorship entity, is qualified by Lewis et al. by their reference to others, such as Nelson R. Capes and Rebecca D. Hess,⁶⁷ who "have concluded that the MPEP does not address this situation."68 However, even Capes and Hess, after acknowledging that the MPEP does not address the situation where "two inventors separately apply for United States patents and, before their patents issue, later *jointly* apply for a patent on an invention that is anticipated or made obvious by one or both of the earlier-filed patent applications,"69 then go on to overlook the central issue. Instead of beginning with the broader question of what is required to remove a reference authored by another that discloses subject matter later claimed by the joint inventive entity, Capes and Hess address the more specific question of whether "co-applicants [may] introduce affidavit evidence to show that one or both reference patents are really the work of one of the co-applicants[.]"70

By posing the narrower question, Capes and Hess presuppose that the work (disclosure) of an individual is not severable from the inventorship entity of which he is a member. In other words, it is assumed in the more focused inquiry that the independent work of an individual cannot be relied upon as a reference against joint work to which he has contributed. This assumption is commonly lumped under the adage that an "applicant's own work cannot be used against him unless there is a time bar under 35 U.S.C. § 102(b)."⁷¹ The idea is that, as stated by Capes and Hess, "it is impossible for an inventor to disclose something *before* he invents it!"⁷² However, in order to understand the implications of disclosing an inventor's own work relative to a later-filed patent application claiming that work, or an obvious variant of it, it is necessary to assess the historical

^{66.} Armitage, supra note 45, at 72.

^{67.} Nelson R. Ĉapes & Rebecca D. Hess, Different Inventive Entities Under 35 U.S.C. § 102(e) and Affidavit Practice Under 37 C.F.R. § 1.132, 81 J. PAT. & TRADEMARK OFF. SOC'Y 33 (1999).

^{68.} Lewis, supra note 59, at 86 (citing Capes & Hess, supra note 67).

^{69.} Capes & Hess, supra note 67, at 35.

^{70.} Id. at 37 (emphasis added).

^{71.} See MPEP, supra note 19, § 2136.05 (citing In re DeBaun, 687 F.2d 459 (C.C.P.A. 1982)).

^{72.} Capes & Hess, *supra* note 67, at 34 (emphasis in original).

development of inventorship and how it has been applied in recent case law.

B. THE "INVENTIVE ENTITY" PRIOR TO THE AIA

Issues of priority typically have required identity of the "inventorship," rather than mere overlap of membership among inventive entities. For example, in *In re Mann*⁷³ the Court of Customs and Patent Appeals (CCPA) held that Koppelman and Mann, as inventors, had conceded priority of invention to a later-filed patent application by Koppelman and Cooper, to which Koppelman and Mann had acquired the rights by electing to take out a patent upon the later-filed application of Koppelman and Cooper. The court said: "[t]here cannot be two first inventors of the same invention, and, if Koppelman and Cooper were the first inventors, it is obvious that Mann and Koppelman could not be the first inventors."⁷⁴ Even though Koppelman was a coinventor on both the earlier-filed patent application and the later-filed patent, the potential for using Koppelman's own work as a means for rebutting the presumed "concession of priority of invention in Koppelman and Cooper [of] the same invention disclosed in the two applications" was never raised.⁷⁵

The "two first inventors" at issue were two inventive entities, namely Koppelman and Mann, as the inventive entity of the first-filed patent application, and Koppelman and Cooper as the inventive entity of the second-filed patent application that became the issued patent. Further, this was not an instance where the claims of the first-filed application and the later-filed, but issued, patent were identical. Rather, the court stated that, "in so far as appellants' claims differ from the construction specifically shown by Koppelman and Cooper, there is no invention involved because the modification is of such a character as is within the scope of the Koppelman and Cooper disclosure." The paradoxical result was that the claimed invention of the earlier-filed application by Koppelman and Mann would be patentable only if it were patentably distinct in view of the disclosure of the later-filed application by Koppelman and Cooper, based on a concession of invention to a distinct

^{73. 47} F.2d 370 (C.C.P.A. 1931).

^{74.} *Id.* at 371.

^{75.} *Id*.

^{76.} Id.

^{77.} Id. at 372.

^{78.} See id. ("This brings us to a consideration of the question of whether the claims here in issue read upon the disclosure in the Koppelman and Cooper patent, as held by the Patent Office tribunals.").

inventive entity, despite naming a common joint inventor. The later-filed application by Koppelman and Cooper could not be removed as a reference against the earlier-filed application by Koppelman and Mann based on the argument that relevant disclosure was really the work of the invention of the common inventor, or because "it is impossible for an inventor to disclose something *before* he invents it," as recited by Capes and Hess.⁷⁹

A converse but consistent result was obtained in *In re Calvert*, ⁸⁰ where the CCPA reversed the Board of Appeals of the United States Patent Office, finding "distinguishable" and eligible for patent protection the subject matter of an earlier-filed patent application that was more narrowly claimed in a later-filed, but first-to-issue, patent by the same sole inventor. ⁸¹ Where there was no distinction in the inventive entity, the fact of prior invention was irrelevant, and the appealed claims were "patentably distinguishable" from the claimed subject matter of the reference patent, regardless of which patent application issued first. ⁸² Therefore, while in *Mann* the court insisted on priority of invention when the inventive entities were distinct, in *Calvert* the court overlooked priority of invention when the inventive entity (a sole inventor) was identical, and insisted only that claim scope be patentably distinguishable. In both cases, identity of inventorship, not overlap, was key to resolving patentability.

- 79. Capes & Hess, supra note 67, at 34.
- 80. 97 F.2d 638, 640 (C.C.P.A. 1938).
- 81. Id. The court stated:

We think it is clear from what has been said that the appealed claims are distinguishable from Claims 6 and 8, as well as the other claims of appellant's patent, in that they cover the broad generic invention which comprises a "rubber hydrochloride," not resistant to photochemical disintegration, "having thermoplastic seals," rather than appellant's improved composition defined in Claims 6 and 8 of his patent, which is resistant to photochemical disintegration.

Id.

82. Id. The court stated:

In view of the fact that, as we understand its decision, the board rejected each of the appealed claims solely upon the theory that claims 6 and 8 of appellant's patent were *not* limited to a composition containing a "photochemical inhibitor," and as we are of opinion that those claims are so limited, we must hold that the appealed claims differ in subject matter and scope from claims 6 and 8 of appellant's patent and are patentably distinguishable therefrom, and that the board erred in rejecting them on the ground of double patenting.

Identity of inventorship was also determinative in *In re Middleton*, 83 where the CCPA held that a patent (the Middleton Patent) disclosing zinc titanate and naming a sole inventor was not prior art against the claims of a later-filed continuation-in-part (CIP) application claiming zinc titanate and naming that inventor and another inventor (the Middleton and Reynolds application). The court clearly stated that the basis for disqualifying the earlier patent as a proper reference was a consequence of establishing that the disclosure in the Middleton Patent, supporting the claimed zinc titanate of the later-filed Middleton and Reynolds CIP application, was the joint invention of the applicants of the CIP:

We think appellants have demonstrated by their affidavits that they, rather than Middleton alone, are the inventors of zinc titanate disclosed in the Middleton patent. There seems to be no dispute that upon discovery of the fact of joint inventorship of the subject matter now claimed in the summer of 1952, the linking application was filed on September 25, 1952. In any event, we think the affidavits of Middleton and Reynolds clearly established that zinc titanate was their joint invention and not that of Middleton alone.⁸⁴

Presumptive in this analysis is that the Middleton patent would have been a proper reference against the Middleton and Reynolds application had the zinc titanate disclosed in the Middleton Patent been the work of Middleton alone.

A similar result was obtained in *In re Blout*,⁸⁵ where the CCPA relied on *Middleton* to reverse a decision by the Board and disqualify as prior art an earlier-filed patent application naming only one of two joint inventors of a later-filed continuation-in-part application. The court in *Blout*, however, made two important misstatements that were later retracted in another case by the same court. The first was a conclusion that in *Middleton*, the court held that "Middleton was not regarded as 'another' with respect to Middleton and Reynolds. Hence 35 U.S.C. § 102(a) and (e) were not applicable." Instead, as discussed above, the court in *Middleton* stated that the earlier-filed Middleton patent was not a proper reference because "[w]e think appellants have demonstrated by their affidavits that they [Middleton and Reynolds], rather than Middleton alone, are the inventors of zinc titanate disclosed in the Middleton

^{83. 319} F.2d 552 (C.C.P.A. 1963).

^{84.} Id. at 560.

^{85. 333} F.2d 928 (C.C.P.A. 1964).

^{86.} *Id.* at 931, n.3.

patent."⁸⁷ The second misstatement came in the conclusion by the court in *Blout* that a prior application naming Rogers as the sole inventor was not properly referenced against a later-filed application naming Blout and Rogers, since "Rogers is not 'another' to Blout and Rogers."⁸⁸ This reasoning is contrary to that of the court in *Middleton*, and is not adhered to in later cases, most prominently *In re Land*,⁸⁹ discussed below. Moreover, it was unnecessary for the court in *Blout* to find that "Rogers is not 'another' to Blout and Rogers," because in *Blout*, the relevant disclosure in the earlier-filed Rogers patent application was established to be the work of Blout and Rogers, the inventive entity of the later-filed application. As stated by the court in *Blout*:

Rogers discloses, but does not claim, the invention of Blout and Rogers, appealed herein.

. . . .

... The affidavits constitute sworn statements of the facts, clearly attributing the invention of dye developers [claimed in the Rogers patent] to Rogers and the invention of insulated dye developers [claimed in later-filed application to Blout and Rogers] to Blout and Rogers.⁹⁰

The patent application at issue in *In re Land* was an appeal from the Patent Office Board of Appeals affirming the rejection of claimed subject matter jointly invented by Land and Rogers over several patent references, among which included two patents naming Rogers as the sole inventor (Rogers '668 and Rogers '606), and one naming Land as the sole inventor. The patent application at issue did not claim priority to any of the earlier patents to Rogers or Land. However, they were all commonly assigned to Polaroid Corporation. With respect to the prior art patents naming Land and Rogers as sole inventors, the court and the Board assumed that the earlier patents constituted "prior art on the ground Land and Rogers, individually, were 'another' with respect to the same persons

^{87.} See Middleton, 319 F.2d at 560.

^{88.} *In re* Blout, 333 F.2d at 931 ("Since Blout and Rogers are claiming the improvement they made, as distinguished from the generic invention claimed by Rogers, and since Rogers is not 'another' to Blout and Rogers, we conclude that the Rogers patent is not properly a reference against Blout and Rogers.").

^{89.} See În re Land, 368 F.2d 866.

^{90.} Blout, 333 F.2d at 930.

^{91.} Land, 368 F.2d at 868.

as joint applicants."92 The court stated the legal relationship among "different legal entities" that share individual members:

The question here is not merely whether A or B, individually, is or is not "another" to A & B jointly on a theory of "different legal entities." Of course they are different "entities" in the sense that an invention made jointly by A&B cannot be the sole invention of A or B and vice versa, and certain legal consequences flow from such fact, such as who must apply for patent. But it is an inescapable fact, too, that when A applies for a patent jointly with B he still has in his head all the information he had as individual inventor A, the same being true of B. If as individuals they apply for patents on individual inventions during a period when they are working together on their joint inventions, they also have in their several heads full knowledge of what they have done jointly. When the joint and sole inventions are related, as they are here, inventor A commonly discloses the invention of A & B in the course of describing his sole invention and when he so describes the invention of A&B he is not disclosing "prior art" to the A & B invention, even if he has legal status as "another."93

In other words, according to the court in *Land*, when A and B each make individual contributions, those individual contributions may or may not represent inventions in their own right. Those individual contributions are, regardless, severable from the joint invention of which they are parts. Nevertheless, A, B and A/B represent distinct legal entities. As distinct legal entities, therefore, disclosure of their individual work constitutes prior art against any claims to their joint invention in a later-filed patent application if that disclosure otherwise meets the requirements of 35 U.S.C. § 102. Disclosure by a member of a joint inventive entity, on the other hand, will *not* constitute prior art, absent a statutory bar, if the disclosure is of the joint invention.

In a footnote, the court expressly withdrew its earlier position in *Blout* that the contribution of the sole inventor was not severable from subject matter claimed by a joint entity of which he was a member and, therefore, not "another" under the statute:

On reconsidering our opinion in Blout and Rogers, wherein it was remarked that: "Rogers is not 'another' to Blout and Rogers," we now think that remark to have been unfortunate. The true basis of our decision "that the Rogers patent is not

^{92.} Id. at 876.

^{93.} Id. at 879.

properly a reference against Blout and Rogers" was that the evidence before us showed that the alleged anticipatory disclosure in the Rogers patent was a description of the Blout and Rogers joint invention, not the invention of another. In that sense only Rogers was not "another," but as a patentee, of course, he was. However the disclosure relied on was not his invention, ... but the applicants' own invention which, as against them, could not possibly be prior art. 94

The court ultimately held that the prior patents naming Land and Rogers as sole inventors were, indeed, prior art to a later-filed patent application naming Land and Rogers as joint inventors:

[O]ur considered opinion is that Land and Rogers '606, on the facts of this case, should be regarded as prior art. It is certainly in accord with the weight of authority to regard Land and Rogers individually as separate legal entities from Land and Rogers as joint inventors, as they would be regarded relative to each other if a Land application were rejected on a Rogers copending patent.⁹⁵

Of particular significance is the implication that disclosure in either the Land or Blout patents would be disqualified as prior art if it could be established that that disclosure was, in fact, work that they had contributed as a joint inventive entity of the later-filed patent application, absent qualification of such statements as prior art under another portion of § 102.96 Specifically, the court stated: "There is no indication that the portions of the references relied on disclose anything they did jointly. Neither is there any showing that what they did jointly was done before the filing of the reference[d] patent applications." All of this means, of course, that there are two avenues for removing disclosures that would otherwise constitute prior art. The first would be to establish that the earlier disclosure is the work of the *inventive entity* of the later-claimed invention of the later-filed patent application. The second mechanism would be to show invention by the *inventive entity* of the later-claimed

^{94.} *Id.* at 879 n.10 (emphasis added).

^{95.} Id. at 881.

^{96.} Such as pre-AIA 35 U.S.C. § 102(b), which stated: A person shall be entitled to a patent unless—

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States

^{97.} Land, 368 F.2d at 881.

invention prior to description of that invention in the cited reference relied upon by the examiner.

