
ARTICLES

RECALIBRATING THE DISGORGEMENT REMEDY IN INTELLECTUAL PROPERTY CASES

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ABSTRACT

The five major U.S. intellectual property (“IP”) regimes—trademark, trade secrecy, copyright, design patent, and utility patent (“patent”) laws—have quite different rules about the availability of disgorgement of infringer profits as a remedy. Traditional principles of restitution and unjust enrichment support awards of disgorgement of profits insofar as they are (1) levied against conscious wrongdoers, (2) attributable to the wrongful conduct, and (3) subject to equitable discretion. Unlike awards of actual damages, which aim primarily to compensate plaintiffs for harms suffered because of a defendant’s wrongdoing, disgorgement awards primarily seek to deter wrongdoing by ensuring that wrongdoers do not profit thereby. This Article presents a formal model that supports our judgment that these principles are consistent with the goal of optimal deterrence of IP infringement.

This Article presents a close study of the doctrinal structure of the five IP regimes’ approach to disgorgement. We find that trademark law is the most consistent of the five regimes with traditional restitutionary principles and the goal of optimal deterrence. Trade secrecy law, like trademark law, is substantially consistent. Design patent, copyright, and patent laws deviate in more significant ways. Disgorgement awards are always available to owners of copyrights or design patents, even against innocent infringers. Moreover, design patent law even deviates from traditional approaches to restricting awards to amounts attributable to infringement. Instead, design patent law requires awards of total profits on the manufacture or sale of whatever “article of

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manufacture” to which an infringing design has been applied. Further, courts have rarely recognized that disgorgement awards should be subject to equitable adjustments in copyright and design patent cases, although this may change after the Supreme Court’s characterization of disgorgement as an equitable remedy for copyright infringement. Patent law deviates from traditional restitutionary principles in a very different way: courts have ruled that Congress repealed disgorgement as a general remedy for patent infringement in 1946, but patent law’s reasonable royalty awards can, in effect, result in a partial disgorgement of infringer profits.

This Article concludes by making recommendations about how courts can, within the statutory bounds of each IP regime, render disgorgement awards that are more consistent with traditional restitutionary principles in a manner that will promote the overall goals of the IP laws.

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INTRODUCTION

Controversies have been cropping up lately on appellate court dockets about the disgorgement of infringer profits remedy in intellectual property (“IP”) cases. In 2016, the Supreme Court addressed an apportionment issue in *Samsung Electronics Co. v. Apple Inc.*,¹ in which a jury awarded all of Samsung’s profits from sales of smartphones that infringed Apple’s design patents.² The Court ruled that the “total profit” that Samsung made from infringing Apple’s design patents did not have to be the total profit from sales of end products (that is, smartphones), as the Court of Appeals for the Federal Circuit (“CAFC”) held,³ but could instead be the total profit attributable to a feature of that product (such as an opening display of a smartphone featuring sixteen colorful icons).⁴ During its 2019-2020 term, the Supreme Court addressed whether disgorgement awards in trademark cases are available only against willful infringers, as the CAFC had held in *Romag Fasteners, Inc. v. Fossil, Inc.*⁵ The Court rejected the lower court’s “categorical rule” that willfulness is a precondition to an award of infringer profits in trademark infringement cases.⁶ In *Romag*, the Court also seemed to suggest that IP disgorgement is an equitable remedy that only judges can render,⁷ as two recent appellate courts have held and as another of the Court’s recent precedents has indicated.⁸

¹ 137 S. Ct. 429 (2016).

² *Id.* at 433 (discussing \$399 million awarded to Apple as result of trial). See *infra* Section III.C for a discussion of design patent’s disgorgement remedy and the *Samsung* decision. Two of us have criticized the Court for failing to invoke and discuss normative principles of restitution and unjust enrichment in design patent disgorgement cases. See Pamela Samuelson & Mark Gergen, *The Disgorgement Remedy of Design Patent Law*, 108 CALIF. L. REV. 183, 185-87 (2020).

³ *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 1001-02 (Fed. Cir. 2015) (rejecting Samsung’s argument for determining damages by apportionment), *rev’d*, 137 S. Ct. 429 (2016).

⁴ *Samsung*, 137 S. Ct. at 433-34; see also U.S. Patent No. D604,305 (filed June 23, 2007).

⁵ 140 S. Ct. 1492, 1497 (2020) (holding that showing of willful trademark infringement is not necessary to qualify for disgorgement of profits award), *vacating and remanding* No. 18-02417, 2019 WL 2677388 (Fed. Cir. Feb. 5, 2019) (per curiam). However, the Court observed that an infringer’s mental state was “an important consideration” in decisions about awarding infringer profits. *Id.* at 1497. The Court had earlier vacated a CAFC decision in this case on other grounds. See *Romag Fasteners, Inc. v. Fossil, Inc.*, 817 F.3d 782 (Fed. Cir. 2016), *vacated on other grounds*, 137 S. Ct. 1373 (2017) (mem.). For discussion of *Romag*, see *infra* text accompanying notes 85-88, 140-148.

⁶ *Romag*, 140 S. Ct. at 1494, 1497.

⁷ See *id.* at 1496-97 (discussing transsubstantive “principles of equity”); cf. *Liu v. SEC*, 140 S. Ct. 1936, 1940 (2020) (characterizing disgorgement of defendant’s profits as form of equitable relief in securities fraud case), *vacating and remanding* 754 F. App’x 505 (9th Cir. 2018).

⁸ See *Hard Candy, LLC v. Anastasia Beverly Hills, Inc.*, 921 F.3d 1343, 1347 (11th Cir. 2019) (denying trademark plaintiff’s demand for jury trial on its disgorgement claim); *Tex. Advanced Optoelectronic Sols., Inc. v. Renesas Elecs. Am., Inc.*, 888 F.3d 1322, 1337 (Fed. Cir. 2018) (vacating jury disgorgement award in trade secrecy case because disgorgement is

The ferment about disgorgement reflected in these cases makes timely this Article's consideration of key differences in how five major IP regimes—trademark, trade secrecy, copyright, design patent, and utility patent—deal with claims for awards of wrongdoer profits.⁹ This Article analyzes the extent to which disgorgement rules in each regime are consistent (or not) with traditional principles of restitution and unjust enrichment.¹⁰ Unlike awards of actual damages, which aim to compensate plaintiffs for harms suffered because of a defendant's wrongdoing, disgorgement awards seek to deter wrongdoing by stripping defendants of profits attributable to the wrong.¹¹ By limiting awards to profits attributable to infringement, these principles make disgorgement a modulated mechanism for achieving deterrence while reducing the risk of undue chilling of socially productive use and development of IP. Disgorgement awards in some IP cases ignore these principles and grossly exceed profit attributable to the defendant's wrong.¹² This Article recommends some ways for courts to achieve greater consistency with restitutionary principles and explains why such consistency is desirable.

Some readers may be surprised to learn just how starkly different are the disgorgement rules of IP regimes.¹³ Under the prevailing interpretation of utility patent law, disgorgement of infringer profits is never available,¹⁴ although awards of a reasonable royalty can, as a practical matter, effect a partial

equitable remedy); *see also* *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 572 U.S. 663, 668 n.1 (2014) (characterizing disgorgement awards in copyright cases as equitable in nature). *Petrella* is discussed *infra* notes 315-322 and accompanying text.

⁹ An earlier article comparing remedy rules in various IP regimes is Ralph S. Brown, *Civil Remedies for Intellectual Property Invasions: Themes and Variations*, 55 LAW & CONTEMP. PROBS. 45 (1992).

¹⁰ RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51 (AM. LAW INST. 2011).

¹¹ *See, e.g.*, H.R. REP. NO. 94-1476, at 161 (1976) (“Damages are awarded to compensate the copyright owner for losses from the infringement, and profits are awarded to prevent the infringer from unfairly benefiting from a wrongful act.”).

¹² The \$533 million award in *Apple v. Samsung*, which represented all of Samsung's profits on sales of infringing smartphones, is a prime example of this. *See infra* Section III.C.

¹³ Other IP regimes also have varying disgorgement rules. The Plant Variety Protection Act, 7 U.S.C. §§ 2321-2582 (2018), has never authorized disgorgement of infringer profits. *See id.* §§ 2561-2565. The Semiconductor Chip Protection Act of 1984, 17 U.S.C. §§ 901-914, authorizes recovery of both actual damages and infringer profits attributable to infringement but does not authorize double recovery. *Id.* § 911. The Vessel Hull Design Protection Act, *id.* §§ 1301-1332, allows disgorgement of profits “resulting from the sale of the copies if the court finds that the infringer's sales are reasonably related to the use of the claimant's design,” but right holders must choose between infringer profits and actual damages. *Id.* § 1323(b). State laws differ on whether disgorgement of profits is available as a remedy in right of publicity cases. *Compare, e.g.*, NEV. REV. STAT. § 597.810 (2019) (disgorgement not authorized), *with* CAL. CIV. CODE § 3344 (West 2020) (allowing recovery of both actual damages and infringer profits attributable to misappropriation).

¹⁴ *See infra* Section III.D.

disgorgement of profits.¹⁵ Design patentees, by contrast, can always ask for an award of infringer profits.¹⁶ Copyright owners can similarly choose a disgorgement remedy,¹⁷ although this remedy is statutorily limited to profits attributable to infringement,¹⁸ whereas design patentees can seek total profits on the manufacture or sale of articles of manufacture to which a protected design has been applied,¹⁹ even if other factors contributed value to that article.²⁰ Copyright law is more generous than design patent law in one respect: it allows recovery of both an infringer's profits and actual damages.²¹ Design patentees can get either profits disgorgement or actual damages, not both.²² Trademark law provides for recovery of both plaintiff's damages and defendant's profits, albeit subject to principles of equity.²³ Until very recently, the general rule in trademark law, however, had been that profits disgorgement was available only when the infringement was willful,²⁴ although there was a circuit split on the issue.²⁵ The Supreme Court in *Romag* rejected this categorical rule but opined that an infringer's mental state was an "important consideration" in deciding whether profits disgorgement should be awarded.²⁶ Trade secrecy statutes, on their face, authorize awards of both actual damages and profits disgorgement.²⁷ Yet courts have generally limited monetary relief for misappropriation to actual

¹⁵ 35 U.S.C. § 284 (2018). Section III.D *infra* explains why reasonable royalty awards may serve as partial disgorgements.

¹⁶ *Id.* § 289 (allowing design patentees to recover infringer's total profits on sales of articles of manufacture embodying the protected design); *see also infra* Section III.C.

¹⁷ 17 U.S.C. § 504(a)(1).

¹⁸ *Id.* § 504(b) (requiring copyright owner to present proof of infringer's revenues, and requiring infringers to present proof of deductible expenses and profits attributable to factors other than infringement).

¹⁹ 35 U.S.C. § 289.

²⁰ *See, e.g., Bergstrom v. Sears, Roebuck & Co.*, 496 F. Supp. 476, 495 (D. Minn. 1980) (allowing disgorgement of profits on sales of fireplace grates, not just on company's patented ornamental design).

²¹ 17 U.S.C. § 504(a).

²² *Bergstrom*, 496 F. Supp. at 494.

²³ 15 U.S.C. § 1117(a) (2018); *see also, e.g.,* 5 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 30:73 (5th ed. 2020) (ebook).

²⁴ *See* RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37 cmt. e (AM. LAW INST. 1995).

²⁵ *See, e.g., Banjo Buddies, Inc. v. Renosky*, 399 F.3d 168, 174 (3d Cir. 2005) (opining that 1999 amendment to 15 U.S.C. § 1117(a) removed willful infringement as requirement for disgorgement of trademark infringer profits).

²⁶ *Romag Fasteners, Inc. v. Fossil, Inc.*, 140 S. Ct. 1492, 1497 (2020).

²⁷ *See* Defend Trade Secrets Act, 18 U.S.C. § 1836(b)(3)(B)(i) (2018); UNIF. TRADE SECRETS ACT § 3(a) (UNIF. LAW COMM'N 1985).

damages or wrongdoer profits, whichever was greater.²⁸ Consistent across IP regimes is the rule against double recovery.²⁹

Part I sets forth the disgorgement rules of trademark law to illustrate several general features of this remedy and their consistency with principles of restitution and unjust enrichment. Disgorgement awards in trademark cases are generally measured by the defendant's total profit on sales of products bearing the infringing mark when the infringement was a substantial factor in sales of the product, with the defendant bearing the burden of establishing deductions from gross revenues.³⁰ This total profit rule generally yields a measure of damages beyond the profit for which the use of an infringing mark was more likely than not a but-for cause. The resulting risk of overdeterrence is modulated in three ways. First, the use of an infringing mark must be a substantial factor driving sales for total profit to be recovered. Second, courts generally limit disgorgement awards to cases of conscious wrongdoing, which requires both that the defendant was subjectively aware that its conduct might infringe the plaintiff's trademark and that the circumstances do not justify the defendant's failure to bargain for the right. Third, disgorgement is an equitable remedy, subject to safety valves, such as laches defenses and judicial discretion to reduce excessive awards.

Part II offers an alternative way to conceptualize the disgorgement remedy through a formal model that addresses a problem in the law of disgorgement while offering a normative rationale for the key features of the disgorgement remedy discussed in Part I. The problem is to determine when a disgorgement award exceeds what is justified as a permissible deterrent as opposed to an impermissible penalty. To solve this problem, we develop an economic model to show how the disgorgement remedy can help the legal system achieve what we term "proportional deterrence" (sometimes called "appropriate" or "optimal" deterrence).³¹ Proportional deterrence seems to be a sound goal for a nonpenal disgorgement remedy because it acknowledges and accounts for the legitimate concerns of IP infringers and those who benefit from their infringing activities. Unlike "absolute" or "complete" deterrence, which aims to prevent all violations and thus generally demands avoidance of infringement regardless of the social

²⁸ See, e.g., RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmt. c (AM. LAW INST. 1995). Trade secrecy law allows for more varied ways to measure profits attributable to misappropriation than other IP regimes. See *infra* Section III.A.

²⁹ See, e.g., 17 U.S.C. § 504(b) (2018) (authorizing copyright owners to recover actual damages and any infringer profits "not taken into account in computing the actual damages"); 35 U.S.C. § 289 (2018). The risk of double recovery is greatest when the litigants are direct competitors and the plaintiff's losses approximate the extent of unjust enrichment attributable to the wrong. See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36 cmt. c (AM. LAW INST. 1995).

³⁰ See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37 cmt. d (AM. LAW INST. 1995).

³¹ See, e.g., Keith N. Hylton, *Punitive Damages and the Economic Theory of Penalties*, 87 GEO. L.J. 421, 421 (1998) (describing concept of "'appropriate or optimal deterrence,' which implies deterring offensive conduct only up to the point at which society begins to lose more from deterrence efforts than from the offenses it deters").

cost of such avoidance,³² proportional deterrence prescribes a level of deterrence that is proportional to the social harm from infringement. By capping the level of intended deterrence, fidelity to the principle of proportional deterrence seeks to promote a socially desirable balance between the interest in inducing potential infringers to bargain with IP right holders (or otherwise to respect IP rights) and the interest in reducing socially wasteful precautions against infringement. The association of the disgorgement remedy with a goal of proportional deterrence can be counterintuitive from a law-and-economics perspective, as the commonly stated—but, as Part II shows, commonly misguided—formula to achieve complete deterrence is “to deny violators all gains from their violations,”³³ a prescription that can facially point toward a standard remedy of disgorgement.³⁴ We contend that the proper aim of disgorgement in IP law is the promotion of proportional, rather than complete, deterrence. The model shows how disgorgement awards can do this.

The model does not provide an unmitigated endorsement of disgorgement awards as a means to achieve proportional deterrence. It instead only supports awards that exceed the profit probably attributable to infringement where there is a material risk that an IP right will be underenforced. For this reason, a total profit rule is not objectionable per se. But even if awards were limited to profit probably attributable to infringement, the disgorgement remedy would be poorly calibrated for achieving proportional deterrence in general because even a disgorgement award so limited can greatly exceed the socially optimal price for use of an IP right. The risk of excessive awards is especially high in cases where the IP-protected interest is a small part of a much larger end product or project (we call this the “dooickey” problem). A total profit rule exacerbates the risk of overdeterrence. This risk is mitigated by the substantial factor rule in trademark law and apportionment rules in other IP regimes, by limitations on the disgorgement remedy to cases of conscious wrongdoing, and by application of equitable safety valves such as laches defenses. In short, the model shows how traditional limitations on disgorgement awards, both in the general law of restitution and unjust enrichment and in specific legal regimes such as trademark law, make sense as means to ensure that disgorgement does not overshoot the proportional deterrence mark.

Part III returns the Article’s focus to the disgorgement remedy in other IP regimes. Section III.A focuses on trade secrecy law, the disgorgement rules of which generally resemble those of trademark law, perhaps because both regimes have retained strong common-law and equitable roots. A major difference is that total profit awards, while not unknown, are relatively unusual in trade secret cases. The typical trade secrecy disgorgement award is a fraction—an

³² See *id.*; see also Alex Raskolnikov, *Probabilistic Compliance*, 34 YALE J. ON REG. 491, 541 (2017).

