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.

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TABLE OF CONTENTS

I.	INTRODUCTION	1385
II.	THE <i>AIKEN</i> /HOMESTYLE EXEMPTION: ITS ORIGINS, CODIFICATION, AND RELATION TO THE TRANSMIT	
	CLAUSE	1388
	A. THE PUBLIC PERFORMANCE RIGHT BEFORE THE 1976 ACTB. 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	4.400
	AIKEN/HOMESTYLE EXEMPTION TEST	
	 The First Element: Commonly Found in a Home The Second Element: The Ouandary of Multiple Receivers 	
	 The Second Element: The Quandary of Multiple Receivers	
III.	APPLYING AIKEN TO WIRELESS SPEAKERS	1416
	A. MHZ SO GOOD: TRADITIONAL WIRELESS LIKELY DOES	
	NOT QUALIFY FOR THE HOMESTYLE EXEMPTION	1418
	B. YOUR IPHONE'S BLUETOOTH CONNECTION	
	C. THE UNCERTAIN OUTCOME FOR P LAY-FI	
	D. STREAMING MATTERS	1421
IV.	TECHNOLOGY BLINDNESS	
	 A. TECHNOLOGY BLINDNESS AND AEREO. 1. The Aereo Decision. 2. Is It Cable, or Is It Antenna? 	1424
	B. TECHNOLOGY BLINDNESS AND <i>AIKEN</i>	
	C. TECHNOLOGY BLINDNESS AND AIREN AND AEREO	
V.	TECHNOLOGY MATTERS	
	A. EXPANDING TECHNOLOGY IN TIME	
	B. THE AEREO DISSENT	
	C. FUTURE DISCUSSIONS	1444
VI.	FINAL THOUGHTS	1111

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.⁶ 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.7 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),9 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.¹² For example, in *White-Smith Music Publishing Co. v. Apollo Co.*,¹³ 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 III*¹⁵ 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.¹⁶ Congress first included public performance rights in copyrighted works in the 1856 Amendments—sixty-six years later—but only for dramatic

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^{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

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. SOC'Y 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

^{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.

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

25. Id. at 195.

27. Id. at 195–96.

29. Id. at 133 n.14 (quotations and citations omitted.); cf. id. at 137.

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).

^{26.} Id. (citing Buck v. Duncan, 32 F.2d 366 (W.D. Mo. 1929)).

^{28.} Twentieth Century Fox Music Corp. v. Aiken (*Aiken II*), 500 F.2d 127, 133 (3d Cir. 1974).

^{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

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).

^{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) revd, 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.

^{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) *affd*, 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*

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

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.").

^{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.*

^{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.

^{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

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. *Ćf. Ăiken 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.

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

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

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:

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.

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

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.

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

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

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.").
76. *Compare* 17 U.S.C. § 106(4) ("[T]he owner of copyright under this title has the

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.

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:

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

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

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.

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

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).

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.

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

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).

^{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.

^{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

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.

^{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.

^{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.¹⁰⁶ 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.¹⁰⁷ The 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."¹⁰⁸ And the Eleventh Circuit has held the § 119 exception enacted through the Satellite Home Viewer Act to be a narrow exception.¹⁰⁹

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), *affd 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

^{106.} See supra notes 79–83 and accompanying text.

^{107.} See Brilliance Audio, Inc. v. Haights Cross Commens, Inc., 474 F.3d 365, 374 (6th Cir. 2007).

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

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 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.

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

^{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).

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

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.

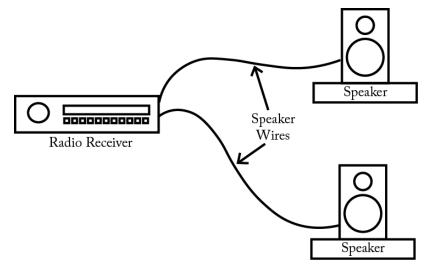


Figure 1: Basic Diagram of a Radio Receiver with Wired Speakers¹¹³

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

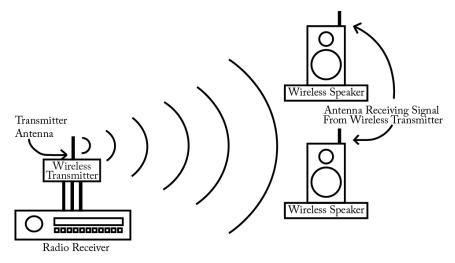


Figure 2: Basic Diagram of a Radio Receiver with wireless speakers¹¹⁷

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."¹¹⁸ To successfully claim the § 110(5) exemption, courts require defendants to satisfy three technology-specific elements.¹¹⁹ First their system "must be of a kind commonly used in private homes."¹²⁰

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

^{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.

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.¹²⁵ 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.¹²⁶ 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.

122. See id.

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

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

^{123.} See id.

^{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."¹³¹ 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."¹³⁹ Yet, in 1991, the internal wiring used in the Claire's Boutiques

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

^{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.

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"¹⁴³) 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.

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.

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:

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.} *See, 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."¹⁴⁸ 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"¹⁴⁹ 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."¹⁵⁰ 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.¹⁵² 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.¹⁵³ For a wireless speaker system to function, the sound signal must be retransmitted from the stereo base to the speaker's receiver.¹⁵⁴ 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,"¹⁵⁵ 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.¹⁵⁶ 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-/10000000177632035/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. 1991).

^{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

. . . .

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.

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.

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,¹⁶⁰ 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.¹⁶² 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.¹⁶⁷ 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.¹⁶⁸

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.¹⁶⁹ 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.¹⁷⁰ 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.¹⁷³ 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.¹⁷⁴ 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.¹⁷⁵

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-FI[™]: 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.¹⁷⁷ 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 $\S 110(5)(A)$ 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."¹⁸³ And as alluded to in Justice Scalia's dissent, ignoring technology can have overreaching and

^{183.} See generally Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014).

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.¹⁸⁵ 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.¹⁸⁶ 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"¹⁸⁷ 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,¹⁹³ which constituted "volitional conduct."¹⁹⁴ Second, like in *Cablevision*, each

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

191. Cartoon 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.

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).

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.¹⁹⁵ 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 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."²⁰⁵ The appellate court noted that the copies made for later viewing by Aereo's system were not infringing under *Cablevision*.²⁰⁶ The court focused on two dispositive

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:

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.").

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."²¹⁷ This is reminiscent of the rationale used in *Jewell-Lasalle*.²¹⁸ 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."²²⁶ 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 nonbroadcast 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

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.

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:

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 fastmoving 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

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).

^{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.").

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 serviceprovider 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*).²⁵⁹ 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."²⁶⁰ Thus, the person who owns the machine is not necessarily the person who possesses it, uses it, or has access to it.²⁶¹ Absent some volitional conduct by an equipment owner like Aereo, courts should not impose liability for direct infringement.²⁶²

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

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 next-generation 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

^{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).

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").

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 Streetresembling "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.

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

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

^{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 Čity 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.").

^{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.