Two companion cases, In re Mathews98 and In re Facius, discussed above, illustrate that if a disclosure in an earlier publication or prior-filed and published patent application is to be disqualified as prior art, it is important to establish that prior disclosure as the work of the later inventive entity. In Mathews, the court held that an affidavit by an earlier applicant that he was not the inventor of the claimed subject matter of the later-filed application, but rather derived it from the later applicant, was sufficient to establish that the earlier disclosure in the first-filed application was, in fact, the invention of the later applicant. 99 In re Facius, decided the same day as Mathews, differed in that the later applicant (Facius, the appellant) was not able to establish that he invented the relevant subject matter disclosed in the earlier-filed patent application. 100 The opinions in both cases recited and distinguished Land. 101 The court in Facius further distinguished the facts in that case from Blout and Mathews by stating that, "in both cases, the patents fully disclosed the claimed inventions,"102 and that it had been established in both cases by affidavits that "the patentees had derived their knowledge of the relevant subject matter from appellants."103

Far from refuting *Land*, the court in *Facius* pointed out inconsistencies between the holdings in *Blout* and *Land* by dismissing as dicta statements in *Blout* that would render the opinions in those two cases inconsistent:

The Land-and-Rogers joint invention undoubtedly had come after their individual inventions relied upon as prior art. The issue was solely a question of law concerning inventive entities, namely, whether Land and Rogers as individual inventors were each "another" with respect to Land-and-Rogers as joint

^{98.} In re Mathews, 408 F.2d 1393 (C.C.P.A. 1969).

^{99.} *Id.* at 1396 ("Dewey's affidavit and Mathew's oath accompanying his application are sufficient, we feel, to prove that the relevant disclosure in Dewey was a disclosure of Mathew's invention." (emphasis omitted)).

^{100.} *In re* Facius, 408 F.2d 1396, 1402. The prior art reference, U.S. Patent No. 3,146,609, by Engalitcheff, disclosed a heat exchange apparatus to which Facius contributed a water distribution box. The later application by Facius claimed a combination of the water distribution box (or "chamber") and a reservoir which, according to the Examiner, was taught by another reference, Dargavel. Facius was trying to remove the Engalitcheff reference because the relevant teaching in Engalitcheff, the water distribution box, was Facius's own contribution.

^{101.} See Mathews, 408 F.2d at 1396; Facius, 408 F.2d at 1405.

^{102.} Facius, 408 F.2d at 1405.

^{103.} Id.

inventors. The confusion therein had arisen as a result of an "unfortunate" remark in *In re Blout*..., and the portion of the Land "opinion" to which appellant alludes, is essentially an explanation of the "true basis" of the Blout "decision." Thus, *Land* is certainly not controlling and is so factually distinguished as to be inapposite to the present case other than for its enriching legal analysis.¹⁰⁴

The appellant (Facius, the later filer) had unsuccessfully attempted to rely on Land to demonstrate that disclosure in the prior-filed application could not be used against him because it was his own "contribution" to that earlier-filed disclosure. It was "inapposite" because the issue in Land, as in Blout, was not who made the "contribution" to the earlier-filed disclosure, but, rather, whether the contribution was, in fact, the work of the later applicant. As discussed above, the court in both Blout and Land held that, in order for such disclosure (or contribution) to be disqualified as prior art, it had to be the work of the inventive entity of the later-filed application.

A contrary decision was rendered by the United States Court of Appeals for the Fifth Circuit in *Shields v. Halliburton Company*, ¹⁰⁶ where the court held that prior employment of a method by a single inventor, Bassett, did not constitute prior art against the claimed improvement of a joint invention, by Bassett and Olesen, in a subsequently-filed patent application. ¹⁰⁷ The court distinguished earlier decisions, including *Land*, by stating that those cases dealt with a "scenario... where the initial individual inventor *seeks a patent for his own work* and then subsequently applies for a second patent *with a collaborator*." ¹⁰⁸ The court also distinguished the facts from earlier decisions, where "earlier work was done by a stranger to the joint inventorship." ¹⁰⁹ In either case, the court clearly considered the individual's activity to be inseparable from the joint inventorship entity of which that individual is a member, at least in those instances where the individual does not seek a patent "for his own work." ¹¹⁰

^{104.} Id. (citations omitted).

^{105.} Id. at 100.

^{106.} Shields v. Halliburton Co., 667 F.2d 1232 (5th Cir. 1982).

^{107.} *Id.* at 1237 ("The only question we answer is whether, under these facts, Bassett is 'another' to Bassett and Olson. We hold he is not, and affirm the district court's conclusion that the patent is valid.").

^{108.} Id. at 1236 (emphasis added).

^{109.} Id. at 1237.

^{110.} *Id.* at 1236.

Edward C. Walterscheid, in a 1982 article published shortly after *Shields* was decided,¹¹¹ sharply criticized the decision by the Fifth Circuit in *Shields* as being "defective" and "simply based on false premises."¹¹² In particular, Walterscheid criticized the court's reasoning as to the nature of "joint invention," where the Fifth Circuit stated:

[I]f the "first" inventor's initial work for which no patent was sought constitutes an earlier invention as to any subsequent efforts with a collaborator, no valid joint invention would be possible. Theoretically every joint invention would have to be the result of simultaneous inspiration by the collaborators. ¹¹³

Walterscheid stated that these were "false premises," because "[i]t assumes that there can be no such thing as a collaborative effort which is *patentably distinct* over the prior invention of one of the collaborators." Even without such distinctness, a "first" inventor's work must include not just "conception but also a reduction to practice of the earlier invention," and "even if reduced to practice the prior invention must be shown not to have been abandoned, suppressed, or concealed." At any rate, according to Walterscheid, the view expressed by the Fifth Circuit presupposing that "filing a patent application has a special connotation in determining whether prior art invention has occurred" was without support in either the patent statute or case law. 115

Beyond Walterscheid's criticisms regarding patentable distinction and the significance of patent filing, however, lies an underlying problem of *lack of severability* of a joint inventor's contribution that is implied in another passage from *Shields* quoted by Walterscheid in his article:

The cases involving an inventor who first seeks a patent, and then seeks a subsequent joint patent are distinguishable for a fundamental reason. Under the statutes governing patentability, novelty is a condition for patentability. 35 U.S.C. § 102. Had Bassett sought a patent for his work on the McDermott platform [the first reduction to practice of air pressure grouting] he must have *claimed that the process he had developed was an invention*. Had Bassett then collaborated with Olsen, and sought a patent

^{111.} Edward C. Walterscheid, *The Ever Evolving Meaning of Prior Art (Part 3)*, 64 J. PAT. & TRADEMARK OFF. SOC'Y 11 (1982).

^{112.} *Id.* at 646–47 ("While it is at least directed to the pertinent section of the patent statute, i.e., Section 102, unfortunately the Fifth Circuit's legal reasoning [in *Shields*] appears to be fully as defective as that of the Sixth Circuit in *General Motors*.").

^{113.} Shields v. Halliburton Co., 667 F.2d 1232, 1235.

^{114.} Walterscheid, *supra* note 111, at 647 (emphasis added).

^{115.} *Id*.

for their joint product they would have been declaring that their work constituted an invention. In such a situation each process would have been the first of its kind. Accordingly, the validity of Bassett and Olsen's patent application would have to be established against Bassett's earlier one. However, as here, where Bassett does some work, seeks no patent, collaborates with Olsen, and subsequently they together seek a patent, the joint application declares that their work submitted as a whole is a single invention—the first of its kind. Because they declare their work to be a single, and first invention, as between the joint inventors there is no earlier invention or prior art against which the joint invention need be established. Thus, the validity of a joint patent issued to two inventors who work in succession is consistent with the normal analytical framework of the patent laws.¹¹⁶

This passage from the Fifth Circuit's opinion separates an individual's work from that of a joint inventorship entity of which he is a part only by his having "claimed that the process he had developed was an invention" in a patent application. According to the Fifth Circuit's reasoning, by the failure of the sole inventor to file such a patent application, an opportunity was created for the joint inventorship entity to declare "their work to be a single, and first invention, as between the joint inventors," and, therefore, "there is no earlier invention or prior art against which the joint invention may be established." For the Fifth Circuit, then, actively "declaring" one's earlier *sole* work to be a distinct invention by claiming it in a patent application constituted the criterion by which that work was to be adjudged "prior art" to a later *joint* invention under "the normal analytical framework of the patent laws." In the event that such a "prior art" relationship were established under *Shields*, then the work of a later joint inventorship entity would have to be patentably distinct.

This analysis dismisses the relevance of an inventor's earlier work as prior art of another in its own right, and bases the status of that activity as "prior art" solely on *declaration* of that work as an invention by claiming it. According to the logic of the court in *Shields*, then, the issue of "prior art"

^{116.} *Id.* at 646 (quoting *Shields*, 667 F.2d at 1236) (emphasis added).

^{117.} Shields, 667 F.2d at 1236.

^{118.} *Id.* at 1235 ("The trial judge correctly noted the factual distinction between the case at bar in which the 'first' inventor, Bassett, never sought a patent himself, and the cases cited by defendants where the first inventor filed for, or received a patent for his own work, and subsequently filed jointly with a collaborator for newer developments.").

^{119.} Id. at 1236.

^{120.} Id.

was solely a consequence of the presence of multiple claimed, or *declared*, inventions among joint inventors, in which case, patentable distinction would be required if inventorship differed among the declared inventions. In other words, the Fifth Circuit was assuming that the work of a joint inventor was not *severable* from a claimed invention of an inventive entity of which that inventor was a part where the earlier work was not separately claimed by that joint inventor as an invention.¹²¹

Unfortunately for the Fifth Circuit, there was no statutory basis or case law supporting a requirement for a patentable distinction solely on the basis that an earlier invention was *claimed*. In earlier cases, such as *Land*, which were recited by the court in *Shields* as failing to disqualify earlier work by a member of a joint inventorship entity, there was no language hinging disqualification on whether the earlier work had been claimed. Rather, the question was whether *disclosure* in an earlier application was the work of the *joint inventive entity* of the subject matter *claimed* in the later-filed patent application.

In another pair of companion cases, In re Katz, 122 and In re DeBaun, 123 the CCPA held that a declaration filed by an inventor in a later-filed patent application was sufficient to remove an earlier-published article (in the case of Katz) 124 or an earlier-issued patent (in the case of DeBaun) 125 as prior art against the later-filed patent application. The court in Katz specifically held that "authorship of an article by itself does not raise a presumption of inventorship with respect to the subject matter disclosed in the article." 126 Consequently, it was unnecessary for other authors of an article to disclaim the relevant portions of that article in order to support the position of the inventor that "he is, in fact, the sole inventor of the subject matter described in the article and claimed" in the patent application. 127 Both cases, of course, presume that unclaimed subject matter of a distinct but overlapping inventive entity may, indeed, be prior art.

^{121.} Id.

^{122.} In re Katz, 687 F.2d 450 (C.C.P.A. 1982).

^{123.} In re DeBaun, 687 F.2d 459 (C.C.P.A. 1982).

^{124.} Katz, 687 F.2d at 455–56.

^{125.} DeBaun, 687 F.2d at 462.

^{126.} *Katz*, 687 F.2d at 455 (qualified in the subsequent case of *Ex Parte Kroger*, 219 U.S.P.Q. 370 (B.P.A.I. 1982), where the Board required further evidence beyond the patent applicant's declaration when the co-author has refused to disclaim the relevant subject matter) (emphasis omitted).

^{127.} *Id*.

III. DOUBLE PATENTING AND THE SEVERABILITY OF THE WORK OF INDIVIDUAL INVENTORS

Severability of inventorship in patent law has also played a significant role in barring an inventor from obtaining more than a single patent for each invention. Prohibition against so-called "double patenting" is manifested in statutory rejections under 35 U.S.C. § 101 of claims identical in scope to those of issued patents, also known as "same invention-type double patenting," and in judicially-based rejections of claims that are not patentably distinct over issued patent claims of different scope, known as "obviousness-type double patenting." Section III.A, below, traces development of judicial constraints on double-patenting as they relate to inventors and inventive entities to which they belong. Section III.B will then explore the genesis of disclaimers intended to overcome such constraints, and how adoption in the 1952 Patent Act of provisions enabling disclaimer of terminal portions of whole patents was applied to resolve early obviousness-type double patenting issues among commonly owned patents having distinct inventive entities.

A. EVOLUTION OF A DOCTRINE

Further early evidence of the significance of severability of the work of individual inventors from the work of an inventive entity of which they are a part can be found in the evolving nature of obviousness-type double patenting. Prior to enactment of the Patent Act of 1952, very little is said about double patenting, wherein a patentee, whether intentionally or not, extends his monopoly by obtaining two patents for what is deemed a single invention. In an early case, *Odiorne v. Amesbury Nail Factory*, Justice Story held, in a case where "plaintiffs obtained a patent in September, 1810, substantially for the same invention, and improvements, which are contained in the patent, on which they now sue," that "the inventor can have but a single patent for his invention; and that the first he obtains, while it remains un-repealed, is an estoppel to any future patent for the same invention founded upon the general patent act." 128

In 1893, the Supreme Court held in *Underwood v. Gerber* that a patentee was not entitled to avail himself of a second patent claiming subject matter identically disclosed, but not claimed, in a patent claiming other subject matter. According to the Court, the subject matter having been disclosed but not claimed, it was thereby disclaimed to the public

^{128. 18} F. Cas. 578, 579 (C.C.D. Mass. 1819).

^{129.} Underwood v. Gerber, 149 U.S. 224 (1893).

despite the filing of the second patent on the same day as the patent reference and issuance the same day as the patent reference.¹³⁰

In Miller v. Eagle Manufacturing Company, the Supreme Court held that a patent applicant was not allowed to claim in a later-filed patent application an invention that more broadly embraces the invention claimed in an earlier-filed patent. Relying on the then "settled" principle that the "patentee of such prior device would be entitled to all of its uses, whether described or not, 132 the Court found that a "single element or function of a patented invention cannot be made the subject of a separate and subsequent patent. 133 The Court clearly laid out the basis for lack of severability of component parts of a claimed invention, and the link between that lack of severability and the general prohibition against obtaining more than one patent for a single invention:

The result of the foregoing and other authorities is that no patent can issue for an invention actually covered by a former patent, especially to the same patentee, although the terms of the claims may differ; that the second patent, although containing a broader claim, more generical in its character than the specific claims contained in the prior patent, is also void

...[I]t must distinctly appear that the invention covered by the later patent was a separate invention, distinctly different and independent from that covered by the first patent; in other words it must be something substantially different from that comprehended in the first patent. It must consist in something more than a mere distinction of the breadth or scope of the claims of each patent. 134

Id.

^{130.} Id. at 231.

^{131.} Miller v. Eagle Mfg., 151 U.S. 186 (1894).

^{132.} *Id.* at 201. The two patents were both directed to an apparatus that shared a common component. As stated by the Court, "the first patent, issued in 1879, covered both the lifting and depressing actions or operations, while the second patent [issued as a divisional patent in 1881] covered only the lifting effect. The spring device which was designed to accomplish these effects, or operations, is the same in both patents." *Id.* at 196.

^{133.} Id. at 201. The Court stated:

[[]I]t is difficult to understand upon what principle the patentee can be allowed to withdraw from the operation of such prior patent, one of its distinct elements, and make it the subject of a second distinct patent.... [A] patentee cannot so split up his invention for the purpose of securing additional results, or of extending, or of prolonging the life of any or all of its elemental parts.