³³ Raskolnikov, *supra* note 32, at 541.

³⁴ Bert I. Huang, *The Equipose Effect*, 116 COLUM. L. REV. 1595, 1596-97 (2016) (“In academic parlance, we sometimes say that the threat to take away a wrongdoer’s net gains goes beyond optimal deterrence to achieve complete deterrence, and courts seem to agree.” (footnote omitted)).

apportionment—of the defendant’s profit flowing from wrongdoing.³⁵ Apportionment is typical when the misappropriation is a relatively small factor in the defendant’s profitable project. Causal considerations, such as the existence of other contributing factors, play a major role in apportionment, but courts consider other circumstances as well, including the egregiousness of the defendant’s conduct.³⁶ Conscious wrongdoing is characteristically present in trade secret misappropriation cases. Equitable doctrines also play a role in trade secrecy cases, though less so than in trademark cases.

Section III.B discusses copyright law’s disgorgement remedy. Total profit awards are rare in copyright cases because the statute directs courts to award only profits attributable to infringement.³⁷ In principle, this should be no more than the profit for which the infringement was more likely than not a but-for cause. In practice, disgorgement awards are generally determined under rules that expansively define profits potentially attributable to infringement. The statute puts the burden on the defendant to prove deductible expenses and a basis for apportionment.³⁸ Unlike trademark and trade secrecy law, copyright law does not, as a matter of law or practice, generally impose a culpability requirement such as deliberate infringement for disgorgement awards. Although copyright cases have sometimes invoked equitable principles in disgorgement cases, codification of this remedy in the early twentieth century seems to have cut it loose from its equitable roots. This may explain why courts in copyright cases have generally treated disgorgement as a legal remedy not subject to equitable discretion. Juries typically decide the measure and apportionment of profit. This may change, however, in light of dicta in the Supreme Court’s 2014 decision in *Petrella v. Metro-Goldwyn-Mayer, Inc.*,³⁹ which characterizes disgorgement as an equitable remedy for copyright infringement that enables courts to consider the egregiousness of the defendant’s conduct as well as the plaintiff’s misconduct in determining an appropriate award.⁴⁰

Section III.C shows that design patent law, as courts have generally interpreted it, is the most at odds with traditional principles of restitution and unjust enrichment and the most likely to yield profit-based awards far greater than can be justified as proportional deterrence. Not only is willful infringement not required to obtain an ostensibly profits-based award, but as Samsung learned to its chagrin in the *Apple* case, design patent law has at best an idiosyncratic relationship with ordinary principles of restitution.⁴¹ The statute authorizes an award of the “total profit” attributable to the manufacture or sale of any “article

³⁵ See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmt. f (AM. LAW INST. 1995).

³⁶ *Id.*

³⁷ 17 U.S.C. § 504(b) (2018) (“The copyright owner is entitled to recover the actual damages suffered by him or her as a result of the infringement, and any profits of the infringer that are attributable to the infringement and are not taken into account in computing the actual damages.”).

³⁸ *Id.*

³⁹ 572 U.S. 663 (2014).

⁴⁰ *Id.* at 686-87; see also discussion *infra* text accompanying notes 315-323.

⁴¹ *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429 (2016).

of manufacture” to which the infringing design was applied.⁴² While two of us have explained that this “total profit” rule can be interpreted to be relatively consistent with restitution principles,⁴³ our approach has yet to be applied in design patent cases. Moreover, equitable limitations on disgorgement awards in design patent cases have been rare in recent decades.

Section III.D discusses the distinctive treatment of disgorgement in utility patent law. By the mid-1940s, patents were commonly issued for small parts of complex technologies. It had consequently become nearly impossible for courts to manage apportionment proceedings satisfactorily. In 1946, Congress’s amendment to the patent damages provision omitted reference to disgorgement and established that patentees are generally entitled to awards of actual damages, but not less than a reasonable royalty.⁴⁴ Courts have concluded that this amendment was intended to repeal the previously available disgorgement remedy for patent infringement. Reasonable royalty awards have become the norm in patent cases and serve, as a practical matter, as a partial disgorgement of profits. Section III.D shows that reasonable royalty assessments often present similar factual and conceptual difficulties as apportionment, albeit with some flexibility about what is “reasonable” that, in effect, enables equitable adjustments.

Part IV reflects on how judicial consideration of conscious wrongdoing, apportionment, and equitable safety valves can advance the normative objectives of IP law when courts award disgorgement of an IP infringer’s profits. Even without statutory changes, courts can exercise discretion to take restitution principles into greater account, as we believe they should, to foster the innovation and competition policy objectives that IP laws are meant to advance. The result will not be an entirely neat and perfectly predictable disgorgement remedy. There will necessarily be some variance in how individual courts deploy disgorgement in individual cases. But a certain degree of vagary and unpredictability is part of the tradeoff that equity often makes as a means of deterring unscrupulous or otherwise opportunistic behavior. Compared to other tools of deterrence, disgorgement has advantages with its mix of equitable flexibilities and gain-based constraints that make it a useful tool in the remedial kit for IP rights enforcement.

I. TRADITIONAL PRINCIPLES OF DISGORGEMENT AS EXEMPLIFIED IN TRADEMARK LAW

This Part reviews the disgorgement rules of trademark law to explain and illustrate several general features of the traditional disgorgement remedy. Section I.A discusses the object, purpose, and measure of disgorgement as a remedy. Section I.B considers why profits disgorgement has generally been

⁴² 35 U.S.C. § 289 (2018).

⁴³ Samuelson & Gergen, *supra* note 2, at 209-20 (explaining role that principles of restitution should play in determining disgorgement awards in design patent cases).

⁴⁴ Act of Aug. 1, 1946, ch. 726, 60 Stat. 778.

available only against conscious wrongdoers. Section I.C explains that disgorgement has long been an equitable remedy and why this is important.

A. *The Total Profit Rule and the Substantial Factor Requirement*

The traditional objective of the disgorgement remedy “is to eliminate profit from wrongdoing while avoiding, so far as possible, the imposition of a penalty.”⁴⁵ In principle, the measure of disgorgement is “the net profit attributable to the underlying wrong.”⁴⁶

Because of the inherently speculative nature of the inquiry, determining the precise amount of an infringer’s profit attributable to infringement is, in practice, more of a Platonic ideal than a realistic goal. Courts in trademark cases have developed some plaintiff-friendly rules that structure and channel the process of assessing disgorgement awards so that amounts awarded are relatively determinate.

Most important is the total profit rule, which directs courts to measure profits disgorgement by the defendant’s total profit on sales for which the infringement was a substantial factor driving demand for the product.⁴⁷ Awards under this total profit rule are generally on the high side, sometimes by a significant margin. These total profit awards are not subject to further apportionment on causal or equitable grounds for reasons explained by the Supreme Court in *Hamilton-Brown Shoe Co. v. Wolf Bros. & Co.*⁴⁸

In the very nature of the case it would be impossible to ascertain to what extent [the defendant] could have effected sales and at what prices except for the use of the trade-mark. No one will deny that on every principle of reason and justice the owner of the trade-mark is entitled to so much of the profit as resulted from the use of the trade-mark. The difficulty lies in ascertaining what proportion of the profit is due to the trade-mark, and what to the intrinsic value of the commodity; and as this cannot be ascertained with any reasonable certainty, it is more consonant with reason and justice that the owner of the trade-mark should have the whole profit than that he should be deprived of any part of it by the fraudulent act of the defendant.⁴⁹

⁴⁵ RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51(4) (AM. LAW INST. 2011).

⁴⁶ *Id.*

⁴⁷ The substantial factor test dates back to RESTATEMENT OF TORTS § 747 cmt. c (AM. LAW INST. 1938) (“[I]f the tortious conduct is a substantial factor in producing the sales, the defendant is liable for resulting profits without diminution for the other contributing factors.”).

⁴⁸ 240 U.S. 251 (1916).

⁴⁹ *Id.* at 262. It is important to understand that before the 1940s, “the subject matter of trademark [protection] was much narrower [than today] (it included only ‘technical trademarks,’ which were words or devices (logos) that did not in any way describe the goods, their geographic origin, etc.)” and “claims of trademark infringement could only be asserted against direct competitors.” E-mail from Mark McKenna, John P. Murphy Found. Professor of Law, Notre Dame Law Sch., to Pamela Samuelson, Richard M. Sherman Distinguished Professor of Law, Univ. of Cal., Berkeley Sch. of Law (Feb. 20, 2020) (on file with the Boston

The general absence of apportionment distinguishes trademark law from other IP regimes, most notably copyright law. This rule makes the measure of the disgorgement remedy determinate in trademark law when it is clear that the use of an infringing mark was a substantial factor driving pertinent sales and when the defendant's gross income and deductible expenses are clear.

The nature of the wrong in trademark infringement somewhat tempers the total profit rule, which applies only to sales that were plausibly influenced by the infringement. The unauthorized use of another's mark is not wrongful in itself but is only wrongful when the use would likely confuse consumers about the source of the goods. *Truck Equipment Service Co. v. Fruehauf Corp.*⁵⁰ illustrates how the nature of the trademark wrong can interact with a requirement of factual causation to limit a disgorgement award.⁵¹ *Truck Equipment Service Co.* ("TESCO") claimed a trapezoidal design for cornhusker semitrailers as its unregistered trade dress.⁵² Fruehauf admitted to copying TESCO's design when entering the market as a competitor, which the district court found it had done to take advantage of consumer acceptance of TESCO's design.⁵³ Fruehauf argued that the design was too functional to be trade dress protectable and lacked secondary meaning (i.e., was not distinctively associated with TESCO's semitrailers⁵⁴), but the court found otherwise.⁵⁵ It found in favor of TESCO but held that Fruehauf had infringed only in the three states in which TESCO's design had attained secondary meaning.⁵⁶ The court ordered Fruehauf to disgorge its profits from sales in those states but allowed Fruehauf to retain its profits in ten other states in which TESCO had no or de minimis market penetration.⁵⁷

University Law Review). As a result,

trademark infringement necessarily consisted of use of the same or a highly similar technical trademark for identical goods, and courts would routinely say that, because there was no legitimate reason for a direct competitor to use the same mark (when that mark didn't offer any information about the goods), mark owners didn't have to prove intent to pass off – it was presumed.

Id. Similarities in packaging or product configuration, which today are often claimed as trademarks, were dealt with under the law of unfair competition. *Id.*

⁵⁰ 536 F.2d 1210 (8th Cir. 1976).

⁵¹ *Id.* at 1222 (limiting disgorgement award to sales attributable to defendant's unlawful use of plaintiff's mark).

⁵² *Id.* at 1216.

⁵³ *Id.* at 1214.

⁵⁴ See *TraFFix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23, 28 (2001) ("The design or packaging of a product may acquire a distinctiveness which serves to identify the product with its manufacturer or source; and a design or package which acquires this secondary meaning, assuming other requisites are met, is a trade dress which may not be used in a manner likely to cause confusion as to the origin, sponsorship, or approval of the goods.").

⁵⁵ *Truck Equip.*, 536 F.2d at 1217-20.

⁵⁶ *Id.* at 1221-22. The court awarded only nominal compensatory damages because TESCO did not prove actual damages from lost sales. *Id.* at 1221.

⁵⁷ *Id.* at 1221-22. The district court further limited the disgorgement award to 20% of Fruehauf's profits from those states, based on market survey data submitted by Fruehauf

When there is evidence that purchasers may have been influenced by infringement, the burden shifts to the defendant to negate a causal influence by establishing that the mark was not a substantial factor in purchaser decisions.⁵⁸ Thus, Fruehauf had to disgorge its profit on sales in the three states in which the plaintiff's design had achieved secondary meaning unless it could prove that those sales were not influenced by the protected design.⁵⁹ Sometimes the defendant can establish that an infringing mark was not a substantial factor in a portion of its profits. For example, in *Holiday Inns, Inc. v. Airport Holiday Corp.*,⁶⁰ the court decided that 30% of the defendant's profits was an appropriate award for the defendant's infringements of Holiday Inn's marks.⁶¹ The court credited the motel owner's testimony that he was responsible for 70% of the motel's profits because he had persuaded weekly customers to rent rooms.⁶² Only transient customers could have been confused by the defendant's use of the plaintiff's marks.⁶³

Another respect in which trademark disgorgement rules are structured to favor trademark owners is the rule that owners need to prove only the infringer's gross revenues from sales of infringing products.⁶⁴ Infringers bear the burden of establishing deductions.⁶⁵ They can deduct "expenses directly associated with producing the relevant gross income," except for "[t]he value of a[n] individual] defendant's own labor" and "salaries or wages paid to persons responsible for the tortious conduct."⁶⁶ Courts use a but-for test to determine deductible expenses. There is generally no deduction for overhead or other fixed expenses that are not increased by the production and marketing of the infringing goods.⁶⁷

The total profit and burden-shifting rules generally yield disgorgement awards greater than the profits for which use of the infringing mark was more

identifying the percentage of purchases attributable to the infringement. *Id.* at 1222. The Eighth Circuit affirmed except as to the 20% apportionment, finding that Fruehauf's willful infringement required disgorgement of all its profits in those three states. *Id.* at 1222-23.

⁵⁸ See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37 cmt. d (AM. LAW INST. 1995) ("[T]he inference may be rebutted by evidence establishing that the purchasers were aware of the true source of the goods, for example, or that the sales resulted solely from the inherent merits of the defendant's product without regard to its source or sponsorship.").

⁵⁹ *Truck Equip.*, 536 F.2d at 1221-22.

⁶⁰ 493 F. Supp. 1025 (N.D. Tex. 1980), *aff'd sub nom.* *Holiday Inns, Inc. v. Alberding*, 683 F.2d 931 (5th Cir. 1982).

⁶¹ *Id.* at 1027-28.

⁶² *Id.* (observing that defendant went to airport and "beat on doors" to get weekly business). However, the court trebled both the profits and damages awards because the defendant continued to use Holiday Inn's marks for over a year after termination of its franchise agreement, which the court characterized as "flagrant disregard." *Id.* at 1028.

⁶³ See *id.* at 1028.

⁶⁴ 15 U.S.C. § 1117(a) (2018); see also RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51(5)(d), 51 cmt. i (AM. LAW INST. 2011) (resolving uncertainty in favor of claimant against the "conscious wrongdoer").

⁶⁵ See, e.g., MCCARTHY, *supra* note 23, § 30:65-:66.

⁶⁶ RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37 cmt. g (AM. LAW INST. 1995).

⁶⁷ *Id.* § 37 cmt. h.

likely than not a but-for cause. The substantial factor test predictably magnifies the effect of the infringing mark on sales, capturing more profit than the actual marginal increase in sales arising from the infringing use when purchases are due to a multiplicity of factors.⁶⁸ Trademark owners benefit from an infringer's returns from risk-taking while potentially avoiding losses from pursuing a similar venture if the infringer's venture proves unprofitable.⁶⁹ Also captured are returns due to the infringer's market power, goodwill, IP, or other intangible factors. As a consequence, the trademark owner may also reap returns on the defendant's investment in tangible assets such as plant and equipment. Typically, the defendant would have been able to realize much of these returns on tangible and intangible assets had it abstained from the infringing activity.

One important reason supporting a disgorgement measure that predictably exceeds profit attributable to infringement is to deter wrongful conduct, especially when the infringer hopes its wrongdoing will go undetected.⁷⁰ The deterrence goal is particularly salient in noncompeting goods cases because use of the mark may not directly harm the plaintiff, and thus a disgorgement award is not plausibly a substitute for a more direct—but perhaps difficult to prove—measure of actual damages. In *Monsanto Chemical Co. v. Perfect Fit Products Manufacturing Co.*,⁷¹ for instance, the defendant sold mattress pads, claiming that Monsanto had made 100% of the filling when, in fact, only a small percentage was Monsanto's product.⁷² The Second Circuit had "no doubt as to the need for deterrence in cases such as this," even though the parties were not direct competitors.⁷³ The court characterized Perfect Fit as having "taken up trademark infringement as its principal line of business. In at least three other instances it has carried out schemes similar to its misuse of [Monsanto's] trademark. It may be said to be a commercial racketeer."⁷⁴

Deterrence also explains why disgorgement awards are not limited to a reasonable royalty in willful infringement cases, even when the plaintiff might have granted a license had the defendant sought one. In *Playboy Enterprises, Inc. v. Baccarat Clothing Co.*,⁷⁵ for instance, the defendant purchased 43,000

⁶⁸ Trademark law authorizes courts to adjust disgorgement amounts if profits recovery would be either inadequate or excessive so that the award is "just." 15 U.S.C. § 1117(a).

⁶⁹ Of course, if the alternative for the trademark owner was to license the trademark, rather than to personally pursue the venture in question, there has been no effective risk savings for the trademark owner as a result of the infringement. Indeed, particularly where the trademark infringer and trademark owner are not direct competitors, a trademark infringer might, in theory, have made an ex ante calculation that it was worthwhile to forgo sure and potentially immediate costs of licensing up front in favor of risking later trademark enforcement that might be especially unlikely—or even pointless—if the venture failed.