For a while, patentable distinction between claims of different patent applications (or lack of it) continued to trump inventorship and common ownership, even following enactment of the 1952 Patent Act. For example, in In re Siu, 135 the CCPA affirmed a decision by the board rejecting claims in a patent application over the claims of a patent issued from an earlier-filed, but commonly-assigned co-pending patent application filed by a different inventor, Ladisch. Siu's claimed invention was directed to a more specific use of the general method claimed by Ladisch. 136 The Board held and the CCPA agreed that "[t]he essential issue here is one of whether or not the claims [of Siu] represent a distinct and patentable invention [over Ladisch]" because, "the pertinent statutes do not, in our opinion, warrant the allowance of more than one patent for a single invention independently of the question of extension of monopoly."137 The court further noted that it "could not have been the legislative intent to permit indiscriminate issuance of numerous patents directed to mere colorable variations of the same idea."138 Significantly, the court invoked *Underwood* to deny Siu's patent, ¹³⁹ despite the disclaimer of any remaining term of the appealed application extending beyond that of the issued patent. According to the CCPA, nothing in the statute or its legislative history suggests abandonment of the settled rule of *Underwood* v. Gerber, forbidding more than one patent for what is obviously only one invention, whether or not the grants expire on the same day."141

Shortly thereafter, in *In re Ockert*, ¹⁴² the CCPA held that claims could be rejected under 35 U.S.C. § 101¹⁴³ even though the claims of the several

^{135.} In re Siu, 222 F.2d 267 (C.C.P.A. 1955).

^{136.} *Id.* at 268 ("The difference between the two groups of claims is that appellant's claims are directed toward the specific use of the method with molten glass, while those of the patent to Ladisch are directed toward the method generically, and toward its use with resinous materials specifically.").

^{137.} Id. at 269.

^{138.} Id. at 270 n.2.

^{139.} Id. at 269.

^{140.} Appellant Siu had taken advantage of 35 U.S.C. § 253, which stated, in part, "In like manner, any patentee or applicant may disclaim or dedicate to the public the entire term, or any terminal part of which the term, of the patent granted or to be granted." Siu, 222 F.2d at 269; 35 U.S.C. § 253 (1952). Although disclosure of subject matter had been provided for under previous statutes (for example, R.S. Sec. 4917 and 4922 of U.S.C. Title 35 and R.S. Sec. 973 of U.S.C. Title 28), 35 U.S.C. § 253 of the 1952 Patent Act provided for the first time that a terminal part of the term of a patent could be disclaimed or dedicated to the public.

^{141.} Siu, 222 F.2d at 270 n. 2 (citation omitted).

^{142.} *In re* Ockert, 245 F.2d 467 (C.C.P.A. 1957).

^{143. 35} U.S.C. § 101 reads now, as it did then:

applications involved and the patent were not "cross-readable." As stated by the court:

35 U.S.C. § 101, like its predecessor R.S. 4886, provides that an inventor may obtain a patent for his invention. There is no statutory provision for the granting of a plurality of patents on a single invention, and this court has repeatedly held that if two patents are to be granted there must be two inventions. . . .

Appellant also alleges that the claims of his applications are not cross-readable, and that accordingly the allowance of the appealed claims would not result in an extension of monopoly. Such cross-reading, however, is not indispensable to a holding of double patenting. . . . If only one inventive concept is present, two patents cannot probably be granted, regardless of the scope or relationship of the claims, or of the order in which the applications were filed or the claims presented.¹⁴⁴

The CCPA in *In re Zickendraht*,¹⁴⁵ as in *Siu*, affirmed a board decision holding that, between an issued patent and a pending patent application, only a single inventive concept was claimed and, therefore, the patent application should be rejected for double patenting.¹⁴⁶ In *Zickendraht*, the applicants (i.e., the same inventive entity) filed two patent applications on the same day, directed to subject matter that was mutually exclusive.¹⁴⁷ The court held that the "sole issue is whether the instant claim defines a patentably distinct invention over that claimed in applicants' patent,"¹⁴⁸ and, because the court found that it did not, the board's decision was affirmed.¹⁴⁹

Judge Rich, in his concurrence, distinguished between patents claiming the same invention, where the proper basis for rejection would be 35 U.S.C. § 101, and patented inventions, though not "prior art," that render a claimed invention obvious, in which case a "double patenting"

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

^{144.} Ockert, 245 F.2d at 469.

^{145.} In re Zickendraht, 319 F.2d 225 (C.C.P.A. 1963).

^{146.} See id. at 228 ("[I]t appears to us, as it did to the examiner and the board, that there is but one patentable invention here to which both the patented and appealed claims are directed.").

^{147.} *Id.* at 227 ("In the instant case the only difference is that in the patent claims there is a substituent on one of the benzene rings while in the application there is not.").

^{148.} Id.

^{149.} Id. at 229.

rejection might be avoided by filing a terminal disclaimer under 35 U.S.C. § 253."¹⁵⁰ In contrast to *Siu*, the issue of a terminal disclaimer was not properly raised in *Zickendraht* and, therefore, was not considered by the court. Judge Rich distinguished the facts in *Siu* by asserting that the "*Siu*... was a common assignee type of 'double patenting' case... [wherein] two different applicants were claiming the same invention..."¹⁵¹ *Zickendraht*, however, was a case where "an applicant takes out a patent on one of two or more copending applications on closely related inventions,"¹⁵² and, according to a "firmly established rule," the applicant "shall not be allowed claims in the other applications except on subject matter which is patently different from the subject matter claimed in his patent."¹⁵³ In this latter type of case, in Judge Rich's view, a terminal disclaimer under 35 U.S.C. § 253 would overcome this non-statutory rejection had such a disclaimer been filed, which it was not.¹⁵⁴

The court in *In re Robeson*¹⁵⁵ reiterated previous justifications for non-statutory "double patenting" rejections beyond extension of monopoly, such as "harassment by multiple assignees, inconvenience to the Patent Office, and the possibility that one might avoid the effect of file wrapper estoppel by filing a second application." The court also distinguished between *Siu*'s "mere colorable variations of the same idea," which it considered to be "directed to the identical invention," and *Robeson*'s "obvious variation of the invention... [that] is more than a 'mere colorable variation' thereof." According to the court, "[w]here the claims

^{150.} Id. at 231 n.4.

^{151.} *Id.* at 232 (Rich, J., concurring.). According to Judge Rich, the only difference between the claimed processes in *Siu* was "the naming of the material to which the process was applied—glass in the appealed claim and inorganic material in the patent." *Id.* It would seem, however, in reading *Siu*, that the court in that case employed a broader conception of "same invention," to include obvious variants, namely "colorable variations of the same idea." *In re* Siu, 222 F.2d 267, 270 n.2.

^{152.} Zickendraht, 319 F.2d at 231 (Rich, J., concurring).

^{153.} Id.

^{154.} Id. As stated by Judge Rich:

But since the patented invention is not prior art, the basis for denial is not a statutory basis; rather it is a case-law development. Where, as here, there are two distinct inventions, each separately patentable in the absence of a patent on the other, it seems to me that a "double patenting" rejection might be avoided by the filing of a terminal disclaimer under 35 U.S.C. § 253, which was not done in this case.

Id. at 231 n.4.

^{155.} *In re* Robeson, 331 F.2d 610 (C.C.P.A. 1964).

^{156.} Id. at 615.

^{157.} Id.

of a second application are substantially the same as those of the first patent, they are barred under 35 U.S.C. § 101."¹⁵⁸ Seeing "more than a 'mere colorable variation" of the claimed subject matter of the issued patent relied upon by the examiner to make the double patenting rejection, and concluding that "the only real objection to granting appellants' application is an extension of the monopoly[,]" the court reversed the rejection in view of the terminal disclaimer filed under 35 U.S.C. § 253.¹⁵⁹ Similarly, in *In re Kaye*, the court held, in a case where the claimed invention was held to be obvious over the claimed subject of the applicant's own prior patent, a terminal disclaimer "disclaiming that portion of the term of any patent issued on the present application which would extend beyond the term of the Kaye patent" was sufficient to overcome an obviousness-type double patenting rejection.¹⁶⁰

In *In re Griswold*, the CCPA held, in two separate appeals from the Patent Office Board of Appeals, that obviousness-type double patenting rejections of claimed inventions over later-filed but first-to-issue patents could not be overcome by terminal disclaimers when the claimed inventions were the same:¹⁶¹

Under the circumstances, we find no differences in substance between the invention defined in appealed claims 23 and 40 and the invention defined in the patent claims.... We are of the opinion that there is nothing defined in the appealed claims that is not as broadly defined in the patent claims. The inventions defined by the respective claims are, in our view, the same.

Appellants have filed terminal disclaimers in their applications but do not argue that they should be given effect if we find the inventions claimed in the respective applications and patents to be the same. Under the circumstances and in view of our finding, we give the disclaimers no effect.¹⁶²

Of more significance was the court's observation of an "imaginative solution" provided by the common assignee, Johnson & Johnson, of disclaiming

the terminal part of any patent granted on the above identified application, which would extend beyond the expiration date of said patent . . . and hereby covenants that any patent so granted

^{158.} Id. at 614.

^{159.} Id. at 615.

^{160.} In re Kaye, 332 F.2d 816, 819 (C.C.P.A. 1964).

^{161.} *In re* Griswold, 365 F.2d 834 (C.C.P.A. 1966).

^{162.} Id. at 840 (emphasis added) (footnote omitted).

on the above identified application, together with any right to recover for its violation shall be *enforceable only for and during such period that the legal title to said patent and to such right to recover shall be the same respectively* as the legal title to United States Patent 3,081,514 and to any corresponding right to recover for its violation, this covenant to run with any patent granted on the above identified application and to be binding upon the grantee, its successors, or assigns.¹⁶³

The court considered this novel type of terminal disclaimer, or "non-alienation agreement" as it would later be referred, which disclaimed the portion of a patent term extending beyond that of another patent and linked enforceability of that patent or common ownership with that other patent, to be "ingenious." ¹⁶⁴

In another case, In re Schneller, the CCPA held that claims in a voluntary divisional application could be rejected over claims of its issued parent patent for obviousness-type double patenting, even when the subject matter may be patentably distinct, if embodiments within the scope of the claims of the issued patent could be embraced within the scope of the claims of the voluntary divisional application. ¹⁶⁵ For example, if the issued patent claimed the combination of ABCX, and the voluntary divisional application claimed the combination of ABCY, an obviousnesstype double patenting rejection would be appropriate where embodiment ABCXY would be embraced by the claims of the issued patent and the voluntary divisional application. The alternative, as stated by the court, would be the "grant of another patent [to the same patentee] effectively extending the time during which he may exclude others from practicing an invention which is disclosed and claimed in his issued patent."167 The remedy would be to file a terminal disclaimer to thereby "effectively prevent this result."168 The court distinguished In re Heinle, 169 where an embodiment of a single element was held to be patentably distinct from a previously patented combination employing a generic embodiment of that element, because the "patent claim would not have been extended by the application claims directed to the element[,]" thus obviating the need for a

^{163.} Id. at 840 n.5 (emphasis added).

^{164.} *Id.* ("The terminal disclaimers which have been filed are ingenious.").

^{165.} In re Schneller, 397 F.2d 350 (C.C.P.A. 1968).

^{166.} *Id.* at 355. The appellants employed this example.

^{167.} Id. at 354.

^{168.} Id.

^{169.} *In re* Heinle, 342 F.2d 1001 (C.C.P.A. 1965).

terminal disclaimer.¹⁷⁰ The court also distinguished *In re Sutherland*¹⁷¹ on the basis that the patent and the application in *Sutherland* were by two different people.¹⁷² In such a case, according to the court, two separate applications would be necessary, despite the disclosure of the claimed subject matter in the specification of the issued patent. The court explained that, while the inventions of the patent and the patent application in *Sutherland* "could be and were employed in the same process of agglomerating synthetic rubber latex," there was "no domination by one inventor's claims of the other's invention."¹⁷³

In an infringement action, SAB Industri AB v. The Bendix Corporation, 174 the District Court for the Eastern District of Virginia found the defendant's assertion, that "joint invention means that all claims in the invention must have the same 'inventive entity,' i.e., that the joint inventors must have combined their efforts as to each claim in the patent," to lack support by any statute or rule of the Patent Office.¹⁷⁵ Instead, the court assumed "for the purpose of this decision and because there is some evidence that it is in accordance with customary practice in the Patent Office, that the defendants' position is correct,"176 and proceeded to hold that a decision by the inventors to file a joint application as a means to avoid prohibited "double patenting" was justifiable.¹⁷⁷ According to the court, "the 'error,' if any, is too technical and immaterial, as well as innocent, to warrant invalidating an otherwise valid patent."178 The court sanctioned simultaneous expiration of an exclusive right to inventions set forth among different claims by distinct inventive entities at least where, as here, there was common ownership.

In *In re Van Ornum*,¹⁷⁹ the CCPA recited the development of obviousness-type double patenting and, in particular, revision of 37 C.F.R.

^{170.} Schneller, 397 F.2d at 355 (apparently contradicting the holding of the Supreme Court in Miller v. Eagle Mfg., 151 U.S. 186 (1894)).

^{171.} In re Sutherland, 347 F.2d 1009 (C.C.P.A. 1965).

^{172.} Schneller, 397 F.2d at 355.

^{173.} *Id.* (quoting *Sutherland*, 347 F.2d at 1013).

^{174.} SAB Industri AB v. The Bendix Corp., 199 U.S.P.Q. 95 (E.D. Va. 1978).

^{175.} Id. at 104.

^{176.} Id.

^{177.} *Id.* ("These [depositions] convince the Court that the method chosen (of a joint application), even though done with an awareness of the proper attribution of inventorship, was done in a *bona fide* affort [sic] to avoid what was regarded by the patent expert, on whom the inventors justifiably relied, as the supreme evil of 'double patenting.").

^{178.} *Id.* at 105.

^{179. 686} F.2d 937 (C.C.P.A. 1982).

§ 1.321(b), whereby patent applications rejected on the non-statutory basis of obviousness-type double patenting could be overcome by filing a terminal disclaimer containing the "non-alienation agreement" noted in Griswold.¹⁸⁰ The appellants argued that, because the inventorship entity was identical between the issued patent and appealed application, a terminal disclaimer should overcome the rejection regardless of common ownership.¹⁸¹ According to the appellants, limiting terminal disclaimers under 37 C.F.R. § 1.321(b) to applications that are commonly owned and for which there is an agreement to maintain common ownership exceeded the Patent Office's rulemaking authority by being "substantive and not procedural."182 The court disagreed with the appellants. The court observed that the 1952 Patent Act183 "provided a possible remedy in the terminal disclaimer" 184 provision of 35 U.S.C. § 253, so that obviousnesstype double patenting rejections could be overcome in the greater interest of being "able to bring such improvement inventions within the protection of the patent system, [and] at the same time giving an incentive for their disclosure."185 The court noted that the "provision is merely permissive and it was left to the courts to work out its application on a case-by-case basis."186

For the court in *Van Ornum*, a terminal disclaimer was "tantamount for all practical purposes to having all the claims in one patent," and carried with it the underlying assumption of common ownership. To hold otherwise, according to the court, would be in contravention to prior case law, such as *Pope v. Gormully*, in which the Supreme Court held it impermissible to assign separate patent claims of the same patent to different parties. Therefore, the CCPA in *Van Ornum*, found that a "non-alienation" provision in a terminal disclaimer, as a requirement by the Patent Office under 37 C.F.R. § 1.321(b), was consistent with the

^{180.} *Id.* at 944–45; see also In re Griswold, 365 F.2d 834, 840 n.5.

^{181.} Van Ornum, 686 F.2d at 938-39.

^{182.} Id. at 945.

^{183.} Patent Act of 1952, ch. 950, 66 Stat. 792.

^{184.} Van Ornum, 686 F.2d at 948 (referencing Patent Act of 1952, ch. 950, 66 Stat. 792).

^{185.} Id.

^{186.} Id.

^{187.} Id. (quoting In re Braithwaite, 379 F.2d 594, 601 (C.C.P.A. 1967)).

^{188.} *Id.* ("Obviously, that thought contemplates common ownership of the two patents, which remains common throughout the life of the patents.").

^{189.} Pope v. Gormully, 144 U.S. 248 (1892).

^{190.} Van Ornum, 686 F.2d at 948.

1952 Patent Act and was not a substantive rule beyond the authority of the Commissioner of Patents and Trademarks.¹⁹¹

In In re Kaplan, the Federal Circuit reversed a decision by the Board of Patent Appeals and Interferences. 192 The court rejected appealed claims in an application filed by Kaplan and another inventor, Walker, over the disclosure of that claimed invention in an earlier-filed patent application by Kaplan alone that had since issued as a patent. Both the patent application and the issued patent were assigned to Union Carbide Corporation.¹⁹³ Kaplan and Walker's joint invention was included in the specification of Kaplan's earlier-filed patent application because, at the time he filed the patent application, Kaplan was aware of the improvement invented by himself and Walker. Therefore, according to 35 U.S.C. § 112, first paragraph, 194 he was required to provide an enabling description of the best mode of practicing the invention that he alone had invented and claimed in the first-filed application. 195 The single claim of Kaplan and Walker's later-filed application was rejected by the Board for obviousnesstype double patenting. 196 The court reversed the double patenting rejection because the board confused "domination" of Kaplan's issued claims over the narrow improvement claimed in the application on appeal with "double patenting," and because the board relied upon Kaplan's patent specification "as though it was prior art, which it is not, to support the obviousness aspect of the rejection."197 The Kaplan patent could not be relied upon as prior art because, as stated by the Federal Circuit, "[d]eclarations under 37 C.F.R. § 1.131 [were] filed by appellants and by Kaplan explaining who invented what and when."198 The Federal Circuit, in reversing the Board, stated, "there is no proper evidence to show that

^{191.} *Id.* Identity of inventorship, then, was a necessary but insufficient condition at the time of *Van Ornum* to render claimed subject matter of different patents tantamount to inclusion in a single patent.

^{192.} In re Kaplan, 789 F.2d 1574 (Fed. Cir. 1986).

^{193.} The decision by the court was made on the basis of the law as it was understood at the time, requiring identity of inventorship of all claims in a patent application.

^{194.} Pre-AIA 35 U.S.C. § 112, first paragraph, stated: The specification shall contain a written descript

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

^{195.} Kaplan, 789 F.2d at 1575-76.

^{196.} *Id.* at 1576.

^{197.} Id. at 1577.

^{198.} Id. at 1576.

the claim is for a mere obvious variation of what is claimed in the Kaplan patent relied upon to support the rejection."¹⁹⁹ Presumably, then, had here been such evidence, the obviousness-type double patenting rejection by the Board would have stood.

The Federal Circuit in *Kaplan*, moreover, continued to acknowledge the significance of *In re Land*:

It is worth remembering an axiomatic statement on the same page of the *Land and Rogers* case, which is also applicable here:

When the joint and sole inventions are related, as they are here, inventor A commonly discloses the invention of A & B in the course of describing his sole invention and when he so describes the invention of A & B he is not disclosing "prior art" to the A & B invention, even if he has legal status as "another." [the reference to "another" is to that word as used in 35 U.S.C. § 102(e) and (g).]²⁰⁰

This comment was made in the context of recognizing that "[i]t is a given, of course, that a sole inventor and joint inventors including the sole inventor are separate 'legal entities,' a legal proposition from which certain legal consequences flow."²⁰¹ In other words, while inventors may make separate contributions to a single invention, prior disclosure of the work of one member of an inventive entity constitutes prior art to the joint invention, while disclosure by that member of the work of the inventive entity of which he is a part may not.

B. PROBLEMS RESOLVED BY THE ADVENT OF TERMINAL DISCLAIMERS

"Terminal disclaimer," as a statutory provision, was first established under the Patent Act of 1952. Although there is no discussion in the legislative history of the impetus behind the second paragraph of 35 U.S.C. § 253,²⁰² it became the primary means for preventing extension of

^{199.} Id. at 1581.

^{200.} *Id.* at 1576 (emphasis added, bracketed text in original) (quoting *In re* Land, 368 F.2d 866, 879).

^{201.} Id. at 1575.

^{202.} See P. Federico, Commentary on the New Patent Act, 75 J. PAT. & TRADEMARK OFF. SOC'Y 161, 210 (1993). Federico states:

The second paragraph of Section 253 is new and provides that "in like manner" a patentee may disclaim, or dedicate to the public, the entire term or any terminal part of the term, of a patent, and such action may be taken by the applicant before the patent is granted.... No specific reason for this provision appears in the printed record, but its

the monopoly of claimed subject matter over later-filed, but earlier-to-issue patents.²⁰³ Under the 1994 Uruguay Round Agreements Act,²⁰⁴ however, all patent applications filed expire automatically twenty years from the earliest priority date claimed.²⁰⁵ Extension of monopoly alone, therefore, no longer provided the major justification for filing terminal disclaimers in the vast majority of pending patent applications. Instead, non-alienation of overlapping claims where no statutory basis for rejection existed became the primary motivation.

Further, while common inventorship provided the original basis for double patenting rejections, common assignees ultimately were able to step into the shoes of inventors to overcome rejections based on overlapping claims of distinct inventive entities. As stated, for example, by the court in *In re Bowers*:²⁰⁶

It is true that in both *Robeson*...and *Kaye*,...the double patenting rejections which we found to be obviated by the terminal disclaimer were predicated in each case on the same inventorship. However, we find this to be a distinction without legal significance in the present context.²⁰⁷

The court held, "we are of the opinion, therefore, that the common assignee of the appealed application and the involved patents is entitled to proceed under 35 U.S.C. § 253."²⁰⁸ Also, as discussed above, the court in *Van Ornum* applied the dicta of *Griswold* and subsequent amendment of the rules by the Patent Office to explicitly rule that, pursuant to 37 C.F.R. § 1.321(b), a second patent would be enforceable only in the event of a terminal disclaimer mandating continued common ownership.

proponents contemplated that it might be effective in some instances, in combatting a defense of double patenting, to permit the patentee to cut back the term of a later issued patent so as to expire at the same time as the earlier issued patent and thus eliminate any charge of extension of monopoly.

- 203. See, e.g., supra notes 135-91.
- 204. Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (Dec. 8, 1994).
- 205. Disregarding patent term adjustment (PTA) under the Patent Term Guarantee Act of 1999, Pub. L. No. F106-113, Div. B, \S 1000(a)(9) [Title IV, Subtitle D ($\S\S$ 4401 to 4405) of S. 1948], Nov. 29, 1999, 113 Stat. 1536, 1501A-557.
 - 206. In re Bowers, 359 F.2d 886 (C.C.P.A. 1966).
- 207. *Id.* at 889. The court in *In re Kaye*, 332 F.2d 816, 819 (C.C.P.A. 1964), discussed *supra* in text accompanying note 160, decided that filing of a terminal disclaimer is adequate to obviate the extension of patent monopoly threatened by two patents claiming "two inventions [that] are not patentably distinct."
 - 208. Bowers, 359 F.2d at 889.

The policy of preventing extension of an exclusive right over an invention and of avoiding harassment by the multiple assignees hinged on a common date of expiration and common ownership throughout the period of enforceability of the patents. This policy would be maintained by these two requirements regardless of identity or overlap between the inventorship entities, so long as the later-filed patent application was not otherwise statutorily barred by the first-filed patent application, such as for lack of bare novelty or obviousness under § 102 or § 103, respectively.

Other problems resolved by terminal disclaimers included situations where various inventive entities collaborated on different, but related, inventions and where obvious improvements were made the subject of later, so-called continuation-in-part applications. Marans commented on this issue shortly after the enactment of the 1952 Patent Act:

[W]hen a number of persons contribute to the making of an invention, it is sometimes necessary to file separate applications with the same disclosure and apportion the claims between the different persons to the best of the ability of the claim draftsman, taking into consideration the facts in the case. Continuation in part applications, improving on the parent applications, also make for double patenting situations which may not be avoidable.²⁰⁹

Assuming the "customary practice" recited by the court in SAB, that "joint invention means all claims in the invention must have the same 'inventive entity," Marans was correct that, if the inventive entity differed among claimed inventions, separate applications would have to be filed so that the inventive entity among the claims of each application would be the same. Multiple inventive entities could, nevertheless, avoid having various applications constitute prior art to each other by filing them on the same day. However, in accordance with the policy of preventing extension of monopoly, such as when several applications owned by a common assignee claim inventions that are obvious variants of each other, the courts could reject patent applications over issued patents, even where the issued patent did not constitute statutory art (such as by having a common filing date). Again, the lack of identical inventive entities between the patent and the parent application was immaterial so long as common ownership was established and maintained. A terminal disclaimer would serve the purpose of preventing extension of monopoly

^{209.} H. Marans, Disclaimer of a Terminal Part of the Patent Term and Double Patenting, 36 J. PAT. OFF. SOC'Y 207, 212 (1954).

^{210.} SAB Industri AB v. Bendix Corp., 199 U.S.P.Q. 95, 104 (E.D. Va. 1978).

over the claimed invention, but only the non-alienation clause in the terminal disclaimer would eliminate the policy of avoiding harassment by multiple assignees for infringement of claims directed to that invention.

IV. AMENDMENTS TO THE PATENT ACT OF 1952 TO ACCOMMODATE OVERLAP OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP

The 1984 Patent Act recognized these realities by explicitly acknowledging that multiple inventorship and ownership entities could, indeed, exist among claims in a single patent, and by enabling patentability of claimed obvious variants in certain instances when they were commonly owned at the time the later invention was made. Sections A and B of this Part will discuss the progression from problems associated with overlapping inventive entities to those of common ownership. Section C will analyze the legislative response that was the 1984 Patent Act. Section D will then address how the Patent Office and the Federal Circuit responded to the 1984 Patent Act.

A. THE PROBLEM OF A COMMON INVENTOR AMONG DISTINCT INVENTIVE ENTITIES

The issue of multiple inventive entities claiming obvious variants of a single invention also presented an obverse problem in that 35 U.S.C. § 102(g) required a determination of priority among the work of distinct inventive entities, regardless of whether the claimed subject matter of any resulting applications were commonly owned or when they were filed, and irrespective of any overlap in membership of those distinct inventive entities.²¹¹ The issue was first highlighted by the CCPA in 1973, in *In re Bass*,²¹² where the court stated:

§ 102 Conditions for patentability; novelty and loss of right to patent A person shall be entitled to a patent unless—

^{211. 35} U.S.C. § 102(g) stated, at that time:

^{. . .}

⁽g)(2) before such person's invention thereof, the invention was made in this country by another who had not abandoned, suppressed or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

^{212.} In re Bass, 474 F.2d 1276 (C.C.P.A. 1973).

[T]he use of the prior invention of another who had not abandoned, suppressed, or concealed it, *under the circumstances of this case* which include the disclosure of such invention in an issued patent, is available as "prior art" within the meaning of that term in § 103 by virtue of § 102(g).²¹³

The "circumstances," as relayed by the CCPA in a later case, *In re Clemens*,²¹⁴ included evidence of priority of the earlier invention, and knowledge of that priority by one of the inventors of the later invention:

In *Bass*, it was clear that at least one of the three *Bass* coinventors had knowledge of the prior invention before the making of the Bass invention. (The sole inventor of the prior invention was a co-inventor of the Bass invention.)²¹⁵

In *Clemens*, the court distinguished *Bass* on the basis that the applicants in *Clemens* had no knowledge of the prior invention of the other applicants (there was no common inventor), and that there was no evidence that the prior invention had been made public at the time the later inventors filed their patent application.²¹⁶ Therefore, the prohibition of 35 U.S.C. § 102(g) for the court in *Bass* and *Clemens* was premised on knowledge by the later inventive entity of the prior invention by another.²¹⁷

The court in *OddzOn Products*, *Inc. v. Just Toys Inc.*²¹⁸ in 1997 summarized the logic of *Bass* and *Clemens* on the basis of disclosure."²¹⁹ The court made clear that an obvious variant may be patentable by virtue of the presence of a common inventive entity, and may be patentable to a third-party who was unaware of the prior invention, but would not be patentable to a third-party who was in receipt of disclosure of that prior

^{213.} *Id.* at 1355 (emphasis added).

^{214.} In re Clemens, 622 F.2d 1029 (C.C.P.A. 1980).

^{215.} Id. at 1039.

^{216.} Id.

^{217.} Id. at 1038. Specifically, the court stated:

The circumstances of the *Bass* case included clear and conclusive evidence of priority. In this connection, statements made in the affidavits filed and accepted under Rule 131 and statements made by attorneys for Bass during prosecution established that the prior invention had been reduced to practice before the earliest alleged conception date for the Bass appellants' invention. In the case at bar, however, there is no such evidence in the record concerning the order in which the inventions in question were made.

Id. (citations omitted).

^{218.} OddzOn Products, Inc. v. Just Toys Inc., 122 F.3d 1396 (Fed. Cir. 1997).

^{219.} Id. at 1403.

invention at the time of the later invention.²²⁰ An example of such an ineligible third party would be a distinct inventive entity where there was a common inventor, as in *Bass*, and even where there was no common inventor, as in *Clemens*, so long as the inventive entity was in receipt of disclosure of the prior invention. The presence of a common inventor among distinct inventive entities was not, in and of itself, a basis for concluding that earlier inventions constituted prior art under § 102(g), other than instances where that presence might constitute knowledge of the prior invention by the later inventive entity that included the common inventor.

B. THE PROBLEM OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP

The presence of a common inventor, moreover, was never the basis for disqualifying what would otherwise constitute prior art under 35 U.S.C. § 102. For example, as discussed above, the CCPA in *Land* stated that, when A discloses the invention of A & B in the course of describing his own invention, he is not disclosing "prior art" to the A & B invention. Nevertheless, A has the legal status as "another." As a consequence, disclosure by A of his own invention is prior art to a joint invention to which he contributed as a joint inventor, and that qualification as "prior art" is not negated by his status as a common inventor among distinct inventive entities. In other words, statutory "prior art" cannot be removed by virtue of the presence of a common inventor among two distinct inventive entities. This is consistent with *Bass, Clemens*, and *OddzOn* in that, in all of these instances, the critical element was knowledge by the later inventive entity of the prior invention.