⁷⁰ See RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51 cmt. k (AM. LAW INST. 2011).

⁷¹ 349 F.2d 389 (2d Cir. 1965).

⁷² *Id.* at 390.

⁷³ *Id.* at 396-97.

⁷⁴ *Id.* at 396.

⁷⁵ 692 F.2d 1272 (9th Cir. 1982).

counterfeit labels with the Playboy rabbit-head mark and sold 20,000 pairs of jeans with the labels.⁷⁶ The district court awarded \$12,750 in damages as the revenue Playboy would have received at its standard 5% royalty rate; the district court refused, however, to award defendant's profits.⁷⁷ The Ninth Circuit reversed, instructing the district court to award the defendant's total profit of \$120,000 on sales of the jeans.⁷⁸ It explained that the royalty award "would fail to serve as a convincing deterrent to the profit maximizing entrepreneur who engages in trademark piracy."⁷⁹ This insistence on awarding more than a reasonable royalty, although that amount was almost surely the profit attributable to the defendant's failure to bargain for the right, comports with traditional equitable principles. A defendant who takes without asking is not allowed to satisfy its debt to the plaintiff by paying what it would have paid had it asked. Allowing a willful infringer to escape by paying the market price for what was taken without paying would defeat one of the purposes of disgorgement, which is to "discourage[] potential invaders from circumventing the bargaining process and appropriating the protected interest without first securing its holder's consent."⁸⁰

Disgorgement awards sometimes more convincingly serve the purpose of compensation when the litigants directly compete as to the same or comparable goods.⁸¹ In such cases, the defendant's profits may plausibly be a reasonable proxy for profits the plaintiff would have earned but for the infringement.⁸² The correspondence between the defendant's profits from infringement and the plaintiff's lost profits is, however, "clearly imperfect . . . since in most cases there is no reason to expect that every sale made by the defendant has been diverted from the plaintiff or that the profit margins of the parties are necessarily the same."⁸³ When a disgorgement award is a reasonable proxy for the plaintiff's

⁷⁶ *Id.* at 1274.

⁷⁷ *Id.*

⁷⁸ *Id.* at 1274-77 ("Any other remedy results in the defendants being unjustly enriched."). The Ninth Circuit rejected plaintiff's theory of calculating profits based on potential sales. *Id.* at 1276 (finding award of profits premised on "potentially fictitious sales from which the defendants derived no economic gain" inappropriate). It left undisturbed the trial court's refusal to award treble damages, but it directed the lower court to award attorney fees. *Id.*

⁷⁹ *Id.* at 1274.

⁸⁰ See HANOCH DAGAN, *THE LAW AND ETHICS OF RESTITUTION* 214 (2004); accord WARD FARNSWORTH, *RESTITUTION* 66 (2014) ("While the innocent converter generally has to pay just for the value of what he took, the conscious wrongdoer also has to disgorge all profits that resulted from his wrong . . .").

⁸¹ Part II, *infra*, explains why the disgorgement remedy is not very good at compensating IP right holders for harms suffered from infringement.

⁸² See, e.g., MCCARTHY, *supra* note 23, § 30:64 (justifying award of infringer's profits "as a rough measure of the harm suffered by plaintiff, when the parties are competitors").

⁸³ RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37 cmt. b (AM. LAW INST. 1995); see also, e.g., *Polo Fashions, Inc. v. Craftex, Inc.*, 816 F.2d 145, 149-50 (4th Cir. 1987) (upholding award of defendant's profits from selling shirts with infringing logo as proxy for plaintiff's lost profits, even though defendant sold infringing shirts for lower price than plaintiff).

lost profits, courts may relax the requirement that the infringement involve conscious wrongdoing, for disgorgement then becomes a rough measure of actual damages.⁸⁴

B. *The Conscious Wrongdoer Requirement*

Consistent with traditional principles of restitution,⁸⁵ the general understanding in trademark law prior to the Supreme Court's *Romag* decision had been that the disgorgement remedy was available only when the infringement was willful, deliberate, or in bad faith.⁸⁶ The Court's opinion in *Romag* rejected the proposition that there is a categorical rule requiring a showing of willfulness as a prerequisite to a disgorgement award.⁸⁷ At the same time, however, the Court did "not doubt that a trademark defendant's mental state is a highly important consideration in determining whether an award of profits is appropriate."⁸⁸

The general limitation of disgorgement to situations involving conscious wrongdoing has been significant because trademark law is a strict liability regime. Innocent uses may infringe trademarks if consumers would be confused by the existence of two similar marks for the same or similar goods or services. Innocent infringers may therefore be enjoined to stop them from further uses of the marks.⁸⁹ Under the traditional understanding, an innocent infringer may be

⁸⁴ Plaintiffs cannot recover twice for the same loss (i.e., both its lost profit and the defendant's profit when these measures overlap). *See, e.g.*, RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36 cmt. c (AM. LAW INST. 1995). The rule against double recovery applies even when the defendant is a conscious wrongdoer.

⁸⁵ *Id.* § 37(1)(a) (allowing award of net profits for trademark infringement when "actor engaged in the conduct with the intention of causing confusion or deception"); *see also* RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51(4) (AM. LAW INST. 2011) (discussing conscious wrongdoing as general restitution requirement); FARNSWORTH, *supra* note 80, at 64-65 (characterizing "the distinction between the innocent and the conscious wrongdoer" as "[t]he most important principle" in restitution). For a detailed analysis of trademark's willfulness requirement, see Mark A. Thurmon, *Confusion Codified: Why Trademark Remedies Make No Sense*, 17 J. INTELL. PROP. L. 245, 274-75 (2010).

⁸⁶ *See, e.g.*, ROGER E. SCHECHTER & JOHN R. THOMAS, INTELLECTUAL PROPERTY: THE LAW OF COPYRIGHTS, PATENTS AND TRADEMARKS 768 (2003).

⁸⁷ *See Romag Fasteners, Inc. v. Fossil, Inc.*, 140 S. Ct. 1492, 1497 (2020) (rejecting proposition that, in trademark law, there is a categorical requirement for showing willful infringement as a prerequisite to disgorgement award).

⁸⁸ *Id.*

⁸⁹ *See Champion Spark Plug Co. v. Sanders*, 331 U.S. 125, 131-32 (1947) (denying award of infringer profits because injunction would "satisfy the equities of the case"); MCCARTHY, *supra* note 23, § 30:1 ("A permanent injunction is the usual and normal remedy once trademark infringement has been found in a final judgment.").

required to pay compensatory damages⁹⁰ but not to disgorge profits, unless its profits are a reasonable proxy for the plaintiff's loss.⁹¹

Prior to the Supreme Court's *Romag* decision, *George Basch Co. v. Blue Coral, Inc.*⁹² was a leading case holding that profits disgorgement is available only when trademark infringement was willful.⁹³ A jury found Blue Coral's labels for cans of metal polish infringed the trade dress of its competitor Basch.⁹⁴ Even though Basch failed to show that Blue Coral had acted with intent to deceive the public, a jury awarded Basch \$200,000, which represented Blue Coral's profits from sales of the infringing product.⁹⁵ On appeal, the Second Circuit held that under the Lanham Act, disgorgement of a defendant's profits first requires proof of willful deception, citing with approval the *Restatement*

⁹⁰ See, e.g., *Saxlehner v. Siegel-Cooper Co.*, 179 U.S. 42, 42-43 (1900) (holding that although innocence did not exonerate defendant from charge of trademark infringement, disgorgement of profits was unavailable). Under the law of restitution, "[t]he value for restitution purposes of benefits obtained by the misconduct of the defendant, culpable or otherwise, is not less than their market value." RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51(2) (AM. LAW INST. 2011). This is functionally an absolute liability rule for damages equivalent to market value. It applies independent of whether there is harm to the plaintiff, see *De Camp v. Bullard*, 54 N.E. 26, 28 (N.Y. 1899) (holding that defendant must pay market value of license to float logs down river owned by plaintiff even though plaintiff was not harmed by trespass), or profit to the defendant, RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51 cmt. c (AM. LAW INST. 2011) (stating that liability for market value applies "even if this measure of enrichment exceeds any value actually realized by the defendant"). This absolute liability is cabined by the requirement of "an actionable interference by the defendant with the claimant's legally protected interests." *Id.* § 51(1). Actionable interference includes nominate torts and equitable wrongs. See *id.* § 51 cmt. a (citing *id.* §§ 13-15, 39-46). Many of these wrongs are themselves fault based (e.g., fraud, interference with business relations, and duress). See *id.* The principal exceptions are proprietary wrongs (e.g., trespass, conversion, and infringement on IP), which are wrongs where liability can attach without fault. See *id.*

⁹¹ Justice Sotomayor's concurring opinion in *Romag* states that "a district court's award of profits for innocent or good-faith trademark infringement would not be consonant with the 'principles of equity' referenced in § 1117(a) and reflected in the cases the majority cites." *Romag*, 140 S. Ct. at 1498 (Sotomayor, J., concurring in the judgment). Justice Gorsuch's majority opinion was not averse to the idea of profits disgorgement in cases of innocent infringement, although it recognized that a defendant's mental state was a "highly important consideration" in applying the disgorgement remedy. *Id.* at 1497 (majority opinion). Justice Alito wrote a separate concurrence saying that "willfulness is a highly important consideration" in disgorgement remedy cases but not "an absolute precondition." *Id.* (Alito, J., concurring).

⁹² 968 F.2d 1532 (2d Cir. 1992).

⁹³ *Id.* at 1540; see also RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37, reporters' note to cmt. e (AM. LAW INST. 1995). But see *Banjo Buddies, Inc. v. Renosky*, 399 F.3d 168, 171 (3d Cir. 2005) (noting that willfulness should be one factor in deciding whether to award profits disgorgement).

⁹⁴ *Basch*, 968 F.3d at 1535.

⁹⁵ *Id.* The district court also ruled that Basch was not entitled to recover actual damages due to its failure to prove actual consumer confusion or Blue Coral's intent to deceive. *Id.*

(Third) of *Unfair Competition's* (“*Restatement of Unfair Competition*”) concern that “an accounting may overcompensate for a plaintiff’s actual injury and create a windfall judgment at the defendant’s expense.”⁹⁶ Hence, it vacated the jury’s profits award.⁹⁷

Taking into account the relative willfulness of an infringement can temper the total profit rule, which predictably yields a measure of damages much larger than the defendant’s actual profit from infringement. Consider the infringing magnetic fasteners at issue in *Romag*. Fossil contracted with a firm in China to manufacture handbags of its design.⁹⁸ That firm, in turn, purchased magnetic fasteners bearing the Romag mark from a third party in China, some of which were, unbeknownst to Fossil, counterfeits.⁹⁹ Romag initially sought to disgorge \$26 million in profits that Fossil made from selling the handbags with infringing snaps, even though its usual royalty rate—\$0.05 per fastener—would have yielded \$37,000 for properly licensed products.¹⁰⁰ Although Fossil unquestionably infringed Romag’s mark, the jury found that the infringement was not willful, so the court decided against awarding any disgorgement of infringer profits.¹⁰¹

For infringement to be considered willful in the sense used here,¹⁰² a defendant must be conscious (i.e., subjectively aware) that its conduct would or

⁹⁶ *Id.* at 1540.

⁹⁷ *Id.* at 1541. The Second Circuit observed that even in cases of bad faith infringement, courts should consider additional factors before determining “whether, on the whole, the equities weigh in favor of an accounting.” *Id.* at 1540; *see also* MCCARTHY, *supra* note 23, § 30:59 (“The courts are careful to retain the right to withhold an award of profits if, in view of the overall facts and equities of the case, it is not appropriate.”).

⁹⁸ *Romag Fasteners, Inc. v. Fossil, Inc.*, 817 F.3d 782, 783 (Fed. Cir. 2016).

⁹⁹ *Id.*

¹⁰⁰ Brief for Respondents in Opposition at 2, 7-8, *Romag Fasteners, Inc. v. Fossil, Inc.*, 140 S. Ct. 1492 (2020) (No. 18-1233).

¹⁰¹ *Romag*, 817 F.3d at 784. Justice Gorsuch’s majority opinion observed that the jury had found that Fossil had acted with “callous disregard” of Romag’s rights, even if it was not a willful infringer. *Romag*, 140 S. Ct. at 1494.

¹⁰² We do not consider the *Romag* decision to be inconsistent with our conception of the level of willfulness that should be a highly important factor in trademark disgorgement cases. We agree with Justice Sotomayor’s concurring opinion in *Romag*, which observed that courts in equity had defined the term “willful” in trademark cases to “encompass a range of culpable mental states—including the equivalent of recklessness, but excluding ‘good faith’ or negligence.” *Romag*, 140 S. Ct. at 1498 (Sotomayor, J., concurring in the judgment). The majority opinion in *Romag* took willfulness as signifying a higher state of culpability, one more consistent with its definition of the term in *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 136 S. Ct. 1923 (2016). *See Romag*, 140 S. Ct. at 1494. *Halo* held that enhanced damages are “generally reserved for egregious cases of culpable behavior.” *Halo*, 136 S. Ct. at 1932. The *Romag* decision pointed out that 15 U.S.C. § 1117(a) (2018) required a finding of willfulness before profits could be awarded in trademark dilution cases. *Romag*, 140 S. Ct. at 1494-95. Willfulness was also explicitly required to increase the cap on awards of statutory damages under § 1117(c), and treble damages could only be awarded for intentional wrongdoing under § 1117(b). *Id.* at 1495. It was, therefore, “all the more telling” that

may violate the rights of the claimant.¹⁰³ The requirement of subjective awareness follows from the gain-based nature of the remedy and from the aim of deterrence, a key purpose of disgorgement. The basic intuition is that an actor should generally not be deterred from making productive use of a resource unless it knows that its use violates or, at least, might well violate, an entitlement for which they should bargain.

Consistent with this intuition, infringement should not be considered willful when circumstances make it unreasonable to expect the defendant to bargain for the right.¹⁰⁴ In this sense, conscious wrongdoing is a more useful term for what we mean by willfulness in this context, as this compound term more explicitly captures the sense that there must be some level of knowledge of the potential violation of another's rights. Additionally, conscious wrongdoing is wrongdoing

§ 1117(a) did not specify willfulness as the mental state required for a profits disgorgement award for trademark infringement. *Id.* It was, moreover, unclear from the case law that willfulness had always been required in disgorgement cases. *Id.* at 1495-96.

¹⁰³ The *Restatement (Third) of Restitution and Unjust Enrichment* (“*Restatement of Restitution*”) defines a conscious wrongdoer as one “who acts (a) with knowledge of the underlying wrong to the claimant, or (b) despite a known risk that the conduct in question violates the rights of the claimant.” *RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT* § 51(3) (AM. LAW INST. 2011). Under this rule, actors may be regarded as conscious wrongdoers even when they acted in good faith, believing, for example, that the IP right was invalid or that their conduct would not infringe on the right if they undertook the risky business. *Id.* § 3 cmt. e. Ward Farnsworth explains: “Once an actor perceives a risk, the law puts strong pressure on him to assess it and, if he cannot be sure what is lawful, to err on the side of prudence.” *FARNSWORTH, supra* note 80, at 71. This rule is tempered by the qualification that a defendant is not considered a willful infringer when circumstances make it unreasonable to expect that person to bargain for the right. *See infra* notes 105-124 and accompanying text. Together, the rule and qualification encourage parties to resolve uncertainty about the validity of a right by negotiating when it is reasonable to expect the defendant to negotiate.