Obviousness-type double patenting decisions also followed the reasoning of the CCPA in *Land*. For example, as discussed above, the Federal Circuit, in reversing a double patenting rejection in *Kaplan*, explicitly called out the "axiomatic statement" of *Land*, acknowledging A's legal status as "another" relative to A & B.²²² The court in *Kaplan* held that prior disclosure in the patent specification naming Kaplan as the sole inventor did not constitute prior art to a later application because the portion of the specification relied upon by the Examiner was the *joint*

^{220.} *Id.* ("[While the] obvious invention A' may not be unpatentable to the inventor A, and may not be unpatentable to a third party who did not receive the disclosure of A...it is unpatentable to the party who did receive the disclosure.").

^{221.} See supra text accompanying notes 96–97.

^{222.} See supra text accompanying note 201.

invention of Kaplan and Walker, who were the coinventors of the patent application on appeal.²²³ While Kaplan's own invention would be prior art to the later-claimed joint invention of Kaplan and Walker, disclosure of the joint invention in Kaplan's specification would not.

Following decisions by the CCPA in Robeson, Kaye, Bowers, and Griswold, among others, and the ensuing confusion regarding the appropriateness of terminal disclaimers to overcome rejections during patent prosecution, the Patent Office early in 1967 issued a Notice restating its practice of limiting applicability of the term "double patenting'... to cases involving two or more applications and/or patents of the same inventive entity "224 The Patent Office clearly excluded instances, such as Bowers, where more than a single inventive entity was involved. The Patent Office went so far as to define a "single entity" by stating that "[s]ole and joint inventors cannot constitute a single entity, nor do two or more sets of joint inventors constitute a single entity if any individual is included in either set who is not also included in the other."225 Relying on Robeson and Kaye, the Patent Office limited application of terminal disclaimers to applications and/or patents where the subject matter of the competing claims do not overlap, even though the subject matter of those claims may be obvious in view of each other.²²⁶ "Overlap" was defined as the possibility for infringement of multiple claims by the "same process, machine, manufacture or composition of matter."227

The Patent Office further stated that terminal disclaimers could not be relied upon to overcome double patenting rejections of claims of applications over claims of patents or other applications having different

^{223.} *In re* Kaplan, 789 F.2d 1574, 1575 ("The reason why the process using the solvent *mixture* of the appealed claim was not *claimed* in the Kaplan patent, although it is *disclosed* in the patent specification; is that Kaplan alone was not the inventor of that process; it was the *joint* invention of Kaplan and Walker and therefore the application on appeal was filed.").

^{224.} Edward J. Brenner, Commissioner of Patents, *Double Patenting*, 834 OFFICIAL GAZ. PAT. OFF. 1615 (Jan. 31, 1967) (publishing a notice of the Commissioner dated Jan. 9, 1967).

^{225.} Id.

^{226.} *Id.* ("If two or more cases are filed by a single inventive entity, and if the expiration dates of the patents, granted or to be granted, are the same, either because of a common issue date or by reason of the filing of one or more terminal disclaimers, two or more patents may properly be granted, if the claims do not overlap, even though the subject matter to which the claims of one case are directed may be obvious in view of the subject matter claimed in the other case.").

^{227.} *Id.* ("Claims overlap within the meaning of this statement if it is possible for them to be infringed by the same process, machine, manufacture, or composition of matter. Cross reading is not necessary to constitute such an overlap.").

inventive entities, even in instances of common ownership.²²⁸ Instead, in instances where cases are filed by different inventive entities, "regardless of ownership," rejections by the Patent Office would be based on statutory provisions of novelty and nonobviousness under § 102 and § 103, in which case terminal disclaimers would have "no effect in this situation since the basis for refusing more than one patent is not connected with any extension of monopoly."²²⁹ Where conflicting claims by different inventive entities of different applications were commonly owned, the Patent Office indicated that it would call upon the assignee to state which entity was the prior inventor and to limit the claims of the other application accordingly, under threat of an interference if the assignee did not comply.²³⁰ Issuance of a patent would estop a common assignee from asserting that a distinct inventive entity of another patent application with competing claims constituted the true inventorship entity.²³¹

A little more than one year later, the Patent Office modified the Notice of January 31, 1967 to state that "when a single inventive entity is involved a terminal disclaimer will be accepted to avoid a double patenting rejection even if the claims overlap," but only for claims that "could not have been allowed in the other application or patent." Presumably the Patent Office was referring to claims that would not be properly supportable by the specification of the patent or application that included the claims relied upon by the examiner. The other major qualification was that the terminal disclaimer must provide that "the patent shall expire immediately if it ceases to be commonly owned with the other application or patent." This second qualification, regarding alienation, may have derived from *Griswold* where, even though the terminal disclaimer was not considered adequate, the court stated that the proffered language mandating common ownership for the life of the patent was an

^{228.} *Id.* ("In situations involving cases filed by different inventive entities, regardless of ownership, Sections 102 and 103 of 35 U.S.C. preclude the granting of two or more patents when directed to identical inventive concepts or when one of the concepts would be obvious in view of the other.").

^{229.} Id. at 1616.

^{230.} *Id.*

^{231.} *Id.* ("[T]he assignee, by taking out the patent at a time when the application was not claiming the patented invention, is estopped to contend that the patentee is not the prior inventor.").

^{232.} Edward J. Brenner, Commissioner of Patents, *Modification of Notice of January* 31, 1967, 848 OFFICIAL GAZ. PAT. OFF. 1 (March 5, 1968) (publishing a notice of the Commissioner dated Feb. 14, 1968).

^{233.} Id.

^{234.} Id.

"imaginative solution to one of the more theoretical objections to double patenting, split ownership of two patents and potential harassment." ²³⁵

In March of 1969, the Patent Office again announced its policy with respect to double patenting in a superseding notice that effectively removed the rule that claims rejected in one application and that overlap another application or patent would not have been allowed in that other application or patent.²³⁶ Specifically, the notice stated that "[c]laims that differ from each other (aside from minor differences in language, punctuation, etc.)," whether or not the differences are obvious, "are not considered to be drawn to the same invention."²³⁷ This notice clarified the distinction between "same invention" and different inventions that are obvious variants of each other.²³⁸ The Patent Office, however, maintained the requirement that double patenting did not apply in cases where there were different inventive entities: "Claims should be rejected on double patenting only in cases involving two or more applications and/or patents of the same inventive entity and not in situations involving commonly owned cases of different inventive entities."²³⁹

In 1971, the Patent Office amended 37 C.F.R. § 1.321 to require that terminal disclaimers filed to overcome a double patenting rejection include a provision "that any patent granted on that application shall be enforceable only for and during such period that said patent is commonly owned with the application or patent which formed the basis for rejection."²⁴⁰ The policy stated by the Patent Office was clarification of existing practice intended to avoid interference proceedings and to "prevent harassment of an alleged infringer by multiple parties due to subsequent different ownership of multiple patents granted as the result of filing a terminal disclaimer to overcome a double patenting rejection."²⁴¹

The Patent Office also amended rule 37 C.F.R. § 1.78, to specifically provide for elimination of conflicting claims under common ownership among two or more applications or between an application and a patent

^{235.} In re Griswold, 365 F.2d 834, 840 n.5; see also supra note 163.

^{236.} Edward J. Brenner, Commissioner of Patents, *Double Patenting and Terminal Disclaimer*, 860 OFFICIAL GAZ. PAT. OFF. 661 (March 18, 1969) ("The notices of January 9, 1967 and February 14, 1968, relating to this subject are hereby superseded except with reference to the practice described involving different inventive entities.").

^{237.} *Id.*

^{238.} Id.

^{239.} Id.

^{240. 36} Fed. Reg. 75, 7312 (April 17, 1971).

^{241. 35} Fed. Reg. 253, 20012 (December 31, 1970).

having different inventors.²⁴² Also, under the rule change, "the assignee may be called upon to state which named inventor is the prior inventor," and to "explain why an interference should [not] be declared or that no conflict exists in fact."²⁴³

These rule changes by the Patent Office, however, did not change the requirement of a common inventive entity when making a double patenting rejection. This, despite an explicit call in 1967 by the court in *Bowers* for the possibility of overcoming a double patenting rejection in instances of common ownership and different inventive entities on the basis that, in the case of common ownership, "same inventorship" was a "distinction without legal significance." Nevertheless, neither in the *Bowers* decision (or in any other court decisions relating to double patenting), nor in policies promulgated by the Patent Office, was there ever any suggestion that a double patenting rejection would be appropriate on the sole basis that different inventive entities shared a common inventor, regardless of whether conflicting claims were commonly owned.

C. LEGISLATIVE RESPONSE TO THE PROBLEMS OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP

In 1984, 35 U.S.C. § 103 was amended to provide an exception where the subject matter relied upon to make the determination of obviousness fell under § 102(f) or § 102(g), and the subject matter relied upon in the reference and in the patent application filed was commonly owned at the time the claimed invention was made.²⁴⁵ The purpose of excluding consideration of § 102(f) and (g) when assessing obviousness was to change a "complex body of case law which discourages communication among members of research teams working in corporations, universities or other organizations."²⁴⁶

Later, in 1999 the exception was expanded to embrace subject matter under § 102(e),²⁴⁷ and in 2004 the Cooperative Research and Technology Enhancement Act of 2004 (CREATE) broadened the exception even

^{242. 36} Fed. Reg. 75, 7312 (April 17, 1971).

^{243.} Id.

^{244.} In re Bowers, 359 F.2d 886, 889; see also supra text accompanying note 207.

^{245.} Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 103, 98 Stat. 3384 [hereinafter 1984 Patent Act].

^{246. 127} CONG. REC. 10522, 10525–29 (Oct. 1, 1984) (Section-by-Section Analysis of H.R. 6286, Patent Law Amendments Act of 1984); *see also* Remarks of Robert W. Kastenmeier, 129 CONG. REC. 5777 (daily ed. Nov. 18, 1983).

^{247.} American Inventors Protection Act of 1999, Pub. L. No. 106-113, § 4807, 113 Stat. 1501A-591.

further to include subject matter covered by a joint research agreement between assignees "that was in effect on or before the date the" later "claimed invention was made." In no case, however, was there a requirement under the exceptions to statutory obviousness of § 103 that a common inventor exist between the inventive entity responsible for the prior work under § 102(e), (f), or (g), and the inventive entity of the claimed invention. Therefore, exceptions to *statutory nonobviousness* have never been based on the presence of a common inventor among distinct inventive entities.

Revisions to 35 U.S.C. § 116 were also made under the 1984 Patent Act, which explicitly allow inventors to apply for a patent jointly even though, *inter alia*, "each did not make a contribution to the subject matter of every claim of the patent."²⁴⁹ A third and equally significant change under the same Act was to permit a patent application to claim priority to an earlier-filed patent application so long as both applications named at least one inventor in common. This amendment to 35 U.S.C. § 120, showing deletions in strikethrough and additions in underline, reads as follows:

§ 120 Benefit of earlier filing date in the United States

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, by the same inventor which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and if it

^{248.} Cooperative Research and Technology Enhancement Act of 2004, Pub. L. No. 108-453, § 2(2)(A) (enacted Dec. 10, 2004).

^{249. 35} U.S.C. § 116, amended by the Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 105, 98 Stat. 3385. Specifically, amendments were only made to the first paragraph of 35 U.S.C. § 116, and appear as follows, showing deletions in strikethrough and additions in underline:

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each sign the application and make the required oath, except as provided in this title. Inventors may apply for a patent jointly even through (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contributions or (3) each did not make a contribution to the subject matter of every claim of the patent.

contains or is amended to contain a specific reference to the earlier filed application.²⁵⁰

Rep. Kastenmeier, chairman of the House of Judiciary Committee in the Section-by-Section Analysis of the legislative history of the 1984 Patent Act, stated that the amendment to § 116 of Title 35 "should also be of benefit to universities and corporations which rely on team research." The legislative history also stated that these amendments raised the prospect of inquiry by the Patent Office or courts into invention dates of the subject matter of various claims "when necessary." However, the amendments to § 120 would "permit greater latitude in filing 'divisional' applications," presumably by enabling priority claims to copending prior-filed applications "by an inventor or inventors named in the previously filed application." Nevertheless, there is no explanation in the legislative history of the 1984 Patent Act as to why amended § 120 required the presence of a common inventor in patent applications when claiming priority to an earlier-filed application. There is no such requirement in the exclusions from prior art under the obviousness

Section 105 of the bill [amending 35 U.S.C. § 116] provides that the two or more inventors may obtain a patent jointly even though each inventor has not contributed to each and every claim found in the patent application. This technical amendment should also be of benefit to universities and corporations which rely on team research.

Id.

^{250. 35} U.S.C. § 120, *amended by* the Patent Law Amendment Act of 1984, Pub. L. No. 98-622, Title I, § 104(b), 98 Stat. 3385.

^{251. 130} CONG. REC. 10525–29 (Oct. 1, 1984) (statement of Rep. Kastenmeier) (Section-by-Section Analysis of H.R. 6286, Patent Law Amendments Act of 1984). Rep. Kastenmeier stated:

^{252.} *Id.* ("When necessary, the Patent and Trademark Office or a court may inquire of the patent applicant or owner concerning the inventors and the invention dates for the subject matter of the various claims."). As an aside, while examination is on a claim-by-claim basis under the AIA, as it was prior to its enactment, it is important to note that entitlement to patent protection is now based on the "effective filing date," under AIA 35 U.S.C. § 102(a)(1) and (a)(2), as opposed to the date of invention under pre-AIA 35 U.S.C. § 102(f) and (g). Further, the possibility for split ownership among claims also exists in patent applications subject to the AIA as well as patent applications subject to the patent law as it existed prior to enactment of the AIA. Therefore, the possibility still exists, although based on effective filing date rather than the date of invention, that claims with a single applicant may be "prior art" relative to each other. *See*, *e.g.*, MPEP § 2152.01 (9th ed. Mar. 2014).

^{253. 130} CONG. REC. H10525–29 (Oct. 1, 1984) at H10528 ("Subsection (b) of section 105 amends section 120 of the patent law to provide that an application can obtain the benefit of the filing date of an earlier application when not all inventors named in a joint application are the same as named in the earlier application. This permits greater latitude in filing 'divisional' applications.").

requirement of § 103 for subject matter under § 102(f) and (g) when the subject matter is commonly owned at the time of the later invention. A requirement of a common inventor in a patent application claiming priority to an earlier-filed but co-pending application should not be necessary, other than to ensure some kind of collaboration linking the inventive entities of the respective patent applications, as in the spirit of the "team research" referenced by Rep. Kastenmeier.²⁵⁴

This reasoning is consistent with that of the courts in Bass and Clemens, 255 where the CCPA denied patentability under "circumstances" that included knowledge by the second inventive entity of a commonly owned prior invention by one of the members of that same inventive entity, and refusal by the court in Clemens to extend that logic to circumstances where there is no evidence of such knowledge by the later inventive entity. It was the inability of the courts to overlook the differences in these circumstances that was the impetus behind the 1984 Patent Act. Common ownership at the time of the second invention was the umbrella that would bring the different circumstances in Bass and Clemens to consistent conclusions. Moreover, the amended § 116 provisions opened the possibility that the subject matter of different claims in an application could be used as prior art against each other when not commonly owned, even when a common inventor among different inventive entities was present.²⁵⁶ Therefore, any interpretation of the amendments to § 103, § 116 and § 120, relating to the presence of a common inventor among distinct inventive entities under § 116 must be limited to common ownership under § 103 and collaboration among joint

^{254.} A requirement of collaboration among "joint inventors" under 35 U.S.C. § 116 was confirmed by the Federal Circuit in *Kimberly-Clark Corp. v. Proctor & Gamble Dist. Co., Inc.*, 973 F.2d 911 (Fed. Cir. 1992) ("For persons to be joint inventors under Section 116, there must be some element of joint behavior, such as collaboration or working under common direction, one inventor seeing a relevant report and building upon it or hearing another's suggestion at a meeting.").

^{255.} See supra notes 212–17 and accompanying text.

^{256.} See 35 U.S.C. § 116, amended by the Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 105, 98 Stat. 3385. As more fully stated in 130 CONG. REC. 10525–29 (Oct. 1, 1984):

Subsection (a) of section 105 [amending the first paragraph of 35 U.S.C. § 116] increases the likelihood that different claims of a patent may have different dates of invention, even though the patent covers only one independent and distinct invention within the meaning of 35 U.S.C. § 121. When necessary, the Patent and Trademark Office or a court may inquire of the patent applicant or owner concerning the inventors and the invention dates for the subject matter of the various claims.

inventors when making claims to priority among the patents or applications under § 120.

D. IMPLEMENTATION OF THE PATENT ACT OF 1984

The 1984 Patent Act presented challenges of interpretation and implementation to the Patent Office and the Federal Circuit. For example, the Act did not specify whether double patenting rejections could be applied among patents or patent applications having distinct inventive entities, or whether common ownership was required to make double patenting rejections where there was only overlap among inventive entities of conflicting patents or patent applications. Sections 1 and 2 below will explain how the Patent Office and the Federal Circuit addressed statutory changes affecting overlapping inventorship, common ownership and the judicial doctrine of obviousness-type double patenting.

1. Rules and Guidelines by the Patent Office

Prior to the 1984 Patent Act, the term "double patenting," pursuant to the Commissioner's Notice published on January 31, 1967, only applied to "two or more applications and/or patents having the same inventive entity and should not be applied to situations involving commonly owned cases of different inventive entities."257 The Notice was also clear that "[s]ole and joint inventors cannot constitute a single entity, nor do two or more sets of joint inventors constitute a single entity if any individual is included in either set who is not also included in the other."²⁵⁸ On December 11, 1984, the Patent Office withdrew the Commissioner's Notice of January 9, 1967 "to the extent that it does not authorize a double patenting rejection where different inventive entities are present."259 On January 5, 1988, following enactment of the 1984 Patent Act, the Official Gazette republished the initial January 8, 1985 guidelines ("Initial Guidelines" or "1985 Initial Guidelines"), 260 stating that it was "reinstituting, in appropriate circumstances, the practice of rejecting claims in commonly owned applications of different inventive entities on the ground of double patenting."261 The Initial Guidelines specified "significant features

^{257.} Edward J. Brenner, Commissioner of Patents, *Double Patenting*, 834 OFFICIAL GAZ. PAT. OFF. 1615 (Jan. 31, 1967); *see also supra* notes 224–39 and accompanying text. 258. *Id*.

^{259. 1050} OFFICIAL GAZ. U.S. PAT. & TRADEMARK OFF. 317 (Jan. 8, 1985) [hereinafter 1985 Initial Guidelines].

^{260. 1086} OFFICIAL GAZ. U.S. PAT. & TRADEMARK OFF. 254 (Jan. 5, 1988) [hereinafter Guidelines Republished].

^{261.} Id. at 255.

resulting from" amendments to each of § 103, § 116 and § 120 under the 1984 Patent Act.²⁶² For example, with respect to amendments to both § 103 and § 120, the Initial Guidelines provided that double patenting rejections could be made regardless of whether the patent applications or patents were commonly owned so long as they had a common inventor, and that terminal disclaimers could not be employed to overcome such a rejection in the absence of common ownership. Specifically, with respect to the "significant features resulting from this amendment to § 103," the Patent Office stated:

- (14) Double patenting rejections may now be made in different applications based on commonly owned patents of different inventive entities and double patenting rejections of the obviousness-type can be overcome by terminal disclaimers.
- (15) A double patenting rejection may also be made in a later filed application where the application/patent on which the rejection is based and the later filed application are not commonly owned as long as one of the inventors is common between the later filed application and the application/patent; such a rejection cannot be overcome by terminal disclaimer in view of the lack of common ownership.²⁶³

With respect to § 120, the Initial Guidelines stated that:

- (4) Double patenting rejections may be applicable, whether or not the applications and patents are commonly owned as long as the applications/patent(s) have at least one inventor in common.
- (5) If the applications and patents are commonly owned, the rejection of the applications on the grounds of double patenting can be overcome by an appropriate terminal disclaimer as long as the identical invention is not being claimed. See *In re Robeson*, 141 USPQ 485 (CCPA 1964), and *In re Kaye*, 141 USPQ 829 (CCPA 1964).
- (6) If the applications and patents are not commonly owned, the double patenting rejection is entered in the later filed application and cannot be overcome by a terminal disclaimer

^{262. 1985} Initial Guidelines, *supra* note 259, at 316–19; Guidelines Republished, *supra* note 260, at 246–49.

^{263. 1985} Initial Guidelines, *supra* note 259, at 317; Guidelines Republished, *supra* note 260, at 246.

since the ownership of the subject matter being claimed belongs to someone other than the owner of the later application.²⁶⁴

However, none of the examples in the Initial Guidelines addressed double patenting rejections where the only basis for the rejection was an assessment of obviousness in the presence of overlapping but distinct inventorship in the absence of common ownership or a claim to priority under § 120. Rather, the only examples provided were based on double patenting rejections of common ownership.²⁶⁵ This, despite the Initial Guidelines' explicit provision for double patenting rejections based solely on an assessment of obviousness over claims of an issued patent or patent application having a common inventor, and in the absence of any showing of common ownership. The point is that there is no apparent reason for rejecting claims on the basis of obviousness-type double patenting solely because of the presence of a common inventor with a patent or patent application, unless a claim to priority has been made under § 120. Even then, such a rejection should only occur where there is identity of inventorship between the rejected claims and those *claims* of the reference patent or application relied upon to make the rejection. There is no reason to assume that the existence of a common inventor with a patent or another patent application is somehow equivalent to identity of inventorship for double patenting purposes.

2. The Federal Circuit Takes Note

Interestingly, over twenty years later, in *In re Fallaux*, the Federal Circuit noted that the Manual of Patent Examining Procedure allows an obviousness-type double patenting rejection where the only link between a patent and a patent application is a common inventor.²⁶⁶ But the court was clear that its opinion in this case should not be read as an endorsement of the Patent Office's stance:

Neither party raised or argued the question of whether a patent may be used as a reference for an obviousness-type double patenting rejection where the patent shares only a common inventor with the application, rather than an identical inventive entity or a common assignee. The *Manual of Patent Examination Procedure (MPEP)*, allows such rejection. See § 804 ¶ I.A (8th ed., rev. 7, 2008) ("Double patenting may exist between an issued patent and an application filed by the same inventive

^{264. 1985} Initial Guidelines, *supra* note 259, at 319; Guidelines Republished, *supra* note 260, at 248.

^{265.} Guidelines Republished, *supra* note 260, at 249.

^{266. 564} F.3d 1313, 1315 n.1 (Fed. Cir. 2009).

entity, or by a different inventive entity having a common inventor, and/or by a common assignee/owner."). This opinion should not be read to decide or endorse the PTO's view on this issue.²⁶⁷

Nevertheless, in *In re Hubbell*, such a situation recently occurred. ²⁶⁸ In that case, patent application number 10/650,509, entitled "Enzyme-Mediated Modification of Fibrin for Tissue Engineering" ("the '509 application"), was rejected for obviousness-type double patenting over a later filed patent application that issued as U.S. Patent No. 7,601,685 ("the '685 patent"). ²⁶⁹ The '509 application and the '685 patent named distinct inventive entities that shared two common inventors: Jeffrey Hubbell and Jason Schense. ²⁷⁰ The '509 application, on appeal before the Federal Circuit, and the '685 patent were never commonly owned. There was no relation between the '685 patent and the '509 application under § 120. The '685 patent could not act as prior art to the '509 application because the '509 application claimed priority to an earlier-filed patent application that preceded any priority claim by the '685 patent. ²⁷¹

The Board of Patent Appeals and Interferences confirmed the Examiner's rejection on the basis that the genus claim in the '509 application was "anticipated" by claims of the issued patent and rejected the appellants' argument that obviousness-type double patenting required common ownership.²⁷² In support of its decision, the Board recited the portion of the Manual of Patent Examining Procedure at § 804(I)(A) reflecting the initial guidelines first promulgated in 1985.²⁷³ The relevant portion of the MPEP recited by the Board, as quoted in *Hubbell*, states that "[d]ouble patenting may exist between an issued patent and an application filed by the same inventive entity, or by a *different inventive entity having a common inventor*, and/or by a common assignee/owner."²⁷⁴ The Board also recited "concern over potential harassment of an infringer by multiple assignees asserting essentially the same patented invention," as expressed in earlier decisions by the CCPA and the Federal Circuit.²⁷⁵ The

^{267.} Id.

^{268. 709} F.3d 1140 (Fed. Cir. 2013).

^{269.} Id. at 1142.

^{270.} Id. at 1143.

^{271.} *Id*.

^{272.} Id. at 1144.

^{273.} Id.

^{274.} *Id.* (emphasis added by the court in *Hubbell*) (quoting MPEP, *supra* note 19, § 804(I)(A)).

^{275.} Id. at 1145.

appellants conceded "anticipation," despite the '685 patent's later priority date than that of the appealed application, and relied exclusively on the argument that obviousness-type double patenting requires common ownership, which, as stated above, never existed between the '509 application and the '685 patent.

The Federal Circuit affirmed the Board's decision, taking judicial notice of the statement in the MPEP that only a common inventor among different entities is required to establish an obviousness-type double patenting rejection.²⁷⁸ The Federal Circuit also invoked a policy of avoiding "multiple assignee harassment."²⁷⁹

Judge Newman, in her dissent recalled the 1984 Patent Act where:

The legislative record explained that when the ownership is the same, whether or not the inventorship is different, rejection on the ground of double patenting can be overcome "by disclaiming the terminal portion of the later patent, thereby eliminating the problem of extending patent life." The panel majority misapplies § 103(c)(1), for the statute is directed to situations of common ownership, it does not provide that when there is not common ownership there can be no patent.²⁸⁰

^{276.} *Id.* ("On appeal, Hubbell does not dispute that Claim 1 of the '685 patent anticipates representative Claim 18 of the '509 application.").

^{277.} *Id.* ("Instead, Hubbell argues that obviousness-type double patenting should not apply where, as here, an application and a conflicting patent share common inventors but do not have *identical* inventive entities, were never commonly owned, and are not subject to a joint research agreement." (emphasis in original)).

^{278.} *Id.* at 1146. As stated by the Federal Circuit:

First, as noted, the MPEP provides that obviousness-type double patenting may exist between an issued patent and an application filed by "the same inventive entity, or by a different inventive entity having a common inventor, and/or by a common assignee/owner." MPEP §804(I)(A) (emphasis added). Although the MPEP is not binding on this court, we can take judicial notice of this provision to the extent it does not conflict with statutory text.

Id. (citations omitted) (emphasis in original).

^{279.} *Id.* at 1147–48 ("Because it is undisputed that an infringer of the '685 Patent would also infringe the '509 application, the multiple assignee harassment justification adopted in *Van Ornum* and reaffirmed in *Fallaux* applies here, despite the lack of common ownership."). The court made no mention of how "multiple assignee harassment" is always possible with any issued patent because the claimed subject matter of any issued patent may be dominated by any number of other, earlier-filed patents generically embracing a later-patented improvement, and since any patented invention may be followed by a subsequently-patented improvement.

^{280.} *Id.* at 1153 (Newman J., dissenting) (quoting the 1984 Patent Act).

Judge Newman is correct that § 103(c)(1) is directed to situations of common ownership. She also stated that, "[i]f there indeed is obviousness-type double patenting, then a terminal disclaimer is necessarily available." However, the Guidelines for implementing the amendments to § 103 under the 1984 Patent Act clearly state that any

double patenting rejection *may also* be made in a later filed application where the application/patent on which the rejection is based and the later filed application are not commonly owned as long as one of the inventors is common between the later filed application and the application/patent; such a rejection cannot be overcome by terminal disclaimer in view of the lack of common ownership.²⁸²

The distinction between the facts of *Hubbell* and the provision under the Guidelines to implement § 103(c)(1) is that the Guidelines state that the double patenting rejection may be made in a "*later* filed application" when not commonly owned.²⁸³ The Guidelines do not, however, generally restrict obviousness-type double patenting to common ownership, and do not provide for curing of obviousness-type double patenting in all cases by filing a terminal disclaimer.

Moreover, the larger question is not whether obviousness-type double patenting is applicable in instances of multiple inventive entities and an absence of common ownership, but rather whether it is appropriate in the absence of common ownership to reject claims of one patent application over those of a patent (or another application) for obviousness-type double patenting where there is no claim of priority under 35 U.S.C. § 120 to connect them. Without language in the Guidelines permitting such double patenting rejections where there is a common inventor, there would be no justification for double patenting rejections made by the examiner, approved by the Board and affirmed by the Federal Circuit in Hubbell. Yet, the language in the Guidelines that provides for double patenting where the *only* basis for making a double patenting rejection is an overlap of inventive entities stems from the amendment to § 120 permitting a priority claim to a co-pending application to another where the inventive entities are distinct but share at least one inventor in common. Under the facts of *Hubbell* there is no such claim to priority under § 120, and the Guidelines do not exemplify a situation where there is a mere overlap of inventorship and a lack of common ownership to

^{281.} *Id*

^{282. 1985} Initial Guidelines, *supra* note 259, at 319 (emphasis added).

^{283.} *Id.*

thereby confirm or deny a requirement of such a claim to priority in making an obviousness-type double patenting rejection where there is only overlap of inventorship.

In *Hubbell*, the issued patent could not constitute statutory prior art relative to the claimed subject matter of the '508 application, since the '508 application had an earlier priority date. From this point of view, and if the overlap of inventorship were to be ignored as a threshold for double patenting, Judge Newman's conclusion would be correct. Namely, that a proper solution to the situation would be, as stated by Judge Newman, "on the merits of the invention, or through the interference or derivation procedures, or other standard protocols as may apply in the particular situation," and not for "double patenting." In other words, the failure of the Patent Office to properly recognize statutory prior art before allowing a patent application to issue should not inure to the detriment of the first patent applicant to obtain a filing date nor, for that matter, to the benefit of the patentee who obtained a patent erroneously.