¹⁰⁴ Many state statutes allow recovery of double or treble damages from willful trespassers. *See, e.g.,* IDAHO CODE § 6-202(3)(b)(i) (2020); MINN. STAT. § 548.05 (2020). When defendants act in the face of a known risk of committing trespass, courts apply something like a good faith standard in deciding whether punitive damages should be assessed. *Crofoot Lumber, Inc. v. Ford*, 12 Cal. Rptr. 639 (Dist. Ct. App. 1961), illustrates this point. Ford cut trees on Crofoot's land knowing that his right to do so was contested. *Id.* at 641-42. Crofoot had tried to rescind the contract under which Ford acted and had successfully obtained a temporary restraining order that temporarily halted Ford's cutting. *Id.* at 642. Ford resumed cutting when the trial court refused to grant a preliminary injunction. *Id.* The court held that Ford was not liable for statutory treble damages because he had acted in good faith. *Id.* at 643. In refusing to grant a preliminary injunction, the court had implicitly given Ford permission to proceed with his logging. *See id.* Likewise, in *Bennett v. Michigan Pulpwood Co.*, 147 N.W. 490 (Mich. 1914), the court found a treble damages statute inapplicable on necessity-like grounds where the intermingling of the plaintiff's and the defendant's timber left the defendant no choice but to take some of the plaintiff's timber. *Id.* at 492. In contrast, in *Chilton v. Missouri Lumber & Mining Co.*, 127 S.W. 941 (Mo. Ct. App. 1910), a defendant who tried to circumvent the legal process by cutting trees before a court could hear a claim was required to pay statutory treble damages. *Id.* at 944.

in the sense of failing to avoid the relevant rights violation through reasonably available means, typically by bargaining with the right holder. A trespasser by necessity, for example, is not treated as a conscious wrongdoer who must disgorge the gains from that trespass. The *Restatement (Third) of Restitution and Unjust Enrichment* (“*Restatement of Restitution*”) illustrates this principle with *Vincent v. Lake Erie Transportation Co.*,¹⁰⁵ in which the defendant chose to remain moored to the plaintiff’s dock during a storm and in fact “reinforce[d] the moorings [to the dock], thereby choosing to ‘preserve the ship at the expense of the dock.’”¹⁰⁶ The plaintiff had a restitution claim regardless of whether the defendant’s conduct was tortious.¹⁰⁷ But the defendant was not treated as a conscious wrongdoer so damages were “reasonable rental value plus costs of repair,” not the defendant’s gain.¹⁰⁸

In trademark law, a conscious wrongdoing requirement shields good faith infringers from disgorgement liability in two types of situations. One is when a competitor has adopted the same or similar mark or trade dress as another for the same or similar goods with a good faith belief that, say, the claimed trademark or trade dress was unprotectable because it was generic, lacked secondary meaning, or was functional.¹⁰⁹ A second is when a noncompetitor adopted the same mark for different products or services with a good faith belief that its use of that mark would not infringe.¹¹⁰ Although good faith may not preclude a finding of infringement if the two marks are, in fact, confusingly similar, courts in trademark cases, applying principles of equity, will often deny profits awards in such cases.¹¹¹

*Lindy Pen Co. v. Bic Pen Corp.*¹¹² exemplifies the denial of disgorgement in good faith infringement cases involving competing goods.¹¹³ In *Lindy*, both

¹⁰⁵ 124 N.W. 221 (Minn. 1910).

¹⁰⁶ RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 40 cmt. c, illus. 9 & reporters’ note to cmt. c (AM. LAW INST. 2011) (citing *Vincent*, 124 N.W. 221).

¹⁰⁷ *Vincent*, 124 N.W. at 222.

¹⁰⁸ RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 40 cmt. c, illus. 9 (AM. LAW INST. 2011).

¹⁰⁹ See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37 cmt. b (AM. LAW INST. 1995).

¹¹⁰ See *id.*

¹¹¹ See, e.g., *Saxlehner v. Siegel-Cooper Co.*, 179 U.S. 42, 42-43 (1900) (indicating that injunction may be issued but no profits should be awarded against good faith trademark infringers); *George Basch Co. v. Blue Coral, Inc.*, 968 F.2d 1532, 1540 (2d Cir. 1992) (noting that limiting availability of disgorgement remedy prevents “the potentially inequitable treatment of an ‘innocent’ or ‘good faith’ infringer”). But see *Burger King Corp. v. Mason*, 855 F.2d 779, 781 (11th Cir. 1988) (per curiam) (affirming award of profits against infringing franchisee even without “showing of culpability on the part of defendant, who is purposely using the trademark”).

¹¹² 982 F.2d 1400 (9th Cir. 1993), *abrogated on other grounds by* *SunEarth, Inc. v. Sun Earth Solar Power Co.*, 839 F.3d 1179 (9th Cir. 2016) (en banc) (per curiam).

¹¹³ *Id.* at 1406. Courts have sometimes employed a proxy-for-plaintiff’s-loss rationale for awards of defendant’s profits without requiring bad faith or willfulness as a prerequisite when the parties are direct competitors. See, e.g., *Tamko Roofing Prods., Inc. v. Ideal Roofing Co.*, 282 F.3d 23, 36-37 (1st Cir. 2002) (“[I]t has been this circuit’s rule that an accounting of

litigants had been using the mark “Auditor” for fine-tip pens they sold to auditors and other customers.¹¹⁴ Defendant Bic initially voluntarily ceased its use of the term but eventually renewed it after realizing that other firms were using variations on the term and that Lindy did not appear to exert any proprietary interest in the mark in its advertising.¹¹⁵ Although the district court upheld Lindy’s claim that Bic’s pens sold under that name infringed Lindy’s mark in certain markets, it was not convinced that the infringement was deliberate, so it denied disgorgement of Bic’s profits from sales of the pens;¹¹⁶ the Ninth Circuit affirmed.¹¹⁷

Disgorgement is often denied in cases involving good faith infringers as to noncompeting goods. In *Scarves by Vera, Inc. v. Todo Imports Ltd.*,¹¹⁸ for instance, the court found that Todo acted in good faith when it used the name “Vera” in connection with its sale of cosmetics and toiletries.¹¹⁹ Because its goods were quite different from the plaintiff’s, there was no diversion of trade, and hence no actual damages (i.e., lost profits). But because consumers might be confused about whether Scarves had extended its product lines into cosmetics and toiletries, the Second Circuit directed the district court to enjoin Todo from continuing to use “Vera” as a mark for its products.¹²⁰ Yet the Second Circuit rejected Scarves’s plea for an award of Todo’s profits from the infringement because Todo’s products were not competitive and the company had acted in good faith.¹²¹

Prior to the Supreme Court’s decision in *Romag*, the outcome in such cases could be explained in two ways. The first is that the defendant’s good faith can negate the element of wrongdoing,¹²² although *Romag* arguably foreclosed this approach. A junior user who is consciously aware that its conduct may infringe the right of another is generally required to bargain for the right, but trademark law recognizes that the defendant’s use of a mark may be justified under some circumstances without bargaining for use of the right.¹²³ Alternatively, as the next Section explains, the defendant’s good faith may be a ground for denying disgorgement as a matter of equitable discretion.¹²⁴ *Romag* left this path open.

defendant’s profits *where the products directly compete* does not require fraud, bad faith, or palming off.”); *supra* text accompanying notes 81-84.

¹¹⁴ *Lindy*, 982 F.2d at 1403.

¹¹⁵ *Id.*

¹¹⁶ *Lindy Pen Co. v. Bic Pen Corp.*, No. 80-cv-00010, 1989 WL 296762, at *3 (C.D. Cal. Aug. 1, 1989).

¹¹⁷ *Lindy*, 982 F.2d at 1404. The relative weakness of the mark was also a factor cutting against a disgorgement award. *Id.* at 1406.

¹¹⁸ 544 F.2d 1167 (2d Cir. 1976).

¹¹⁹ *Id.* at 1175.

¹²⁰ *Id.* at 1174-75.

¹²¹ *Id.* at 1175.

¹²² *See, e.g., id.* (holding that good faith infringement should not result in disgorgement under the factual circumstances).

¹²³ *See supra* notes 105-124 and accompanying text.

¹²⁴ *See infra* notes 131-139 and accompanying text.

C. *Equitable Remedy with Safety Valves*

U.S. trademark law expressly states that the availability of profits and damage remedies are “subject to the principles of equity.”¹²⁵ Several circuit courts have held that disgorgement of trademark infringer profits is an equitable remedy that only judges may order,¹²⁶ concluding that trademark owners have no Seventh Amendment right to a jury trial when seeking infringer profits because of the equitable nature of this remedy since 1791.¹²⁷ Historical studies have shown that courts sitting in equity in eighteenth-century England could and did require defendants, incident to the issuance of injunctive relief, to account for profits attributable to infringement, a remedy comparable to modern disgorgement awards.¹²⁸

¹²⁵ 15 U.S.C. § 1117(a) (2018). The majority in *Romag* characterized these principles as providing “transsubstantive guidance on broad and fundamental questions” such as the appropriateness of certain remedies. *Romag Fasteners, Inc. v. Fossil, Inc.* 140 S. Ct. 1492, 1496 (2020). It did not find persuasive that these principles universally imported willfulness as a requirement for disgorgement in all IP cases. *Id.* (“[I]t seems a little unlikely Congress meant ‘principles of equity’ to direct us to a narrow rule about a profits remedy within trademark law.”).

¹²⁶ See, e.g., *Hard Candy, LLC v. Anastasia Beverly Hills, Inc.*, 921 F.3d 1343, 1355-59 (11th Cir. 2019) (stating that jury trial was unavailable because disgorgement of profits is equitable remedy); *Fifty-Six Hope Rd. Music, Ltd. v. A.V.E.L.A., Inc.*, 778 F.3d 1059, 1074-76 (9th Cir. 2015) (“There is no Seventh Amendment right to have a jury calculate profits.” (emphasis omitted)); MCCARTHY, *supra* note 23, § 30:59. See generally Mark A. Thurmon, *Ending the Seventh Amendment Confusion: A Critical Analysis of the Right to a Jury Trial in Trademark Cases*, 11 TEX. INTELL. PROP. J. 1, 80-101 (2002). Judges may, however, ask a jury to render an advisory verdict. See *infra* Sections III.A.3 and III.B.3 for trade secrecy and copyright cases addressing disgorgement as an equitable remedy.

¹²⁷ See U.S. CONST. amend. VII; *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 376 (1996) (describing Supreme Court’s “historical test” for Seventh Amendment jury rights as asking, in part, “whether the particular trial decision must fall to the jury in order to preserve the substance of the common-law right as it existed in 1791”). Yet, courts often describe a remedy as equitable with little historical analysis. See Caprice L. Roberts, *The Restitution Revival and the Ghost of Equity*, 68 WASH. & LEE L. REV. 1027, 1048-51 (2011).

¹²⁸ See Sean Bottomley, *Patent Cases in the Court of Chancery, 1714–58*, 35 J. LEGAL HIST. 27, 38 (2014) (noting that accounting of profits remedy was available in equity in patent cases); H. Tomás Gómez-Arostegui, *Equitable Infringement Remedies Before 1800*, in RESEARCH HANDBOOK ON THE HISTORY OF COPYRIGHT LAW 195, 220-25 (Isabella Alexander & H. Tomás Gómez-Arostegui eds., 2016). It is, however, important to recognize that back then there was no such thing as a restitution claim or a disgorgement remedy. See Mark P. Gergen, *The Equitable Origin of the Disgorgement Remedy 1-2* (Aug. 31, 2020) (unpublished manuscript) (on file with the Boston University Law Review) (explaining that profits-based remedy was available only in equity and not in action at law before twentieth century). *Hogg v. Kirby* (1803) 32 Eng. Rep. 336; 8 Ves. Jun. 214 (Ch.), is an early equity case involving trademark infringement. See *id.* at 339 (noting that court allowed plaintiff’s petition for injunction and accounting of defendant’s profits because of difficulty in determining extent of damage). The Supreme Court recently observed that although the term “disgorgement” is of relatively recent vintage, the Court has long recognized that awarding wrongfully obtained profits to achieve restitution is equitable in nature. See *Liu v. SEC*, 140 S. Ct. 1936, 1940 n.1

In the late nineteenth and early twentieth centuries, before the distinction between law and equity courts was largely effaced, plaintiffs had to establish a basis for equitable jurisdiction to recover an infringer's profits.¹²⁹ A plaintiff could do this by persuading a court that the defendant had breached a fiduciary duty, the defendant violated a property right, or some asset in the defendant's hand was a product of the wrong to which she should be given an equitable interest.¹³⁰ In trademark cases, courts often asserted equitable jurisdiction when awarding disgorgement by analogizing this remedy to equitable constructive trusts.¹³¹

Classifying disgorgement as an equitable remedy is important for reasons beyond the absence of a right to a jury trial. It means that a court has the power to exercise equitable discretion in deciding whether to grant a disgorgement award at all and, if so, in what amount to set the award.¹³² Courts may limit disgorgement to a fraction of the profit attributable to a wrong if they find that a partial disgorgement would suffice to deter the defendant from wrongdoing.¹³³ Indeed, courts exercising equitable discretion can tailor disgorgement awards in much the same way that they can decide whether to order injunctive relief, how to tailor an injunction, or whether to award treble damages.¹³⁴ When factual uncertainty exists about whether the use of an infringing mark was a substantial

(2020). The Court cited numerous copyright and patent cases, as well as its *Romag* decision, in support of that proposition. *Id.* at 1944-46.

¹²⁹ See, e.g., RESTATEMENT OF THE LAW OF RESTITUTION § 136 & cmt. a (AM. LAW INST. 1937) (stating that legal remedy for tortious use of "a trade name, trade secret, franchise, profit a prendre, or other similar interest of another" was action at law for reasonable use value, while plaintiff would bring "a bill in equity, with a request for an accounting for any profits which have been received").

¹³⁰ See Kenneth H. York, *Extension of Restitution Remedies in the Tort Field*, 4 UCLA L. REV. 499, 508-27 (1957); see also *Am. Air Filter Co. v. McNichol*, 527 F.2d 1297, 1300 (3d Cir. 1975); *Nat'l Merch. Corp. v. Leyden*, 348 N.E.2d 771, 775-76 (Mass. 1976).

¹³¹ See, e.g., Samuel L. Bray, *The System of Equitable Remedies*, 63 UCLA L. REV. 530, 554 (2016) (recognizing constructive trust as equitable remedy in presence of wrongful ownership); see also *Liu*, 140 S. Ct. at 1944 (noting that profits disgorgement is often conceptualized as effecting constructive trust, including in IP cases); *Hamilton-Brown Shoe Co. v. Wolf Bros. & Co.*, 240 U.S. 251, 259 (1916) ("The infringer is required in equity to account for and yield up his gains to the true owner [of the mark], upon a principle analogous to that which charges a trustee with the profits acquired by wrongful use of the property of the *cestui que trust*.").

¹³² 15 U.S.C. § 1117(a) (2018); RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37(2) (AM. LAW INST. 1995).

¹³³ See, e.g., *Kansas v. Nebraska*, 574 U.S. 445, 465 (2015) (awarding "partial disgorgement" for breach of interstate water compact because it "will serve to stabilize a compact by conveying an effective message to a breaching party that it must work hard to meet its future obligations").

¹³⁴ Injunctive relief is also statutorily subject to equitable principles. 15 U.S.C. § 1116(a); see also, e.g., *Herb Reed Enters., LLC v. Fla. Entm't Mgmt., Inc.*, 736 F.3d 1239, 1249 (9th Cir. 2013). Courts can enhance actual damage awards by up to three times subject to equitable principles under 15 U.S.C. § 1117(a).

factor in driving a sale¹³⁵ or how to calculate total profit,¹³⁶ a court may rely on equitable considerations in resolving these issues. Equity courts can both deny disgorgement of infringer profits when the defendant acted in good faith and consider the egregiousness of the defendant's conduct when resolving uncertainty about how much profit was attributable to a wrong.¹³⁷

The power of a court to exercise equitable discretion in making disgorgement awards is a safety valve that makes tolerable strong background rules, such as the total profit rule whose strict application could otherwise unduly deter socially productive activities.¹³⁸ This safety valve provides courts with the discretion to reduce damages when the general rule would yield a damage award significantly exceeding the profit actually attributable to the wrong but when an essentially punitive award is unwarranted. The equitable nature of the disgorgement remedy also empowers courts to deny or limit disgorgement awards based on the plaintiff's misconduct or delay in seeking a remedy.¹³⁹

Laches and misconduct were, in fact, alternative bases for denying a disgorgement remedy in *Romag*. The district court found that Romag's founder had received information in May 2010 that gave him reason to believe that Fossil bags contained counterfeit snaps.¹⁴⁰ Yet he failed to investigate or bring a claim for several months.¹⁴¹ He waited until just before "Black Friday," the busiest shopping day of the year, to bring an action against Fossil and got a temporary restraining order ("TRO") that required Fossil to remove all bags containing the infringing snaps from trade channels, causing more than \$4 million of Fossil's inventory to be removed from the market during the holiday season.¹⁴² Had Romag made its claim against Fossil months earlier, Fossil would have had time

¹³⁵ For example, in *Truck Equipment Service Co. v. Fruehauf Corp.*, 536 F.2d 1210 (8th Cir. 1976), the district court awarded 20% of Fruehauf's profits in three states. *Id.* at 1221. The court of appeals increased this to 100% of those profits due to defendant's willful conduct. *Id.* at 1223. *Truck Equipment* is discussed *supra* text accompanying notes 50-57.

¹³⁶ See, e.g., *Pedinol Pharmacal, Inc. v. Rising Pharm., Inc.*, 570 F. Supp. 2d 498, 505-07 (E.D.N.Y. 2008).

¹³⁷ When trademark infringement involves counterfeiting, much steeper damage rules apply. 15 U.S.C. § 1117(b)-(c). Trademark counterfeiting can also give rise to criminal liability. 18 U.S.C. § 2320 (2018).

¹³⁸ Cf. Henry E. Smith, *Equitable Defences as Meta-Law*, in DEFENCES IN EQUITY 17, 19-20 (Paul S. Davies, Simon Douglas & James Goudkamp eds., 2018); Henry E. Smith, *Equity as Meta-Law*, 130 YALE L.J. (forthcoming 2020) (manuscript at 4-5) (on file with the Boston University Law Review) (describing equity as well suited for dealing with problems "of high complexity and uncertainty" and "combatting opportunism").