V. IMPLICATIONS FOR OBVIOUSNESS-TYPE DOUBLE PATENTING

Any change in the severability of inventive contributions by inventors to joint inventions under the AIA will likely conflict with, or at least affect obviousness-type double patenting, at least as this judicially based doctrine is currently understood. Moreover, it is likely to compound issues raised by recent cases addressing obviousness-type double patenting under the twenty-year limit to patent term under the URAA. An alternative was proposed under the Innovation Act, both introduced under both the 113th Congress and the 114th Congress, ²⁸⁵ which would have based qualification for obviousness-type double patenting not on relative issue dates or expiration dates, but on relative filing dates among competing subject matters claimed in respective patents and patent applications. Section A of this Part will extend the logic of severability to the AIA and obviousnesstype double patenting. Section B will discuss recent developments in obviousness-type double patenting in view of overlapping but distinct inventive entities, or common ownership, and Section C will interpret the proposed codification of obviousness-type double patenting from the historical viewpoint of severability and common ownership.

^{284.} In re Hubbell, 709 F.3d 1140, 1151 (Newman, J., dissenting).

^{285.} Innovation Act, H.R. 9, 114th Cong. (2015).

A. EXTENDING THE LOGIC OF SEVERABILITY TO THE AIA AND OBVIOUSNESS-TYPE DOUBLE PATENTING

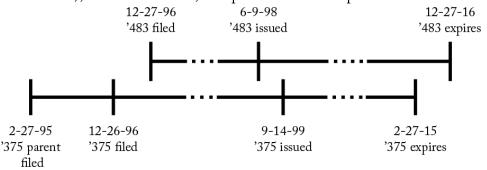
Permitting obviousness-type double patenting rejections among distinct inventive entities on the sole basis of a common inventor would seem to, superficially, suggest that the contributions of an inventor are not severable from the invention of an inventive entity to which he belongs. However, as we have seen, even the Guidelines provided by the Patent Office to implement the amendments to § 103, § 116 and § 120 of the 1984 Patent Act make clear that the work of multiple inventive entities could be used against each other in the absence of common ownership, regardless of any overlap between them. Contrary to the sometimesasserted premise that an inventor's own work cannot be used against him, jurisprudence in this country has, in fact, consistently recognized a distinction between the work of an individual and the work of a collective inventive entity of which he is a part. Therefore, despite statements in the Guidelines to the contrary, obviousness-type double patenting should not be based on the existence of a common overlapping inventor among distinct inventive entities in the absence of common ownership.

Nothing in the AIA contradicts the long-time judicially recognized severability of the work of an individual from that of an inventive entity of which he is a part. Therefore, the only conclusion that should be drawn from the language of AIA 35 U.S.C. § 102(b)(1) and § 102(b)(2) is that an exception under the AIA to prior art must be the work of the inventor, where the claimed subject matter is the work of the inventor alone, or the work of the joint inventive entity where the claimed subject matter is the work of that joint inventive entity.

Similarly, obviousness-type double patenting is still judicially based, and there is no discussion in the AIA or its legislative history of how this change in language is to affect the law of double patenting. Whatever the law regarding a sufficient basis for double patenting with nothing more than naming of a common inventor, it holds as well under the AIA only as well as it did prior to it. Regardless, § 120 is at the root of the provision enabling a common inventor to be the basis for an obviousness-type double patenting rejection, and because the phrase under § 120 of the AIA specifying "an inventor or joint inventor," is the same as that provided in § 102(b), it should be treated the same way. Therefore, just as double patenting based solely on overlap of inventorship should be considered improper prior to the AIA, so should double patenting be considered based on the same overlap under the AIA.

B. RECENT DEVELOPMENTS IN OBVIOUSNESS-TYPE DOUBLE PATENTING IN VIEW OF OVERLAPPING INVENTIVE ENTITIES AND COMMON OWNERSHIP

Recently, the Federal Circuit, in *Gilead Sciences, Inc. v. Natco Pharma Ltd.*, held that a later-issued patent which is nevertheless the first to expire could be used to invalidate a previously issued patent having a later expiration date, despite the invalidating patent having the same inventors and ownership.²⁸⁶ The order of filing and issue of the prior art patent, U.S. 5,952,375 (the '375 Patent), and the patent at issue, U.S. 5,763,483 (the '483 Patent), are shown below, as represented in the opinion:²⁸⁷



The court rejected the plaintiff's argument and the District Court's holding that "a later-issued but earlier-expiring patent' cannot 'serve as a double-patenting reference against an earlier-issued but later-expiring patent." As stated by the Federal Circuit, although "looking to patent issue dates had previously served as a reliable stand-in for the date that really mattered—patent expiration," where patents are subject to the twenty year term prescribed by the URAA "it is the comparison of . . . patent expiration dates that should control, not merely the issuance dates." To base the availability of double patenting on the issue date would, according to the Federal Circuit, enable inventors to "routinely orchestrate patent term extensions by (1) filing serial applications on obvious modifications of an invention, (2) claiming priority to different applications in each, and then (3) arranging for the application claiming the latest filing date to issue first,"²⁹⁰ thereby barring double patenting

^{286. 753} F.3d 1208, 1210 (Fed. Cir. 2014).

^{287.} Id. at 1210.

^{288.} *Id.* (quoting Gilead Scis., Inc. v. Natco Pharma Ltd., 2012 U.S. Dist. LEXIS 180717 (D.N.J., Dec. 21, 2012)).

^{289.} Id. at 1556.

^{290.} Id. at 1556-57.

rejections over any but the patent application that is the last to expire and effectively extending the monopoly of patent protection over the invention. According to the court, if the District Court's holding stood, intentional delay would transform the term of the later-filed patent application from an improper extension of monopoly into an enforceable term that could not be attacked for double patenting because the first-filed patent application issued as a patent only after issuance of the patent based on the later-filed application.

In his dissent Chief Judge Rader cautioned against the Federal Circuit's "new rule," stating that "a primary motivation behind the doctrine—preventing the effective extension of patent term—is largely no longer applicable," and that all other policy concerns, such as preventing multiple infringement suits by different assignees, do not justify "an extension of double patenting." In the case before the court, Judge Rader explained that the "policy concern regarding subsequent extensions of patent term" was not at issue because the subsequently issued patent on which double patenting was based "did *not* extend the term of the earlier-issuing '483 Patent," and harassment by multiple assignees was not an issue because the '375 Patent was subject to a terminal disclaimer. As stated by Judge Rader, "if the '375 patent never issued, Gilead would certainly be entitled to the '483 patent's 2016 expiration date."

Judge Rader is correct that the '375 Patent, as the first-filed but later patent to issue, did not extend the term of the earlier-issued '483 Patent, since both patents would normally expire twenty years after their respective filing dates. Judge Rader is also correct that the '375 Patent, being subject to a terminal disclaimer over the '483 Patent, avoided the risk of harassment by multiple assignees. However, Judge Rader's reference to Gilead's entitlement to the full term of the '483 Patent had the '375 Patent never issued touches upon a much more fundamental concern not at issue in *Gilead*. If the same patents (or patent and application) lacked a *common inventor or common ownership*, no obviousness-type double patenting issue could arise against either patent, ²⁹⁷ entitling the owners of the respective patents to their full twenty

^{291.} *Id.* at 1559 (Rader, J., dissenting).

^{292.} Id.

^{293.} Id. In this case, a terminal disclaimer had been filed in the '375 Patent.

^{294.} Id. (Rader, J., dissenting).

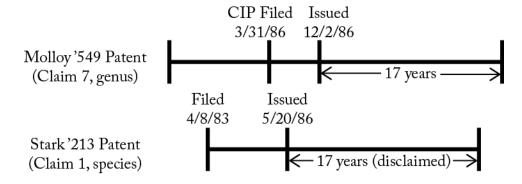
^{295.} Id.

^{296.} Id.

^{297.} The '483 Patent was filed last and, therefore, would not constitute statutory "prior art" against the '375 Patent.

year terms (assuming the claimed subject matter of the later-filed application was patentably distinct over the teachings of the earlier).

In this respect, the result reflects the reasoning of Eli Lilly & Co. v. Barr Laboratory, decided by the Federal Circuit in 2001.²⁹⁸ There, species claim 1 of U.S. 4,590,213 to Stark (the Stark '213 Patent), filed several years after a commonly-owned, but otherwise unrelated patent, U.S. 4,626,549 to Molloy (the Molloy '549 Patent),²⁹⁹ was relied upon to invalidate genus claim 7 of the earlier-filed Molloy '549 Patent for obviousness-type double patenting.³⁰⁰ In Lilly, however, filing of a terminal disclaimer in the Stark '213 Patent was not an option.³⁰¹ According to the court, "a patent owner cannot avoid double patenting by disclaiming an earlier patent."302 Further, because the entire term of the earlier-issuing Stark '213 Patent had been disclaimed by Lilly, the court would not allow Lilly to terminally disclaim the period of the Molloy '549 Patent extending beyond when the Stark '213 Patent would have expired had it not been disclaimed.303 The sequence of events of the two patents, issued as the Stark '213 Patent and the Molloy '549 Patent, both owned by Lilly, is represented below:



The Federal Circuit held that the claimed subject matter of the Molloy '549 Patent (genus claim 7) was not patentably distinct relative to the

^{298. 251} F.3d 955 (Fed. Cir. 2001).

^{299.} *Id.* at 958–59. The Molloy '549 Patent was a continuation-in-part application (CIP) with Serial No. 06/846,448, filed on March 31, 1986, claiming priority to Serial No. 05/432,379, filed on Jan. 10, 1974. The Stark '213 Patent was based on Serial No. 06/483,087, filed April 8, 1983.

^{300.} Id.

^{301.} Id. at 967, n.5.

^{302.} Id.

^{303.} Id.

claimed subject matter of the Stark '213 Patent (species claim 1).³⁰⁴ Therefore the claim at issue in the Molloy '549 Patent (genus claim 7) was invalid.³⁰⁵

Beyond the obviousness of claimed subject matter over that of another patent not considered statutory prior art was the irony that, as in *Gilead*, had the patents *not* had a common inventor or been *commonly owned*,³⁰⁶ the subject matter of the both patents might well have each been patentable in their own right. Specifically, the claimed subject matter of the Molloy '549 Patent was found to be not patentably distinct because the Molloy '549 patent claim at issue, claim 7, had a genus relationship to the species of the Stark '213 Patent claim 1.³⁰⁷ As stated by the court: "A patentable distinction does not lie when a later claim is anticipated by an earlier one. That is, a later claim that fails to provide novel invention over an earlier claim is not patentably distinct from the earlier claim."³⁰⁸

Consistent with the majority's reasoning in *Gilead*, the fact that the subject matter of claim 1 of the Stark '213 Patent might be patentably distinct as a novel, non-obvious species of the genus of claim 7 of the

304. *Id.* at 971. The court stated:

The only other difference between claim 1 of the '213 Patent and claim 7 of the '549 Patent is that the former is directed to humans while the latter is directed to animals. Humans are a species of the animal genus. Our case law firmly establishes that a later genus claim limitation is anticipated by, and therefore not patentably distinct from, an earlier species claim.

Id.

305. *Id.* at 972 ("[W]e hold that... claim 7 is invalid for obviousness-type double patenting in view of claim 1 of the '213 Patent....").

306. There was no overlap of inventorship.

307. *Id.* at 969. As stated by the court:

Therefore, the only difference between claim 1 of the '213 Patent and claim 7 of the '549 Patent is that the former addresses a method of treating anxiety in humans with fluoxetine hydrochloride while the latter claims a method of using fluoxetine hydrochloride to block serotonin uptake in animals.

. . .

... Therefore, the limitation of claim 7 of the '549 Patent directed to blocking serotonin uptake by use of fluoxetine hydrochloride is an inherent characteristic of the administration of fluoxetine hydrochloride for any purpose, including the treatment of anxiety.

• • • •

... Humans are a species of the animal genus. Our case law firmly establishes that a later genus claim limitation is anticipated by, and therefore not patentably distinct from, an earlier species claim.

Id. at 969-971.

308. Id. at 970.

Molloy '549 patent, under a "two-way"³⁰⁹ obviousness-type double patenting rejection, was immaterial because the PTO was not "solely responsible for the delay in causing the second-filed application to issue prior to the first."³¹⁰

As noted by Robert Armitage in a white paper accompanying a United States House of Representatives hearing regarding proposed legislation under the AIA to codify obviousness-type double patenting,³¹¹ following Lilly, "double patenting would now infect two patents even if the two patented inventions were patentably distinct because the non-obviousness test operated, i.e., one of the two patented inventions was prior art to the other."³¹² In particular, the court in Lilly held that a "two way" test for obviousness, normally applied in situations where the later-filed application issues first, would not apply unless the PTO was solely responsible for the delay in causing the second-filed application to issue prior to the first. This holding potentially invalidates patents for obviousness-type double patenting that might well have been considered separately patentable if they were separately assigned and had distinct (and non-overlapping) inventive entities.

In essence, the holding by the court in *Lilly* raised the prospect of requiring every pair of commonly owned patents to be analyzed for possible double patenting despite the order of invention.³¹³ The holding has this result because, according to Armitage, the "ancient constraint on double patenting as applied to a later-issuing basic invention after an

^{309.} A "two-way" obviousness analysis only applies to double patenting rejections where the claims of the reference patent were filed later than the pending Patent Office claims. It is also necessary that "the applicant could not have filed the claims in a single application *and* there is administrative delay." Under a two-way analysis, subject matter of the affected claims of the patent and the patent application must each be obvious over the other in order to maintain the obvious-type double patenting rejection. *See* MPEP § 804 II.B.1(b) (9th ed., Mar. 2014).

^{310.} *Id.* at 968 n.7 (quoting *In re* Berg, 140 F.3d 1428, 1437). The court stated: The two-way test is only appropriate in the unusual circumstance where, *inter alia*, the United States Patent and Trademark Office ("PTO") is "*solely* responsible for the delay in causing the second-filed application to issue prior to the first."

Id.

^{311.} Everything You Ever Wanted to Know About Double Patenting... But Never Realized That You Needed to Ask (From the Makers of Prozac), The "Innovation Act": Hearing Before the H. Comm. on the Judiciary, 113th Cong. 170, 202 (Oct. 29, 2013) [hereinafter Armitage II] (statement of Robert A. Armitage, Former General Counsel, Eli Lilly & Co.).

^{312.} Id. at 196.