¹³⁹ See, e.g., *McLean v. Fleming*, 96 U.S. 245, 257-58 (1878) (reversing award of profits in trademark action due to longstanding acquiescence and inexcusable laches); *Borg-Warner Corp. v. York-Shipley, Inc.*, 293 F.2d 88, 95-96 (7th Cir. 1961) (concluding that trademark owner's misconduct foreclosed accounting for infringer's profits); see also *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 572 U.S. 663, 687 (2014); *infra* text accompanying notes 315-323.

¹⁴⁰ *Romag Fasteners, Inc. v. Fossil, Inc.*, 29 F. Supp. 3d 85, 93-94 (D. Conn. 2014).

¹⁴¹ *Id.* at 94-95.

¹⁴² *Id.* at 95.

to replace the infringing snaps with noninfringing ones.¹⁴³ Additionally, Romag's founder engaged in litigation misconduct by misrepresenting facts and omitting significant information in his declaration supporting the TRO.¹⁴⁴ Confronted with such conduct, the district court concluded that Romag "intentionally sat on its rights . . . to orchestrate a strategic advantage and improperly obtain emergency injunctive relief on a timetable of its choosing, not on the irreparability of its harm."¹⁴⁵ This misconduct factored into the trial judge's decision to reject the jury's advisory disgorgement award of \$90,759.36 (representing 1% of Fossil's profits) on an unjust enrichment theory and more than \$6.7 million on a deterrence theory.¹⁴⁶

The *Romag* case thus illustrates many of this Part's points. Because Fossil was unaware of the counterfeit snaps,¹⁴⁷ the court was right not to disgorge Fossil's profits. Romag's misconduct and delay in bringing the suit were alternative discretionary grounds for withholding a disgorgement award. It was for the court to decide whether Fossil willfully infringed the Romag trademark, the amount of any disgorgement award, whether the defense of laches applied, whether disgorgement should be denied on other equitable grounds, and even whether to ask the jury for an advisory verdict on the proper size of a disgorgement award. However, Fossil had to pay a reasonable royalty for infringing Romag's utility patent, a jury-awarded legal remedy that the court lacked equitable discretion to review.¹⁴⁸

II. A MODEL OF HOW TRADITIONAL PRINCIPLES OF DISGORGEMENT PROMOTE PROPORTIONAL DETERRENCE

Part I has shown how trademark law implements disgorgement in ways that generally correspond with principles from the law of restitution and unjust enrichment. This Part examines whether those limitations and the disgorgement remedy more generally make sense as means to promote social welfare. By analyzing how the availability of disgorgement as a remedy helps to deter IP infringements, we show how disgorgement can help advance social welfare. Yet simultaneously, we show the need to limit the availability and scope of disgorgement awards. This is to protect against disgorgement awards overshooting the mark and tipping an IP regime into overdeterrence, which can

¹⁴³ *Id.* at 95-96.

¹⁴⁴ *Id.* at 105-06.

¹⁴⁵ *Id.* at 106.

¹⁴⁶ *Id.* at 107-11.

¹⁴⁷ The jury had, however, found that Fossil had acted with "callous disregard" of Romag's rights, even if it had not willfully infringed those rights. *See Romag Fasteners, Inc. v. Fossil, Inc.*, 817 F.3d 782, 784 (Fed. Cir. 2016).

¹⁴⁸ *See Romag Fasteners, Inc. v. Fossil, Inc.*, 686 F. App'x 889, 890 (Fed. Cir. 2017) (vacating district court's reduction of reasonable royalty damages for patent infringement due to laches). It remains to be seen whether the district court will reconsider Romag's plea for a disgorgement award upon remand after the Court's reversal of its and the CAFC's rulings in *Romag*.

be socially harmful by excessively chilling the diffusion or further development of new ideas or forms of expression.

Because we focus here on generating proper incentives for a potential infringer of IP rights, the analysis in this Part does not address the concern that disgorgement awards sufficient to properly deter infringement could lead to windfalls for right holders that encourage frivolous or vexatious litigation, socially inadequate efforts to provide notice of IP rights, or perhaps even excessive effort to acquire IP rights in the first instance.¹⁴⁹ Such concerns can be mitigated by the equitable limitations on disgorgement discussed here, and these concerns might be even more fully met by decoupling the disgorgement of an infringer's profits from the precise value of the monetary award made to the IP right holder.¹⁵⁰ But social welfare analysis that accounts for the incentives for potential plaintiffs as well as potential defendants has proven complicated.¹⁵¹ Thus, consistent with restitution law's traditional focus on providing proper incentives to avoid wrongdoing, we generally restrict ourselves to considering how the disgorgement remedy can promote proper incentives for potential infringers.

A central problem in the law of disgorgement related to this concern with providing proper ex ante incentives is determining when a profit-based award exceeds what is a permissible deterrent and becomes an impermissible penalty.¹⁵² A possible, but ultimately unsatisfactory, response would be to import from modern negligence law a rule of more-likely-than-not but-for causation to define the measure of profit that is not considered a penalty and so is appropriately subject to disgorgement as a deterrent.¹⁵³ As we explain below, the but-for rule poorly serves the goal of proportional deterrence because a profit award so calculated can both underdeter and overdeter. Further, the but-for rule

¹⁴⁹ See A. Mitchell Polinsky & Yeon-Koo Che, *Decoupling Liability: Optimal Incentives for Care and Litigation*, 22 RAND J. ECON. 562, 563 (1991) (contending that decoupling defendant's liability from plaintiff's award predictably improves social welfare by permitting the court to address deficiencies in deterrence without raising probability of suit and thus raising litigation costs); Note, *An Economic Analysis of the Plaintiff's Windfall from Punitive Damage Litigation*, 105 HARV. L. REV. 1900, 1907 (1992) ("Windfalls to plaintiffs . . . provide inefficient compensation, encourage risk-seeking behavior, and misallocate legal resources.").

¹⁵⁰ See *supra* note 149.

¹⁵¹ See Albert Choi & Chris William Sanchirico, *Should Plaintiffs Win What Defendants Lose? Litigation Stakes, Litigation Effort, and the Benefits of Decoupling*, 33 J. LEGAL STUD. 323, 324-28 (2004).

¹⁵² Mark P. Gergen, *Causation in Disgorgement*, 92 B.U. L. REV. 827, 829 (2012) (noting "a riddle posed by the [Restatement of Restitution] when it admonishes (as it does repeatedly) that disgorgement is meant to deter but not to punish, as if these were distinct goals" (footnote omitted)).

¹⁵³ Importation of the but-for rule could be justified by a third purpose often ascribed to the disgorgement remedy, namely "that defendants should not benefit from their own wrongdoing." FARNSWORTH, *supra* note 80, at 8. This principle, on its own, is not very helpful when deciding other issues, such as whether infringing activity justifies disgorgement, whether conscious wrongdoing should be required, or how to define conscious wrongdoing.

can present difficulties of its own in terms of cost, precision, and satisfactory administrability. We believe that it is because of these difficulties that trademark law has substituted the total profit and substantial factor rules in lieu of a rule of but-for causation. These rules generally yield an award larger than the profit probably attributable, as a causal matter, to the use of an infringing mark. The use of rules other than but-for causation to determine profit-based awards is typical in the law of restitution. The *Restatement of Restitution* explains that profit “calculations are to a large extent the product of presumptions. This is because—in important recurring settings—the question of what is properly attributable tends to escape specification by objective rules.”¹⁵⁴ The total profit rule in trademark law is one such presumption. The substantial factor rule determines when the presumption applies.¹⁵⁵

This Part develops a model to show how traditional principles of disgorgement can advance the goal of proportional deterrence. We proceed from the premise that the disgorgement remedy for IP infringements should be aligned with the commonly accepted overall goal of IP regimes: to advance human welfare by promoting the creation and use of IP.¹⁵⁶ To achieve this goal, there is a need to limit the scope and weight of IP rights in order to avoid overly chilling socially productive activities by followers of initial IP creators. Thus, the welfare-enhancement goal itself suggests that the proper aim for disgorgement in IP law is proportional deterrence, rather than complete deterrence. IP creators themselves generally build on the creations and insights of others, so there is

¹⁵⁴ RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51 cmt. e (AM. LAW INST. 2011).

¹⁵⁵ Tort law also generally has eschewed the but-for rule of causation to determine harm and compensatory damages for intentional torts. G. Edward White has observed that rules on factual causation emerged relatively late in the development of tort law. He attributes this to causation not being an issue in “intentional torts cases or cases where an act-at-peril standard of liability governed.” G. EDWARD WHITE, *TORT LAW IN AMERICA: AN INTELLECTUAL HISTORY* 314 (expanded ed. 2003). Courts generally did not allow an intentional tortfeasor to argue its conduct was not the cause of the plaintiff’s loss. *See, e.g., Saxlehner v. Eisner & Mendelson Co.*, 138 F. 22, 24 (2d Cir. 1905) (“One who has fraudulently appropriated the trade-marks and labels of another will hardly be heard to say that he would have been equally successful had he used honest indicia and labels.”). The *Restatement of Torts* made the substantial factor the rule for causation for intentional invasions. *See* RESTATEMENT OF TORTS § 279 (AM. LAW INST. 1934).

¹⁵⁶ *See, e.g., Mazer v. Stein*, 347 U.S. 201, 219 (1954) (“The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in ‘Science and useful Arts.’”); 1 PETER S. MENELL, MARK A. LEMLEY & ROBERT P. MERGES, *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE: 2017*, at 16 (2017) (“Utilitarian theory and the economic framework built upon it have long provided the dominant paradigm for analyzing and justifying the various forms of intellectual property protection.”). We recognize that trade secrecy and trademark laws have evolved out of unfair competition norms and serve other purposes (e.g., trade secrecy also sets standards for commercial morality and trademark protects consumers from confusion). Yet, these laws nevertheless serve the same general utilitarian purposes of other forms of IP.

substantial justice in giving each creator limited power to prevent successors from building on their creations. In addition, the often uncertain nature of IP rights creates risks of undue chilling of even noninfringing activities without an especially heavy-handed system of remedies. This uncertainty can make inadvertent or, at least, relatively excusable infringement quite likely. Finally, the relative crudeness of IP rights' typical formulation—generally through a facially one-size-fits-all system—relative to plausible measures of individual merit, invested labor, or need provides further cause to doubt that the basic structure of IP regimes justifies a goal of complete deterrence as opposed to proportional deterrence. To the extent that certain infringing conduct seems so abhorrent that a goal of complete deterrence appears justified, policy makers may define the relevant conduct as a crime and thereby enable criminal prosecution and punishment. U.S. policy makers have done so in a limited fashion with the IP regimes of copyright, trademark, and trade secrecy laws.

The usual functional purpose of disgorgement as a deterrent is to induce prospective infringers to bargain with right holders in advance of any infringement.¹⁵⁷ When bargaining is feasible, it is generally superior to litigation as a mechanism for ensuring that right holders are adequately compensated for infringement. If inducing prospective infringers to bargain with right holders was the only goal, a punitive remedy could be justified.¹⁵⁸ A counterweight to the interest in inducing bargaining is a concern that overly strong remedies can cause people to take socially excessive precautions to avoid infringing IP rights—i.e., precautions whose costs exceed the added value for society that the precautions create. This is particularly important because the validity and scope of IP rights are often uncertain, with the consequence that an unduly heavy-handed remedial regime might deter much conduct that, if litigated to judgment, a court would find did not constitute infringement.

Monetary relief for IP right holders when infringement has occurred operates functionally to preserve positive incentives for the creation and preservation of IP.¹⁵⁹ When disgorgement succeeds as a deterrent, it forces the infringer to bargain for the right and so provides an IP right holder compensation through bargaining. When disgorgement fails as a deterrent, the remedy may still serve

¹⁵⁷ See DAGAN, *supra* note 80, at 214; FARNSWORTH, *supra* note 80, at 66 (framing disgorgement as way to disincentivize “conscious wrongdoing”); see also HANOCH DAGAN, UNJUST ENRICHMENT 19 (1997) (claiming that limiting disgorgement to profits rather than proceeds permits deduction of infringer’s contribution to gains, thereby avoiding punitive effects). Hanoch Dagan’s approach takes the existing social meanings of forms of IP as given, whereas history reveals such meanings to be contested and malleable. See generally OREN BRACHA, OWNING IDEAS: THE INTELLECTUAL ORIGINS OF AMERICAN INTELLECTUAL PROPERTY, 1790–1909, at 12–14 (Christopher Tomlins ed., 2016) (noting historical shift in copyright and patent history towards recognition of those rights as universal and “as entitlements in intangible objects”).

¹⁵⁸ All five IP regimes provide for enhanced damages to serve punitive purposes in cases of egregious and malicious infringements. The disgorgement remedy should not be applied to accomplish this end. See, e.g., Gergen, *supra* note 152, at 830.

¹⁵⁹ See, e.g., ROGER D. BLAIR & THOMAS F. COTTER, INTELLECTUAL PROPERTY: ECONOMIC AND LEGAL DIMENSIONS OF RIGHTS AND REMEDIES 45 (2005).

the purpose of compensation when right holders are unable to establish actual damages with a sufficient degree of certainty, resulting in little or no actual damages.¹⁶⁰ Nonetheless, we regard compensation as a subsidiary purpose for disgorgement in IP cases. If this were its principal purpose, the disgorgement remedy would be unavailable when compensatory damages sufficed. This may be the norm in contract law in the United States,¹⁶¹ but it is not the norm in IP law. In addition, although the defendant's profit can sometimes serve as a rough surrogate for the plaintiff's loss,¹⁶² the disgorgement remedy is generally inferior to actual damages as a direct method of compensation. By definition, disgorgement reflects a measure of the infringer's gains, which may be over- or undercompensatory relative to a measure of harm to the right holder. If the defendant's profits are being used as a proxy for the plaintiff's loss, then damages should be described as compensatory. This would make it clear that willfulness is not required and that these damages are a legal, not an equitable, remedy.

Some have questioned the ability of the disgorgement remedy to serve the purpose of deterrence. Bert Huang, for example, has observed that, if this remedy captures only the net gain to the defendant from committing the wrong,¹⁶³ then the threat of a disgorgement award, in principle, only leaves a person considering whether to violate a right in equipoise: "Someone who expects to disgorge her net gain knows that her act will be neither gainful nor costly; it will be a wash. . . . To fully persuade her not to act, then, *other* costs beyond disgorgement itself must finish the job."¹⁶⁴ When the probability of enforcement of a rights violation is less than 100%,¹⁶⁵ the balance would shift decisively in favor of infringing a right unless the actor assigned a substantial enough negative value to being sued or otherwise pursued by the right holder after infringement has occurred.

¹⁶⁰ Cf. Huang, *supra* note 34, at 1630 (suggesting possibility that "rather than awarding no damages at all, courts could substitute disgorgement instead").

¹⁶¹ See, e.g., RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 39 (AM. LAW INST. 2011) (restricting disgorgement as remedy for breach of contract to cases in which contract damages are insufficient to protect plaintiff's entitlement).

¹⁶² See *supra* text accompanying notes 81-84.

¹⁶³ By the "net gain to the defendant from committing the wrong," we mean the marginal difference between the defendant's income upon having committed the wrong and what the defendant's income would have been had it pursued its next best option.

¹⁶⁴ Huang, *supra* note 34, at 1598; see also Robert D. Cooter, *Punitive Damages, Social Norms, and Economic Analysis*, 60 LAW & CONTEMP. PROBS. 73, 77 (1997) ("Perfect disgorgement' is a sum of money that leaves the injurer indifferent between the injury with liability for damages or no injury."); Andrew Kull, *Restitution's Outlaws*, 78 CHI.-KENT L. REV. 17, 19 (2003) (noting that facial result of "disgorgement-type restitution" is that "[t]he wrongdoer is left back where he started").

¹⁶⁵ See Robert Cooter, *Prices and Sanctions*, 84 COLUM. L. REV. 1523, 1547 n.51 (1984) ("Deterrence [from disgorgement of profits] is imperfect because disgorging profits eliminates the actual gain, but there is still an expected gain whenever there is a positive probability that the wrongdoing will go undetected.").

Huang highlighted one way to tip the disgorgement remedy toward more reliable deterrence: giving the right holder the choice of whether to receive disgorgement or harm-based compensatory awards.¹⁶⁶ If the right holder's provable harm exceeds the profits to be disgorged, the right holder can obtain compensation for this harm. If a disgorgement award would exceed the provable harm, then profits would be disgorged. If, *ex ante*, a prospective right violator does not know which of these situations will occur and the disgorgement of profits is expected to capture the violator's net gain from the violation, the possibility of a greater-than-profits award should mean that the right violator will now expect to lose on balance from the infringing course of conduct. If the prospective violator is a rational profit maximizer, it would then be deterred.

Right holders generally enjoy this remedial choice.¹⁶⁷ As Part I showed, the total profit rule in trademark law usually tips the balance even further in the direction of deterrence. It is not objectionable *per se* that the rules for calculating disgorgement awards for trademark infringement predictably generate awards that exceed the defendant's net gain from using the infringing mark. If disgorgement awards did not predictably exceed the infringer's net gains, this remedy would inadequately serve the purpose of deterrence when the expected probability of enforcement is less than 100%. Trademark law explicitly acknowledges that the disgorgement remedy should often exceed the defendant's net gain from using the infringing mark when the infringer's next best option was to pay a license fee. Disgorgement is not limited to the license fee that the defendant would have paid because then the disgorgement remedy would not adequately encourage parties to bargain for such a license in advance of infringement.

To what degree should the disgorgement remedy encourage such bargaining? Should the goal be proportional, rather than complete, deterrence as we suggest? In passing, Huang posits that copyright law "apparently intend[s]" complete deterrence.¹⁶⁸ Roger Blair and Thomas Cotter have similarly assumed that IP statutes embody an intent to completely deter infringement.¹⁶⁹ But as we point out, a goal of complete deterrence seems inconsistent with IP's association with an overall goal of social welfare promotion and with how IP regimes are structured and operate in practice. Equitable remedies such as injunctions and disgorgement properly reflect concerns about the impacts of IP on the public

¹⁶⁶ See Huang, *supra* note 34, at 1636 (describing how complete deterrence is expected to result where potential right violator "sees no chance of a net gain, but only some chance of breaking even and otherwise a net loss").

¹⁶⁷ Copyright owners can recover both actual damages and infringer profits. 17 U.S.C. § 504(a)(1) (2018). At least, in theory, this is also true for trademark and trade secrecy owners. Design patentees can have one or the other but not both. See *Catalina Lightning, Inc. v. Lamps Plus, Inc.*, 295 F.3d 1277, 1290 (Fed. Cir. 2002). This choice is not available to utility patentees. See *infra* text accompanying notes 399-405.

¹⁶⁸ See Huang, *supra* note 34, at 1636.

¹⁶⁹ See BLAIR & COTTER, *supra* note 159, at 45 ("As a first approximation, deterring infringement requires a set of rules that render infringement unprofitable.").

interest or competing private interests.¹⁷⁰ Hence, a goal of proportional deterrence—a level of deterrence that maximizes overall social welfare—seems the appropriate aim for an IP regime’s disgorgement remedy. We now consider the extent to which disgorgement can advance that goal.

On a first cut, a purely compensatory regime without disgorgement might seem more likely to advance a goal of proportional deterrence by serving as the best vehicle to cause infringers to internalize harms to IP right holders. A standard statement is that social-welfare-maximizing deterrence, often called “optimal deterrence,” results when a right violator is required to pay an amount “equal[ing] the harm to society of the violation, so that the prospective offender will proceed with the violation only if the gain from doing so (which is also a societal welfare gain) exceeds the social harm that will result from the violation.”¹⁷¹ If one assumes, in a first approximation, that the harm to society is well represented by harm to the right holder, simply requiring an IP infringer to pay an IP right holder’s actual damages might seem the best way to promote a goal of proportional deterrence.

But disgorgement has a meaningful role to play in improving social welfare because various complications defeat this simple formula. Consider these factors: First, in part because of information costs, difficulty in detecting some infringements, and litigation costs, IP rights may not be enforced even when infringed. In such circumstances, proper ex ante incentives might result if courts can be relied upon to award a multiple of actual damages that counterbalances the limited probability of enforcement.¹⁷² However, determining the correct multiple can be difficult, if not practically impossible.¹⁷³ Second, given burdens of proof and limitations on the kinds of IP harms for which courts will compensate, harm-based compensatory damages may undercompensate right holders relative to the total harm they suffer.¹⁷⁴ Third, there is often considerable uncertainty about the relevant IP right’s scope, validity, or—from a potential infringer’s standpoint—even existence. Relatedly, whether a challenged course

¹⁷⁰ See, e.g., *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006) (holding that to obtain permanent injunction against legal violations, patentees, like other right holders, “must demonstrate . . . that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted . . . [and] that the public interest would not be disserved by a permanent injunction”).

¹⁷¹ David A. Dana, *Rethinking the Puzzle of Escalating Penalties for Repeat Offenders*, 110 YALE L.J. 733, 740 (2001).

¹⁷² See A. Mitchell Polinsky & Steven Shavell, *Punitive Damages: An Economic Analysis*, 111 HARV. L. REV. 869, 887 (1998) [hereinafter Polinsky & Shavell, *Punitive Damages*] (“[I]f a defendant can sometimes escape liability for the harm for which he is responsible, the proper magnitude of damages is the harm the defendant has caused, multiplied by a factor reflecting the probability of his escaping liability.” (emphasis omitted)).

¹⁷³ See Louis Kaplow, *An Economic Approach to Price Fixing*, 77 ANTITRUST L.J. 343, 421-22 (2011); Noam Sher, *The Best Welfare Point: A New Compensation Criterion and Goal for Tort Law*, 48 U. MEM. L. REV. 145, 198-99 (2017).

¹⁷⁴ Cf. Paul T. Wangerin, *Restitution for Intangible Gains*, 54 LA. L. REV. 339, 351 (1993) (asserting that “in intellectual property cases the gains to wrong-acting parties usually are easier to identify and calculate than the losses to the others”).

of conduct actually infringes an IP right is frequently only a matter of probability, rather than one of certainty. Fourth, given problems with proof and limitations on types of costs and benefits courts will consider in calculating gains to be disgorged, the gains to be disgorged may differ from the infringer's actual gains. Indeed, rules used to determine disgorgement awards in IP law generally yield a disgorgement award greater than the profit probably attributable to the infringement.

The stylized model below takes such factors into account and illustrates both disgorgement's capacity to improve social welfare in the enforcement of IP rights as well as limitations on disgorgement's performance of that role. The model employs probabilities and expected values that are assessed, at least on an initial cut, from the standpoint of semiomniscient observers. The observers are semiomniscient in that they have all available present facts, but they can only estimate probabilities for the actions (e.g., patent enforcement, a holding of liability for infringement, or an assessment of damages) that others, such as the relevant right holder or the courts, will take (or not take) in the future. Under the basic form of the model, the potential infringer is assumed to be a risk-neutral and profit-maximizing party who has the same probability and expected-value estimates as the semiomniscient observers. Hence, for purposes of assessing whether infringement will be deterred, the model's focus is on whether, for the potential infringer, the net expected value of a possibly infringing course of action is negative.¹⁷⁵ If this net expected value is negative, the potential infringer will either not pursue the contemplated course of conduct or will seek a license for the use. For simplicity in analyzing the basic capacity of disgorgement as a means to improve social welfare in enforcing IP rights, prospective litigation costs are assumed to be negligible as are possibilities for post hoc licensing or settlement after an unlicensed course of potentially infringing conduct has

¹⁷⁵ As variants on the basic model, consider what would happen if, for instance, the initial perspective is not semiomniscient and the potential infringer can make a more precise assessment of probabilities and expected values by undertaking additional information "search costs," such as devoting more attorney time to identifying possibly infringed IP rights and evaluating their validity and scope; or if the potential infringer can undertake additional "IP avoidance costs" to pursue as an alternative to the originally contemplated course of conduct, a course of conduct that reduces the probability of IP enforcement, the probability of an infringement holding in the event of enforcement, and/or the expected value of an adverse court award in the event of an infringement holding. *Cf.* Michael Abramowicz, *A Unified Economic Theory of Noninfringement Opinions*, 14 FED. CIR. B.J. 241, 252 (2004) (observing that "investment in inventing around [a patent] is analogous to a tortfeasor's taking of a precaution"). Hence, under such variants of our model, the initial response of a potential infringer to a net negative value for a potentially infringing course of conduct might be neither to abandon that course of conduct entirely nor to alter its nature simply by seeking a license from the right holder. Instead, the initial response might be to invest more either in researching IP rights or in modifying the contemplated course of conduct in a way that reduces probability-weighted legal exposure and thereby manages to achieve a positive net expected value. For a social-welfare-maximizing policy maker, the question then becomes whether channeling potential infringer resources into such precautionary measures—whether search or IP avoidance—produces social benefits worth the social candle.

begun. Adding these complications should not alter the basic qualitative conclusions drawn from the model.

The probability and expected-value variables employed by the model are as follows:

- P_E represents the probability that IP rights of concern will be enforced ($0 \leq P_E \leq 1$, where a probability of 1 is a 100% probability). IP rights may be underenforced because the right holder does not detect the infringement, the right holder chooses not to sue, or the infringer is judgment proof. A disgorgement award, like punitive damages, can address the first two problems but not the problem of a judgment-proof defendant.
- P_I represents the probability that the course of conduct will be held to infringe valid IP rights if that conduct is subject to an enforcement action ($0 \leq P_I \leq 1$). Uncertainty may exist about how courts or other government actors will determine such matters as the validity of the right, its scope, or whether the defendant's conduct infringes the right. This probability is determined *ex ante*, before a court or other government actor resolves legal uncertainty.
- H_C represents the expected harm-based compensatory damages that a court will actually award if infringement is found and this remedy is pursued ($H_C \geq 0$).
- G_C represents the gain-based disgorgement amount that a court will actually award if infringement is found and this remedy is pursued ($G_C \geq 0$).
- H represents the expected harm-based compensatory damages that a court would ideally award if the court found infringement and correctly accounted for all relevant harms to the right holder from the infringement ($H \geq 0$).
- G represents the gain a potential infringer expects to obtain by engaging in the potentially infringing conduct ($G \geq 0$).

Given these variables, the potential infringer's expected gain from the contemplated course of conduct takes the following value Δ_H if only harm-based compensatory damages are available:

$$\Delta_H = G - P_E P_I H_C \quad (\text{Eq. 1})$$

The model assumes that, instead of paying H_C for infringing conduct, an infringer would ideally fully compensate a right holder for all relevant harms from IP infringement—i.e., pay the right holder H .¹⁷⁶ It further assumes that when the right's scope, validity, or existence is uncertain, then the optimal price

¹⁷⁶ This is not the social cost of the infringing conduct, even putting aside effects on third parties. As between the right holder and the infringer, potentially infringing conduct imposes a net cost only if $H > G$ with the net cost being $H - G$. Potentially infringing conduct creates a net gain when $G > H$.

the potential infringer should pay to the right holder is $P_I H$ —full compensation for all relevant harms multiplied by the probability that the conduct would be held to infringe the right if the right holder brought an infringement claim (i.e., P_I is the probability the semiomniscient observer assigns to an infringement claim succeeding). This assumption reflects the view that, when a court would not find infringement, there is no legally cognizable harm for which the potential infringer should provide compensation. Given a further assumption of no positive or negative externalities and a similarly simplifying assumption that the relevant IP regime's validity and scope doctrines are appropriately tuned so that, for purposes of maximizing social welfare, harm to the right holder would ideally be fully compensated whenever it occurs,¹⁷⁷ the optimal expected value for public policy to set in advance for the contemplated course of conduct is then given by Δ where:

$$\Delta = G - P_I H \quad (\text{Eq. 2})$$

If the cost for the contemplated course of conduct is determined by how much a court will award for it, but a claim for infringement will only be prosecuted with probability P_E , Equation 2 combines with an analog of Equation 1 to tell us that the optimal monetary award for infringement is H/P_E .¹⁷⁸ In principle, a way for a court to approximate this desired award is to enhance damages by multiplying the ordinary compensatory award H_C by the value $m = 1/P_E$. Nonetheless, if H_C misses the mark in approximating H or if the court errs in estimating the multiplier $m = 1/P_E$, this approach could fall short of ensuring socially optimal enforcement of IP rights.

Assuming for the moment that courts do not deploy such enhanced damage remedies, by how much does the expected value of the contemplated course of conduct deviate from the optimum in a purely compensatory regime in which the potential infringer expects to obtain Δ_H instead of Δ ? Under the given assumptions, the answer appears in the following equation:

$$\Delta_H - \Delta = (1 - P_E)P_I H + P_E P_I (H - H_C) \quad (\text{Eq. 3})$$

The first term on the right-hand side of this equation is strictly nonnegative and reflects how underenforcement of IP rights can lead to excessive incentives to engage in potentially infringing conduct. The second term can be positive or negative. When positive, it reflects how compensatory damages that undershoot the mark (i.e., where $H_C < H$) can likewise contribute to excessive incentives to engage in potentially infringing conduct. On the other hand, if compensatory damages tend to overshoot the mark (i.e., where $H_C > H$), then the second term takes a negative value and can counterbalance the nonnegative value of the first.

In a regime where a right holder can choose whether to receive compensatory damages or disgorgement of infringer profits, the disgorgement remedy has an

¹⁷⁷ See Abramowicz, *supra* note 175, at 248 (noting “the common claim that potential tortfeasors will have optimal incentives if they bear the full costs of their activity”).

¹⁷⁸ See, e.g., Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 169-70 (1968) (analyzing social and economic factors that influence method or extent of enforcement); Polinsky & Shavell, *Punitive Damages*, *supra* note 172, at 889.

ex ante effect only if the expected disgorgement award exceeds the expected compensatory damages award (i.e., where $G_C > H_C$). Under these circumstances, a right holder who sues will elect the disgorgement award over the compensatory damages award. Thus, where the potential infringer expects that $G_C > H_C$, it will assign an expected value Δ_G to the contemplated course of conduct that differs from Δ_H :

$$\Delta_G = G - P_E P_I G_C \quad (\text{Eq. 4})$$

Under the model's various assumptions, how does Δ_G differ from the socially optimal expected value for the contemplated course of conduct? Straightforward algebra leads to the following equation for this difference:

$$\Delta_G - \Delta = (1 - P_E) P_I H + P_E P_I (H - H_C) - P_E P_I (G_C - H_C) \quad (\text{Eq. 5})$$

Notice that the first two terms on the right-hand side are the same two terms that appear on the right-hand side of the equation for $\Delta_H - \Delta$. Further, because we are presently concerned with situations where $G_C > H_C$, the third term is negative. Hence, to the extent that compensatory damages alone provide insufficient deterrence from a social-welfare perspective because $\Delta_H - \Delta > 0$, the availability of a disgorgement remedy can have a corrective effect, driving $\Delta_G - \Delta$ downward toward the optimal value of zero.

Equation 5 underscores the importance of distinguishing the case in which disgorgement can fully be explained as serving a compensatory function from the case in which disgorgement can only be explained as serving a deterrence function. Disgorgement can fully be explained as serving a compensatory function when $H \geq G_C > H_C$ —i.e., when the infringer's profit represents an amount that a court would ideally award as at least part of compensatory damages. In contrast, disgorgement is an aid to proportional deterrence as long as $H/P_E \geq G_C > H_C$, without regard to the value of P_I . Because $H/P_E \geq H$, when disgorgement is effectively compensatory from an ex ante perspective (i.e., when $H \geq G_C > H_C$), overdeterrence is not a concern. Hence, in such circumstances, there is no need for a requirement of conscious wrongdoing or for equitable safety valves to mitigate a risk of overdeterrence.

This analysis roughly comports with the practice in trademark law of loosening the requirement of willful infringement when the defendant is a competitor of the plaintiff.¹⁷⁹ In such cases, the defendant's profit most likely represents a loss to the plaintiff (most likely, $H \geq G_C$). This also suggests a possible justification for a general principle that an IP right holder may recover a reasonable royalty from an innocent infringer. The royalty may be a proxy for H . Alternatively, the royalty may serve to cap this version of a disgorgement award in an amount that does not exceed H by too much (in particular, does not exceed H/P_E).

¹⁷⁹ See *supra* text accompanying notes 81-84 (noting that in some circumstances where plaintiff competes with defendant, plaintiff's profits likely correspond to what defendant would have earned if not for infringement).

Equation 6 isolates the case in which disgorgement can only be explained as serving a deterrence function because court-awarded actual damages are, in fact, fully compensatory (i.e., $H = H_C$):

$$\Delta_G - \Delta = (1 - P_E)P_I H_C - P_E P_I (G_C - H_C) \quad (\text{Eq. 6})$$

In considering the significance of this equation, it is useful to compare the deployment of disgorgement to the use of a damage multiplier to achieve proportional deterrence. As suggested earlier,¹⁸⁰ proportional deterrence (i.e., $\Delta_G - \Delta = 0$ in Equation 6) can be achieved where $H = H_C$ by replacing the disgorgement amount G_C on the right-hand side of Equation 6 with an enhanced damages amount H_C/P_E —i.e., deploying an appropriately tuned damages multiplier $m = 1/P_E$. Perhaps unsurprisingly, most IP regimes (e.g., trademark, trade secret, and both design and utility patent law) allow courts to award up to double or treble damages as punitive or exemplary damages.¹⁸¹ Copyright law is the exception in not providing for punitive or exemplary damages.¹⁸²

A damages multiplier is potentially superior to disgorgement as a mechanism for deterrence because the disgorgement remedy is only effective as a deterrent corrective where $G_C - H_C > 0$. This set of circumstances likely overlaps substantially with those where the potential infringer's gains G from a possibly infringing course of conduct exceed expected harms to the right holder H from that course of conduct. When $G - H > 0$ and there are no countervailing externalities, infringement might be viewed as "efficient" in the sense that it can increase total social welfare because the infringer was a more effective user of the protected subject matter than the right holder (i.e., $G > H$). In such a situation, a policy maker focused on total social welfare might not be especially interested in deterring infringement.