^{313.} Id. at 196-97.

earlier-issuing improvement patent has now morphed into a question of whether a two-way test can be invoked,"³¹⁴ and that a "two-way" test will, following *Lilly*, *only* be applied where the PTO has *sole* responsibility for delay that results in later issuance of a patent based on an earlier-filed patent application.³¹⁵

A significant difference between Lilly and Gilead with respect to obviousness-type double patenting is that the patent applications in *Lilly* were filed prior to enactment of the twenty year term prescribed by the URAA. Nevertheless, both claim 7 of the Molloy '549 Patent in *Lilly* and the claims of the '375 Patent in Gilead (had the '375 Patent been at issue in Gilead), shared the same problem, wherein a patent application is subject to invalidation by a later-filed application for obviousness-type double patenting because of common ownership or because of overlapping inventorship. As discussed above, the '483 Patent of Gilead faced the additional threat of invalidation by later issuance of claims because the later-issued patent would also be the first patent to expire, again, only because the patents shared an inventor, or were commonly owned. However, while the validity of the '375 patent was not at issue in *Gilead*, earlier issuance of the later-filed '475 patent rendered the '375 patent susceptible to obviousness-type double patenting as well.³¹⁶ Therefore, both Lilly and Gilead force patent owners to consider double patenting in all pairs of commonly-owned patents, or patents sharing a common inventor, regardless of the sequence of invention (if pre-AIA), filing (if post-AIA), issuance (both pre- and post-AIA), or expiration (post-URAA).

In her dissent from a refusal by the Federal Circuit to reconsider *Lilly* (en banc), Judge Newman stated that claim 7 of the '549 Patent should not have been held invalid for double patenting because the rejection was based on the issued claim of a patent application filed *after* the filing date

^{314.} Id. at 197.

^{315.} See Armitage II, supra note 311; see also MPEP § 804 II.B.1(b) (9th ed., Mar. 2014), which states, in part:

If the patent is the later filed application, the question of whether the time wise extension of the right to exclude granted by a patent is justified or unjustified must be addressed. A two-way test is to be applied only when the applicant could not have filed the claims in a single application *and* there is administrative delay.

⁽Emphasis added).

^{316.} See Gilead, 753 F.3d at 1215 ("[I]t is the comparison of . . . patent expiration dates that should control, not merely the issuance dates.") (emphasis added).

associated with the '549 Patent.³¹⁷ In such a case, according to Judge Newman, double patenting would only apply where the application could have included all of the involved claims of both patents in the same application.³¹⁸ If all of the claims could have been prosecuted in a single application, a one-way test of patentable distinction of the claims of the later-issued patent over those of the earlier-issued patent would apply. If not, then the claimed invention of each patent application would have to be patentably indistinct over the other in order to maintain the obviousness-type double patenting rejection of the claims of the patent that was last to issue.³¹⁹

Mr. Armitage made a similar statement in his white paper:

The facts of *Berg* might have led the U.S. Patent and Trademark Office and the Federal Circuit to immediately and decisively apply the rule in *Schneller* that states voluntarily divided inventions must be independent and distinct to escape double patenting, unless the "safe harbor" of *Vogel* applies—the laterissuing patent will not claim any obvious variation of any claim in the earlier-issuing patent. The *Schneller*-like character of this appeal could not have been clearer. Had it done so, and nothing more, the *Berg* appeal would have been as unremarkable as *Schneller* itself.⁵²⁰

More significantly for our purposes, and as also pointed out by Mr. Armitage, the court in *Berg* made an "appallingly inaccurate characterization of the origin and scope of the ['two-way'] test"³²¹ by stating:

^{317.} Eli Lilly & Co. v. Barr Lab., 251 F.3d 955, 974 (Newman, J., dissenting) ("The 1974 invention cannot be invalidated based on what was filed and claimed in the 1983 application").

^{318.} Id. at 975 (Newman, J., dissenting) (citing In re Berg, 140 F.3d 1428 (Fed. Cir. 1998)). Judge Newman stated:

The Federal Circuit then held that Berg was not entitled to the benefits of the two-way test because he could have included all of the claims in a single application. Neither the facts of Berg nor the law as developed therein applies to the patents here under consideration.

Id.

^{319.} *Id.* (Newman, J., dissenting).

^{320.} Armitage II, *supra* note 311, at 193 (citing *In re* Schneller, 397 F.2d 350 (C.C.P.A. 1967), *In re* Vogel, 422 F.2d 438 (C.C.P.A. 1969), and *In re* Berg, 140 F.3d 1428 (Fed. Cir. 1998)). The "safe harbor" of *Vogel* was that "no double patenting can exist where non-obviousness for the later issuing patent has been established given that the claims of the earlier-issuing patent were treated as the equivalent of prior art." *Id.* at 179.

^{321.} Id.

Since *Braat*, many patent applicants facing an obviousness-type double patenting rejection under the one-way test have argued that they actually are entitled to the two-way test. The two-way test, however, is a narrow exception to the general rule of the one-way test. Indeed, the primary basis for the *Braat* decision—different inventive entities—was removed by the Patent Law Amendments Act of 1984 (the "1984 Act"). Nevertheless, the notion survives that in certain unusual circumstances, the applicant should receive the benefit of the two-way test. The questions then is: when?³²²

In fact, according to Mr. Armitage, *Braat* was a "perversion" of earlier jurisprudence addressing double patenting in that the "two-way" test established by *Braat* caused the validity of a patent having an earlier effective filing date to hinge upon the patentable distinction over the claimed subject matter of a later-filed, but first-to-issue patent.³²³ While the court in *Braat* did limit the "two-way" test to instances where later-issuance of the first-filed patent was not attributable to the patent applicant,³²⁴ to draw from *Berg* the conclusion that "two-way" distinctness was *only* appropriate where the PTO was *solely* responsible for delay in the issuance of claims in the first filed patent application, as done by the court in *Lilly* was, according to Mr. Armitage, improper:

In other words the "rate of prosecution" issue would now [after *Lilly*] *preclude* application of a "two-way test" in all but the most narrow of circumstances. The entire line of cases from *Ohio Brass* onwards that looked to the relative dates of invention to invoke what the *Braat* court called the "two-way test" would now be ignored.³²⁵

The court in *Gilead* adopted the reasoning of the court in *Lilly* that embraced obviousness-type double patenting rejections of inventions

^{322.} *Id.* (quoting *Berg*, 140 F.3d at 1432 (citing *In re Braat*, 937 F.2d 589 (Fed. Cir. 1991)).

^{323.} Id. at 189. Armitage stated:

Thus, the "two-way" test perverts the prior law of *Ohio Brass, Stanley, Borah* and other decisions that focus on the unfairness of calling a second-issued patent "double patenting" when the patent is for an original or basic discovery that was later the subject of an improvement, but the improvement earlier patented. Testing the improvement for "non-obviousness" should not be necessary to decide whether the basic patent is "double patenting."

Id

^{324.} Id. at 190.

^{325.} *Id.* at 196 (citing Thomson-Houston Electric Co. v. Ohio Brass Co., 80 F. 712 (6th Cir. 1897)).

which, but for overlapping inventorship or common ownership, may have been separately patentable, and applied that reasoning to patents limited to a twenty year term by the URAA.³²⁶ By focusing on the expiration date rather than the issue date, the court in Gilead accounted for the underlying principle of preventing extension of patent monopoly, but left in place the "perversion" in Braat of potentially calling into question the validity of patents on the basis of earlier-issued patents claiming subject matter developed well after the effective filing date of the patents at issue, and without even the option for applying a "two-way" test for patentable distinction unless the PTO were solely responsible for the delay. Similar to the result in Lilly, all pairs of commonly owned patents, as well as patents having common inventorship or a common inventor, must be tested for double patenting. This testing is required regardless of their respective filing dates, issue dates, or the claimed subject matter of the respective patent claims being the consequence of the work of distinct inventive entities.327

C. PROPOSED CODIFICATION OF OBVIOUSNESS-TYPE DOUBLE PATENTING UNDER THE AIA AND ITS INTERPRETATION FROM THE HISTORICAL VIEWPOINT OF SEVERABILITY AND COMMON OWNERSHIP

Congress has proposed legislation that would codify obvious-type double patenting under 35 U.S.C. § 106.³²⁸ Although removed from subsequent versions of the proposed Act, § 106 is worth addressing because it would have had several benefits. For example, under proposed § 106, obviousness-type double patenting involving patents subject to the AIA would be limited to rejection of claims of a "second patent" over "first patent" claims having an earlier "effective filing date," as defined by the AIA. The "first patent" must "name the same individual or individuals as the inventor"³²⁹ as the "second patent," or the first patent must qualify as "prior art" under § 102(a)(2) "if an exception under section 102(b)(2) were

^{326.} Gilead, 753 F.3d at 1215 ("In the URAA, Congress clearly limited the one period of exclusivity an inventor can obtain for each of his inventions to twenty years from the filing date of the earliest application to which inventor claims priority—with some limited exceptions.").

^{327.} *Id.* at 1558 ("Permitting any earlier expiring patent to serve as a double patenting reference for a patent subject to the URAA guarantees a stable benchmark that preserves the public's right to use the invention (and its obvious variants) that are claimed in a patent when that patent expires.").

^{328.} Innovation Act, H.R. 9, 114th Cong. (as introduced, Feb. 5 2015).

^{329.} *Id*.

deemed to be inapplicable."³³⁰ Also, the owner of the second patent must not have disclaimed the right to enforce the second patent "independently from, and beyond the statutory term of, the first patent."³³¹ In essence, as stated in a report³³² by the House Committee on the Judiciary introducing the Innovation Act, proposed § 106 would restore and codify the following three "fundamental principles" of double patenting:

- 1. Prohibition of double patenting of an "inventor's patents if the same patents could have validly issued to separate inventors";
- 2. The inventors' "right to rely on the order of invention (i.e., pre-AIA priority), rather than the order of issuance, to determine if the later-issued patent should be subject to a double patenting limit"; and
- 3. Limiting "double patenting" to "cases involving two or more applications and/or patents of the *same inventive entity*," as stated in a notice dated January 9, 1967, and published in the

330. *Id.*

331. *Id.* The relevant portions of proposed section 106 would read as follows: § 106. Prior art in cases of double patenting

A claimed invention of a patent issued under section 151 (referred to as the "first patent") that is not prior art to a claimed invention of another patent (referred to as the "second patent") shall be considered prior art to the claimed invention of the second patent for the purpose of determining the nonobviousness of the claimed invention of the second patent under section 103 if—

- (1) the claimed invention of the first patent was effectively filed under section 102(d) on or before the effective filing date of the claimed invention of the second patent;
- (2) either—
 - (A) the first patent and second patent name the same individual or individuals as the inventor; or
 - (B) the claimed invention of the first patent would constitute prior art to the claimed invention of the second patent under section 102(a)(2) if an exception under section 102(b)(2) were deemed to be inapplicable and the claimed invention of the first patent was, or were deemed to be, effectively filed under section 102(d) before the effective filing date of the claimed invention of the second patent; and
- (3) the patentee of the second patent has not disclaimed the rights to enforce the second patent independently from, and beyond the statutory term of, the first patent.
- 332. H.R. REP. NO. 113-279 (2013) (Innovation Act Report together with Dissenting Views and Additional View).

January 31, 1967 edition of the Official Gazette of the United States Patent Office.³³³

By limiting obviousness-type double patenting to rejections over patent claims having the same or an earlier-effective filing date and naming "the same inventor" or "the same individual or individuals as the inventor," the problem of invalidating later-issued patents in view of patent claims having later-effective filing dates, such as occurred in *Lilly*, would be overcome. Also, patent claims would not be subject to invalidation under proposed § 106 simply by virtue of common ownership, since the affected claims of the second patent would be able to avoid double patenting if patentably distinct, or a terminal disclaimer would be available if the claims of the second patent were not patentably distinct. Patentable distinction would not depend upon the order of issuance, so that there would be no need to call on a test for "two-way" distinctness.

The advantages of the proposed statute are, moreover, all possible because, as asserted in the House Report, § 106 would exclude double patenting rejections where rejection based on statutory "prior art" over the same patent would be available.³³⁴ The criteria for statutory obviousnesstype double patenting under proposed § 106 would hinge upon the alternatives of: (1) qualifying under § 106(2)(A) as "prior art" because of identical inventive entities, consistent with double patenting as it existed prior to the 1984 Act, or (2) qualifying under § 106(2)(B) as § 102(a)(2) prior art if the exceptions under § 102(b)(2) were "deemed to be inapplicable." The two alternatives lead to an anomaly if the exception under § 102(b)(2) is not also based on the work of an identical "inventive entity." Specifically, if qualification as "prior art" under § 106(2)(B) was contingent upon inapplicability under § 102(b)(2) pursuant to disclosure of "subject matter" that is the work of an "individual or joint inventor" rather than the work of the inventive entity of the claimed subject matter at issue then, effectively, § 106 would be supporting two standards for the term "inventor." The first standard, under § 106(2)(A), would be the "inventor" as an identical "inventorship entity" consistent with the Notice in the 1967 Patent Office Gazette. The second standard of "inventor," incorporated under § 106(2)(B) by referencing § 102(b)(2), would disqualify otherwise statutory "prior art" on the basis of overlap in inventorship entities, where an individual's earlier published work could not be relied upon to reject claimed subject matter naming an inventive

^{333.} Id. at 36 (emphasis added).

^{334.} Id. at 67.

entity of which he was a member. The two meanings of "inventor" (or "inventorship entity") would, therefore, also give two distinct meanings to "prior art." Under § 106(2)(A), "prior art" would depend upon "an identical inventive entity," while, under § 106(2)(B), which incorporates § 102(a)(2), "prior art" would depend upon the existence of a common named inventor, thereby broadening the art available for double patenting purposes beyond patents that have an identical inventive entity or are commonly owned. This incongruity is inconsistent with the stated goal of proposed § 106 of restoring double patenting to the threshold that existed prior to codification by the 1984 Patent Act of the possibility of multiple inventorship entities within a single patent.

Such a discrepancy within proposed § 106 is also unnecessary. If the exception to "prior art" under § 102(b)(2)(A) and (B) were limited to disclosures of subject matter "obtained directly or indirectly from the inventor or a joint inventor" that were the work of the *inventorship entity* named in the patent application at issue, rather than merely the work of the *inventor* or *joint inventor* alone, then the subparagraphs of proposed § 106 would be consistent with each other. Proposed § 106 and enacted § 102 of the AIA also would be consistent with the meaning of the term "inventorship entity" that has existed throughout the course of United States patent law.

VI. CONCLUSION

The independent work of individuals has always been considered severable from that of inventive entities of which they are a part. While the AIA defines for the first time in a United States patent statute the meaning of several well-worn terms, such as "inventor," "joint inventor" and "prior art," nothing in the Act or its legislative history mandates that disclosures of the work of an individual "inventor" be disqualified from consideration as "prior art" to an invention claimed by "joint inventors" of which the individual is one. Failure to recognize a distinction between disclosure by a joint inventor of the individual's own work and disclosure of the work of the joint inventive entity when qualifying exceptions to "prior art" under the AIA would broaden the practical significance of membership in a joint inventive entity far beyond its historical limits. Distinguishing the work of individuals from contributions they make as joint inventors, on the other hand, is not only consistent with the historical precedent, it is consistent with the literal language of the new Act and with proposed legislation that would simplify the much-confused judicial doctrine of obviousness-type double patenting.