Meanwhile, the disgorgement remedy does nothing to bolster deterrence in situations where $G_C - H_C < 0$. This is unfortunate because, compared to a situation where $G_C - H_C > 0$, potential infringement seems generally more likely to be inefficient ($G - H > 0$ in the absence of externalities) when $G_C - H_C < 0$. The potential infringer is more likely in the latter situation to be less effective than the right holder in drawing value from the relevant subject matter (i.e., $G < H$). A society looking to maximize overall welfare would therefore be

¹⁸⁰ See *supra* notes 172, 178 and accompanying text.

¹⁸¹ See 15 U.S.C. § 1117(a) (2018) ("In assessing damages [for trademark infringement] the court may enter judgment . . . for any sum above the amount found as actual damages, not exceeding three times such amount."); 35 U.S.C. § 284 (2018) ("[A] court may increase the damages [for patent infringement] up to three times the amount found or assessed."); UNIF. TRADE SECRETS ACT WITH 1985 AMENDMENTS § 3(b) (UNIF. LAW COMM'N 1985) ("If willful and malicious misappropriation exists, the court may award exemplary damages in an amount not exceeding twice any award [of actual damages or infringer profits] made under subsection (a).").

¹⁸² See *Bucklew v. Hawkins, Ash, Baptie & Co.*, 329 F.3d 923, 931 (7th Cir. 2003) (noting that Copyright Act "contains no provision for punitive damages"). However, statutory damages of up to \$150,000 for willful infringement may have a punitive character. 17 U.S.C. § 504(c) (2018).

expected to be less sympathetic with “inefficient infringement” than with the “efficient infringement.”¹⁸³ Yet the disgorgement remedy operates in reverse fashion. It most likely adds substantially more to the deterrence of efficient infringement than inefficient infringement. This perverse effect of the disgorgement remedy is mitigated if, *ex ante*, a potential infringer has difficulty predicting whether $G_C > H_C$ or $G_C < H_C$. But even then, the uncertainty may result in a relatively greater chilling of relevant activity where the likelihood of efficient infringement is greater. The balkiness of disgorgement as a utilitarian remedy might thus be diluted, but it will remain.

Equation 6 also highlights a related deficiency of disgorgement as an aid to optimal enforcement of IP rights: the lack of calibration to any corrective effect that disgorgement has. In Equation 6 and the assumptions underlying it, there is nothing that constrains the magnitude of $P_E P_I (G_C - H_C)$ so that it will not greatly exceed any posited positive value for $\Delta_H - \Delta$ —the discrepancy between expected compensatory and social-welfare-maximizing remedies. Particularly if relevant profits are not reliably apportioned relative to a potential infringer’s total profits, the expected value of G_C could be orders of magnitude greater than the expected values of H_C and H . Such a disproportionate value for G_C can predictably generate the undue chilling of socially productive activities that, in prospect, are only possibly infringing. Overdeterrence is a concern when $G > H$ because the disgorgement remedy can then deter socially productive activity. When a potential infringer is able to bargain with an IP right holder, this concern diminishes because the infringer and right holder can bargain around the suboptimal damage rule. The right holder may thereby capture a larger share of the gain without diminishing social welfare. Yet bargaining requires a potential infringer to know of the IP right and its owner. Thus, demanding *ex ante* bargaining can cause a potential infringer to undertake socially inefficient search costs, even when it does not ultimately prevent the underlying social-welfare-promoting conduct altogether.

Further, the model shows that this inefficiency essentially occurs independent of the probability P_I that the rights in question will actually be infringed. This is true because P_I appears equally as a multiplier in the disgorgement “correction” $P_E P_I (G_C - H_C)$ as well as in the terms constituting $\Delta_H - \Delta$. This highlights the concern that a heavy-handed disgorgement remedy could undesirably chill socially productive activity that, from an *ex ante* perspective, has only a small probability P_I of being found to be infringing.

An improperly calibrated damages multiplier could similarly lead to disproportionate and overly deterrent court awards. IP regimes commonly respond to this concern by generally demanding that infringement was in some sense “willful” to qualify for a multiplier or for disgorgement.¹⁸⁴ Here,

¹⁸³ Cf. A. Mitchell Polinsky & Steven Shavell, *Should Liability Be Based on the Harm to the Victim or the Gain to the Injurer?*, 10 J.L. ECON. & ORG. 427, 428 (1994) (studying “the efficacy of harm-based liability and gain-based liability as means of deterring socially undesirable acts—acts for which an injurer’s gain is less than the victim’s harm”).

¹⁸⁴ See *supra* Section I.B (discussing rationale for general limitation on disgorgement awards to cases of conscious wrongdoing).

willfulness is an opaque concept that we have argued should be understood to require both subjective knowledge of a plausible infringement claim and the absence of circumstances justifying the use of an IP right without bargaining—i.e., conscious wrongdoing.¹⁸⁵ These requirements help answer arguments that considerations such as the willfulness of rights violations have no place in a deterrence calculus.¹⁸⁶ The requirement of subjective knowledge reduces socially inefficient search costs by taking a potentially supracompensatory remedy off the table when an actor is unaware of a possible infringement claim.¹⁸⁷ This might seem to create incentives to avoid exposure to any information that could lead to subjective knowledge of potential infringement.¹⁸⁸ But even aside from the possibility that such behavior may satisfy the requirement for conscious wrongdoing as a form of willful blindness,¹⁸⁹ burying

¹⁸⁵ See *supra* text accompanying notes 102-106.

¹⁸⁶ See Polinsky & Shavell, *Punitive Damages*, *supra* note 172, at 900 (contending that, in assessing punitive damages, courts “err in considering a variety of factors that generally *are not* relevant to deterrence, including the reprehensibility of defendants’ conduct and defendants’ wealth”).

¹⁸⁷ The *Restatement of Restitution* takes the position that the disgorgement remedy should apply even when the infringer knows the validity and scope of the right it may be infringing is uncertain. RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51(4) (AM. LAW INST. 2011). Our analysis provides limited support for this position. While a low value of P_j reduces the two left-hand terms of Equation 5 (which define the need for the disgorgement remedy), it also reduces the right-hand term (which defines the effect of a supracompensatory disgorgement remedy). In this sense, uncertainty about infringement is irrelevant to the need for disgorgement’s deterrent effect. But the resulting support for the *Restatement’s* position is limited because the concern for overdeterrence remains if the uncertainty about the validity and scope of the right is an impediment to bargaining or if uncertainty induces parties to incur expenses to resolve or reduce that uncertainty that are socially inefficient. In many cases in IP practice, even with the best possible efforts, there will still be considerable uncertainties about the scope, validity, and enforceability of IP rights. See Stewart E. Sterk, *Property Rules, Liability Rules, and Uncertainty About Property Rights*, 106 MICH. L. REV. 1285, 1327, 1331 (2008) (noting that “[i]n a number of areas, copyright doctrine is inherently fuzzy” and that “uncertainty about the scope and existence of legal rights is more pervasive in the patent realm than in the copyright realm”). Additionally, the costs of achieving clarification will sometimes be greater than its social value. *Id.* at 1288 (“[I]n some instances, the cost of acquiring information about the scope of property rights will exceed the social value of that information. . . . [T]he search for information might . . . generate private gains to the party incurring the search costs, while generating no comparable social gains.”). This concern can be dealt with by a second strand of the rule (which focuses on whether the defendant could reasonably have been expected to resolve the uncertainty in bargaining) or by the exercise of equitable discretion.

¹⁸⁸ Cf. Thomas F. Cotter, *An Economic Analysis of Enhanced Damages and Attorney’s Fees for Willful Patent Infringement*, 14 FED. CIR. B.J. 291, 318 (2004) (noting concern that enhanced damages for willful infringement generate “risk that a firm will caution its employees to avoid reviewing existing patents, lest the firm be charged with actual knowledge of . . . a patent that later becomes the subject of litigation”).

¹⁸⁹ See, e.g., *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 766 (2011) (finding that willful blindness to infringement is form of actual knowledge).

one's head in the sand would only avoid a potential disgorgement claim. An actor will still have an incentive to investigate possible IP rights when an action might harm right holders, particularly when the harm might exceed the expected profit from the contemplated action.

A further benefit of generally requiring conscious wrongdoing is that it helps provide an alternative answer to Huang's question of why disgorgement should be regarded as an apt vehicle for deterrence if perfect enforcement is assumed (i.e., $P_E = 1$).¹⁹⁰ At least where $G > H$, if a potential infringer's choice is not confined to deciding between undertaking a potentially infringing activity and simply not undertaking that activity but instead also includes the option of bargaining with the IP right holder to obtain advance authorization for *otherwise* potentially infringing activity, the threat of disgorgement acts unambiguously as a positive incentive to avoid infringement even without resorting to the election-of-remedies,¹⁹¹ total-profit-rule,¹⁹² and imperfect-enforcement-plus-proportional-deterrence¹⁹³ reasoning that we have provided. In such a situation, the threat of disgorgement should drive a rational potential infringer to bargain with the IP right holder for a license at a price L that lies between G and H (i.e., a price such that $G > L > H$), thereby making the right holder better off than if the relevant activity were not undertaken and making the potential infringer better off than if it proceeded with the activity without a license or if it avoided the activity altogether.

In any event, compared to a disgorgement award, awards of multiplier-enhanced compensatory damages commonly have two characteristics that together give them an edge in avoiding gross overdeterrence. First, the multiplied compensatory damages begin tethered to H , at least as long as H_C itself is reasonably tethered to H . Second, multiplied damages are commonly capped at values of twice or treble the assessed compensatory damages, which limits how far the supracompensatory award can exceed the proportional deterrence amount.

On the other hand, caps on damages multipliers can be an impediment to achieving optimal enforcement of IP rights if the probability of enforcement P_E is low enough.¹⁹⁴ If P_E is less than one-third and $H_C = H$, a treble damages cap will mean that even an expected deployment of the maximum multiplier of three will be insufficient to provide proportional deterrence. Thus, disgorgement can do useful work in improving deterrence in cases where P_E is less than 0.5 and the damages multiplier is capped at two and also in cases in which P_E is less than one-third and the damages multiplier is capped at three. Further, the effectiveness of disgorgement as a deterrent is bolstered by rules like the total

¹⁹⁰ See *supra* text accompanying notes 163-164.

¹⁹¹ See *supra* text accompanying notes 166-167 (explaining that design patent owners have choice between actual damages or infringer profits but may not recover both).

¹⁹² See *supra* Section I.A.

¹⁹³ See *supra* text accompanying notes 168-179.

¹⁹⁴ See Polinsky & Shavell, *Punitive Damages*, *supra* note 172, at 900 (“[C]aps cannot be justified on deterrence grounds because they might preclude the proper award of punitive damages.”).

profit rule and burden-shifting rules that predictably make $G_C > G$.¹⁹⁵ The effectiveness of disgorgement as a deterrent is bolstered even further if a potential infringer expects G_C to increase as P_E decreases, as it might if the egregiousness of a plaintiff's conduct correlates with higher gains and lower detection—and thus lower enforcement—probabilities. These advantages of increasing deterrence, however, predictably raise again the concern that the disgorgement remedy, unshackled by any caps, might run amok, even when limited to cases of willful infringement.¹⁹⁶ The aforementioned difficulty in determining the value of P_E on which to base the multiplier can make this danger seem particularly severe. By comparison, the degree to which disgorgement can overreach at least has a sort of natural upper limit in some measure of infringer profits, however generous.

A conscious wrongdoing requirement is an imperfect safeguard against the risk of overdeterrence created by supracompensatory damage rules. A court may err in finding subjective knowledge of possible infringement or in finding that the circumstances did not justify the defendant's decision to engage in the infringing conduct without bargaining. Moreover, a test for conscious wrongdoing developed with single-person infringers in mind might not be an adept way to assign culpability to a firm or to determine when a firm, with its distinctive internal agency problems, may be efficiently deterred through the threat of a supracompensatory remedy.

Given the imperfection of a conscious wrongdoing requirement as a limit on disgorgement awards, it is understandable that courts have developed further checks. The general principle that limits disgorgement awards to profits that are at least substantially, if not necessarily causally, attributable to a wrong serves a function analogous to multiplier caps. In trademark law, the limiting function is performed by a rule that limits total profit awards to sales in which the infringing mark was a substantial factor in the purchaser's decision.¹⁹⁷ In trade secrecy and copyright law, there are rules defining the outer boundary of profit that may be considered causally attributable to infringement that are less distinct and more expansive, creating the need for an additional safety valve layered on top of conscious wrongdoing and causation requirements.

Safety valves enable courts to adjust damage awards within the range permitted by the causal rules. In IP law, the power of a court to exercise equitable discretion when apportioning profits can be an important safety valve. Apportionment is necessary when profit probably attributable to infringement is speculative, as it often is in IP cases. Apportionment involves more than courts making their best guesses about the amounts that are in the midrange of profits probably attributable to infringements. Courts also consider the egregiousness of the defendant's conduct. This is a feature, not a bug, because it enables courts

¹⁹⁵ See *supra* text accompanying notes 47-69.

¹⁹⁶ In an earlier paper, one of us suggested that the disgorgement remedy in copyright cases could be simplified if courts chose a multiple of a reasonable royalty as an appropriate deterrent for the defendant's conduct, rather than trying to apportion profit. See Gergen, *supra* note 152, at 850.

¹⁹⁷ See *supra* Section I.A.

to award damages up to whatever the limiting rule allows in a clear case of willful infringement while also enabling courts to award much less when the defendant's conduct is not egregious. The power to reduce an award that is unduly punitive through apportionment is particularly important in copyright law because disgorgement is not limited to cases of conscious wrongdoing and because copyright has an expansive conception of profit potentially subject to disgorgement. Conversely, the substantial factor rule in trademark law has been sufficiently limiting such that there has generally been no need for courts to apportion total profits under the rule. Courts exercise equitable discretion at other stages of the analysis, including when deciding whether to award disgorgement and resolving factual uncertainty.

Laches as a defense is another important safety valve. When a right holder knows of infringing conduct and stands by, merely delaying whatever legal action it plans to undertake, the probability of enforcement P_E approximates one, thus substantially undercutting the deterrence rationale for disgorgement. The right holder's conduct also supports an inference that whatever harm it expects to suffer from the infringing conduct will be more than made up by an anticipated court award, an expectation that eliminates or at least dilutes the compensatory rationale for disgorgement. Often when a laches defense applies, the infringer does not know that its conduct infringes the plaintiff's right, which explains the infringer's otherwise irrational conduct.¹⁹⁸ In such cases, a laches defense may be redundant with a requirement of conscious wrongdoing. But laches defenses more straightforwardly and generally put the onus on a right holder who knows of infringing conduct to inform the infringer of its right, which can reduce search costs. Even when a potential infringer already knows that its conduct may violate a right, laches defenses have information-forcing functions by putting the onus on the right holder to inform the potential infringer about its intent to assert the right.¹⁹⁹

In sum, disgorgement can substantially improve enforcement of IP rights where a remedial regime of purely compensatory damages—or even one allowing doubling or trebling of compensatory damages—would likely fall short. To the extent that compensatory damages, a multiplier over compensatory damages, the threat of an injunction, or, say, an award of attorney fees can fall short of providing proportional deterrence, the availability of a disgorgement remedy can help fill the gap. Further, to the extent that the disgorgement remedy falls short in filling this gap, at least it does not leave the relevant IP regime worse off. The general deployment of disgorgement as an elective remedy means that its availability should not aggravate problems of underdeterrence. In situations where underdeterrence from disgorgement is a concern—for example, when compensatory damages are elected because H_C exceeds G_C —other

¹⁹⁸ Cf. John M. Golden, *Redundancy: When Law Repeats Itself*, 94 TEX. L. REV. 629, 640-41 (2016) (discussing phenomenon of partial redundancy).

¹⁹⁹ See Yair Listokin, *Learning Through Policy Variation*, 118 YALE L.J. 480, 501-02 (2008) (“An information-forcing rule compels parties with superior information to divulge this information because the default rule . . . is crafted to work against the party with the superior information.”).

mechanisms, such as the enhancement of compensatory damages by a multiple not exceeding a statutorily set cap, may better respond to underdeterrence than an inflated disgorgement award, which would most likely increase the risk of overdeterrence in other classes of cases. Quite generally, the lack of calibration of disgorgement as a mechanism to serve deterrence means that there is real cause for fear that a disgorgement remedy can severely overshoot the proportional deterrence mark.

Our greater concern with overdeterrence than underdeterrence from the disgorgement remedy is particularly salient in IP law because of the common difficulty in separating profit probably attributable to infringement from profit that the defendant probably would have made in any event. This difficulty is especially likely to arise when the infringing act pertains to only a part of a product or project. Trademark law thus has historically supported disgorgement's deterrence function with the total profit rule but also reduced the resulting risk of overdeterrence by generally limiting the availability of disgorgement to cases of conscious wrongdoing, requiring that an infringing mark be a substantial factor in a sale before total profit is subject to disgorgement, allowing courts to exercise equitable discretion in applying the remedy, and allowing laches defenses.²⁰⁰ Given the imperfection of each of these checks on disgorgement's potential for overdeterrence, their partially redundant layering can be critical to approximating the goal of improving enforcement of IP rights.²⁰¹

We next turn to examining how well other IP regimes deal with the problem of achieving a balance between the interest in inducing potential infringers of IP rights to bargain with right holders (or otherwise protecting IP rights) and the interest in reducing socially wasteful precautions by potential IP infringers.

III. THE DISGORGEMENT REMEDY IN OTHER IP REGIMES

This Part considers how the disgorgement remedy has been codified and applied in four IP regimes—trade secrecy, copyright, design patent, and utility patent—in light of the principles and policies discussed in Parts I and II. In trade secrecy, copyright, and design patent law, disgorgement of infringer profits is often awarded in amounts larger than the profit probably attributable to the infringement, sometimes substantially so. To manage the risk that excessive disgorgement awards may overdeter the use and development of IP, especially when the infringing element is a small feature of a product or project (i.e., a doohickey), these regimes have adopted rules that enable some apportionment of profits. Trade secrecy law is alone, however, in generally limiting the availability of disgorgement awards to a wrongdoer who either knew or had good reason to know of its infraction. Further, courts in trade secrecy cases sometimes consider egregiousness of the conduct (or lack thereof) in exercising equitable discretion. In contrast, neither copyright nor design patent law has a

²⁰⁰ See *supra* Part I.

²⁰¹ Cf. Oren Bracha & John M. Golden, *Redundancy and Anti-Redundancy in Copyright*, 51 CONN. L. REV. 247, 253-56 (2019); Golden, *supra* note 198, at 665.

scienter or fault requirement for disgorgement awards, and courts rarely exercise equitable discretion in these regimes. The disgorgement remedy in design patent law is most out of whack with traditional equitable principles and most likely to yield awards far in excess of an appropriate deterrent. Utility patent law differs from other IP regimes due to the unavailability of disgorgement as a remedy. Nevertheless, utility patent law's reasonable royalty remedy may, as a practical matter, achieve a partial disgorgement of an infringer's profits. To assess such royalties, courts often grapple with difficult questions similar to those encountered when deciding how to apportion profits for purposes of disgorgement.

A. *Trade Secret Law*

Disgorgement of wrongdoer profits is a common remedy in trade secret cases and largely tracks traditional principles of restitution and unjust enrichment.²⁰² This should be unsurprising, given that trade secrecy, like trademark law, emerged as a common-law unfair competition tort with roots that trace back to equity. Although the traditionally dominant state law nature of trade secret law might suggest more deviations from the norm than the federal regimes for trademarks, copyrights, and patents, the *Restatement of Unfair Competition* and the Uniform Trade Secrets Act ("UTSA") have brought about considerable consistency in trade secret cases, including in their recognition of disgorgement as a remedy for trade secret violations.²⁰³ Moreover, in 2016, the U.S. Congress enacted the Defend Trade Secrets Act ("DTSA"),²⁰⁴ which federalized trade secrecy law, closely tracking both the substantive and remedial rules of the UTSA.²⁰⁵

²⁰² Although disgorgement is typically a remedy for trade secret misappropriation, it is not universal. New York courts do not recognize profit disgorgement as a remedy for trade secret misappropriation, relying instead on punitive damages to deter misappropriations. *See E.J. Brooks Co. v. Cambridge Sec. Seals*, 105 N.E.3d 301, 311 (N.Y. 2018) (holding that monetary award "tied to the defendant's gains rather than the plaintiff's losses, [was] not a permissible measure of damages" for trade secret misappropriation).

²⁰³ *See TianRui Grp. Co. v. Int'l Trade Comm'n*, 661 F.3d 1322, 1327-28 (Fed. Cir. 2011) ("Fortunately, trade secret law varies little from state to state and is generally governed by widely recognized authorities such as the Restatement of Unfair Competition and the Uniform Trade Secrets Act."); RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 (AM. LAW INST. 1995). Forty-eight states and the District of Columbia, Puerto Rico, and the Virgin Islands have adopted a version of the UTSA (as amended in 1985). *See* 1 ROGER M. MILGRIM & ERIC E. BENSON, MILGRIM ON TRADE SECRETS § 1.01(2)(b) (2020).

²⁰⁴ 18 U.S.C. § 1836 (2018).

²⁰⁵ *Compare* UNIF. TRADE SECRETS ACT WITH 1985 AMENDMENTS §§ 1, 3 (UNIF. LAW COMM'N 1985), *with* 18 U.S.C. § 1836(b)(3) (authorizing awards of actual damages, but no less than reasonable royalty and explaining that if misappropriation is willful or malicious, courts may award exemplary damages). Trade secret misappropriation may also give rise to criminal liability. 18 U.S.C. §§ 1831-1832.

1. A Menu of Options for Measuring Disgorgement

Trade secret law provides a menu of options from which courts can choose to measure a profit-based award.²⁰⁶ In choosing among these measures, courts often consider which rule would best approximate the profit that was causally attributable to the misappropriation.²⁰⁷

The most generous measure of disgorgement is the defendant's total profit on a project that used misappropriated information.²⁰⁸ However, profits are sometimes subject to apportionment.²⁰⁹ Some courts put the burden on the defendant to establish a basis for apportioning profits (as well as deductible expenses) once the plaintiff has made a threshold showing that the defendant profited from its use of a trade secret.²¹⁰ On the other hand, when it is clear that only a share of total profit was attributable to misappropriation and the plaintiff has failed to offer evidence from which to determine that, courts sometimes refuse to award either total profits or a share of those profits.²¹¹ This implicitly

²⁰⁶ See, e.g., *Wellogix, Inc. v. Accenture, L.L.P.*, 716 F.3d 867, 879 (5th Cir. 2013) (“Damages in misappropriation cases can take several forms: the value of plaintiff’s lost profits; the defendant’s actual profits from the use of the secret[;] the value that a reasonably prudent investor would have paid for the trade secret; the development costs the defendant avoided incurring through misappropriation; and a ‘reasonable royalty.’” (quoting *Bohnsack v. Varco, L.P.*, 668 F.3d 262, 280 (5th Cir. 2012))).

²⁰⁷ See, e.g., *USM Corp. v. Marson Fastener Corp.*, 467 N.E.2d 1271, 1277 (Mass. 1984).

²⁰⁸ Courts in some trade secret cases have considered disgorging the “entire profit” or applying the “entire market value” rule borrowed from patent law. This rule considers whether the misappropriated element is sufficiently important that it “drives demand” for the product, such that an award of entire profits on the product is appropriate. See, e.g., *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 904 F.3d 965, 979 (Fed. Cir. 2018) (“[T]he entire market value rule is appropriate only when the patented feature is the sole driver of customer demand or substantially creates the value of the component parts.”); *Versata Software, Inc. v. Internet Brands, Inc.*, 902 F. Supp. 2d 841, 855-57, 855 n.3 (E.D. Tex. 2012) (ruling that jury was entitled to conclude that plaintiff’s trade secrets “were the basis for the core features” of products and hence to award defendant’s entire profits, although not explicitly endorsing application of entire market value rule).

²⁰⁹ See, e.g., *Morlife, Inc. v. Perry*, 66 Cal. Rptr. 2d 731, 740 (Ct. App. 1997) (affirming award disgorging 33% of defendant’s profits for trade secret misappropriation).

²¹⁰ *USM*, 467 N.E.2d at 1277 & n.3. Once the plaintiff proves revenues from sales of products that used the misappropriated trade secret, the burden shifts to the defendant to establish its deductible expenses and a basis for apportionment. See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmt. f (AM. LAW INST. 1995); see also *Jet Spray Cooler, Inc. v. Crampton*, 385 N.E.2d 1349, 1360-61 (Mass. 1979) (holding that lower court did not err in allowing deduction in defendant’s gross profits); *infra* text accompanying notes 215-226.

²¹¹ See *MSC Software Corp. v. Altair Eng’g, Inc.*, No. 2:07-cv-12807, 2015 WL 13273227, at *4-5 (E.D. Mich. Nov. 9, 2015) (excluding expert testimony because, although it provided basis for determining profits attributable to computer program, expert made no effort to determine what portion of those profits was attributable to trade secrets at issue). There was thus insufficient evidence to support the proposition that the trade secret-related aspects drove demand for that program. *Id.* at *20; see also *Waymo LLC v. Uber Techs., Inc.*, 256 F. Supp. 3d 1059, 1064 (N.D. Cal. 2017) (excluding expert evidence for failure to

puts the burden on the plaintiff to establish a basis for apportionment. Causal principles most clearly control when disgorgement is measured by costs the defendant saved by not having to develop misappropriated technology independently,²¹² plus the value of any “‘head start’ that a defendant made from misappropriating the plaintiff’s trade secrets.”²¹³ This rule applies when the defendant establishes that it could have developed a misappropriated technology independently and when misappropriation only delayed its ability to earn a profit. The least generous measure of disgorgement is the market value of the misappropriated information or a reasonable royalty for use of the information. This measure tends to be used as a fallback when the plaintiff cannot make out a case for using one of the other measures.²¹⁴

Courts sometimes choose a larger measure of profit to sanction what they regard as egregious misconduct. In *Jet Spray Cooler, Inc. v. Crampton*,²¹⁵ for example, four trusted senior employees left Jet Spray’s employ and started a company “engaged in the manufacture and sale of beverage dispensers similar to those manufactured by [Jet Spray],” using “all of the information and knowledge which they had acquired while working for [Jet Spray].”²¹⁶ The Massachusetts Supreme Judicial Court (“SJC”) concluded that defendants had misappropriated trade secrets contained in an engineer’s report to Jet Spray.²¹⁷ On appeal from a judgment on damages several years later, the SJC upheld the Superior Court’s rejection of a special master’s recommendation to award only \$1,400, the price that Jet Spray paid for the engineer’s report.²¹⁸ The SJC regarded this award as an “err[or] as [a] matter of law in failing to focus on the abuse of the confidential relationship and on the secrecy attached” to the engineer’s report.²¹⁹ The SJC chastised the special master who recommended a low award for failing to focus “on the wrongful conduct of the defendants.”²²⁰

distinguish between profits attributable to allegedly misappropriated trade secrets and profits attributable to other factors).

²¹² See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmt. f (AM. LAW INST. 1995); DAVID W. QUINTO & STUART H. SINGER, TRADE SECRETS 141 (2d ed. 2012) (“The unjust enrichment damages will typically consist of the research and development costs the defendant was spared by misappropriating the trade secrets.”).

²¹³ QUINTO & SINGER, *supra* note 212, at 142.

²¹⁴ See, e.g., *O2 Micro Int’l Ltd. v. Monolithic Power Sys., Inc.*, 399 F. Supp. 2d 1064, 1076-78 (N.D. Cal. 2005). O2’s expert testified that MPS’s misappropriation of eleven trade secrets had caused MPS to be unjustly enriched by \$16 million. *Id.* at 1076. Because a jury found that MPS had been unjustly enriched by its use of only one of the secrets, the court vacated a \$12 million disgorgement award for insufficiency of evidence to support it. *Id.* It ordered the defendant to pay a reasonable royalty of \$900,000. *Id.* at 1078.

²¹⁵ 282 N.E.2d 921 (Mass. 1972).

²¹⁶ *Id.* at 923-24.

²¹⁷ *Id.* at 926-27.

²¹⁸ *Jet Spray Cooler, Inc. v. Crampton*, 385 N.E.2d 1349, 1353 (Mass. 1979), *superseded by statute*, MASS. GEN. LAWS ch. 231, § 6H (2020), *as recognized in* *Mill Pond Assocs., Inc. v. E & B Giftware, Inc.*, 751 F. Supp. 299, 301 (D. Mass. 1990).

²¹⁹ *Id.* at 1353-58.

²²⁰ *Id.* at 1358.

The master would also have denied compensatory and disgorgement remedies based on a finding “that the only effect of the defendants’ wrongful use of the [engineer’s] report was the fact that the defendants were able to enter the market in competition with [Jet Spray] three months earlier.”²²¹ A second master’s report recommended an award of the defendants’ net profits on all sales of products incorporating the misappropriated secrets, which the Superior Court adjusted, totaling \$282,100.83.²²² The SJC endorsed this award, although it corrected the amount to \$254,114.79.²²³ The SJC observed that, through disgorgement, “[Jet Spray] may actually recover far more than its actual loss,”²²⁴ and the court explained that an award of “the entirety of the defendants’ net corporate profits from 1964 to 1975” was proper in this case “because it [was] impossible for the defendants to segregate the portion of their profits which [was] attributable to the misappropriated trade secrets from the portion of their profits which may be attributable to other factors.”²²⁵ On the other hand, the SJC upheld the trial judge’s denial of interest for the time preceding a second master’s report, saying that, even without such interest, the overall award was “so palpably and unquestionably ample to fully compensate [the plaintiff] for any and all invasion of its rights, as to suggest no circumstances which invoke the court’s discretion to enlarge it by allowance of [additional] interest.”²²⁶

A total profit award was also rendered in *USA Power, LLC v. PacifiCorp*.²²⁷ Utah’s Supreme Court upheld a disgorgement award of over \$91 million for what a jury had found, after a five-week trial, to be the willful and malicious misappropriation of USA Power’s plans for a power plant.²²⁸ This award was more than four times the amount of jury-determined actual damages. Applying a deferential standard of review to the jury’s verdict, the court reasoned that “the jury could have reasonably inferred from the evidence . . . that only one plant was possible in [the relevant location], that misappropriation caused this plant

²²¹ *Id.* at 1357.

²²² *Id.* at 1358-59. The judge also held the individual defendants jointly and severally liable along with the corporate defendant. *Id.* at 1362.

²²³ *Id.* at 1359 n.16.

²²⁴ *Id.* at 1363 (citing, *inter alia*, *Mishawaka Rubber & Woolen Mfg. Co. v. S.S. Kresge Co.*, 316 U.S. 203, 207 (1942) (“There may well be a windfall to the . . . owner where it is impossible to isolate the profits which are attributable to the use of the infringing mark. But to hold otherwise would give the windfall to the wrongdoer.”)).

²²⁵ *Id.*

²²⁶ *Id.* at 1364 (first alteration in original) (quoting *L.P. Larson, Jr., Co. v. William Wrigley, Jr., Co.*, 20 F.2d 830, 836 (7th Cir. 1927), *rev’d on other grounds*, 277 U.S. 97 (1928)). A federal district court subsequently recognized that *Jet Spray*’s ruling on prejudgment interest was legislatively overturned by Massachusetts statute. *See Mill Pond Assocs., Inc. v. E & B Giftware, Inc.*, 751 F. Supp. 299, 301 (D. Mass. 1990) (citing MASS. GEN. LAWS ch. 231, § 6H (2020)).

²²⁷ 372 P.3d 629 (Utah 2016). The jury found actual damages of about \$21.4 million and unjust enrichment damages of \$112.5 million. *Id.* at 643. The trial court reduced the unjust enrichment award to about \$91.1 million in light of the otherwise duplicative nature of the actual damages award. *Id.*

²²⁸ *Id.* at 643, 658-59.

to be [PacifiCorp's] instead of [USA Power's], and, therefore, that all of PacificCorp's profits were the result of misappropriation."²²⁹ We share Milgrim and Bensen's skepticism that this profit measure can be explained on causal grounds.²³⁰ The trial court offered an alternative rationale for this award, saying that it was "sufficient to satisfy the policy [of deterring future misappropriation]."²³¹

The total profits awards in *Jet Spray* and *USA Power* are inconsistent with both traditional equitable principles and the principle of proportional deterrence. Courts may, of course, consider interests of deterring wrongdoing in choosing a measure of profit that exceeds the profit probably attributable to the misappropriation. The *Restatement of Unfair Competition* explains that "the appropriate method of measuring [monetary] relief" depends "upon a comparative appraisal of all the factors of the case," including not only "the degree of certainty with which the plaintiff has established the fact and extent of . . . the actor's pecuniary gain resulting from the appropriation" but also "the nature and extent of the appropriation" and "the intent and knowledge of the actor."²³² In both cases, courts awarded the defendant's total profits because the defendant's conduct seemed egregious. The result in *USA Power* is less troubling because the defendant knew that it was using stolen plans, and its possession of the plans may well have been a substantial factor in winning the construction contract. The court awarded disgorgement to punish what it thought was egregious conduct. While this is an inappropriate use of disgorgement (which is meant to deter, not to punish), at least there was conduct that warranted punishment. The result in *Jet Spray* is more troubling. While the senior employees unquestionably took advantage of their employer's trust, they were not bound by a covenant not to compete, nor were they surreptitious about the information they used. That information gave the new company only a small boost coming out of the gate. Under these circumstances, ordering disgorgement of the defendant's entire profits for over ten years was excessive.

The stark difference between the two special master damage awards in *Jet Spray*—\$1,400 vs. \$254,114—illustrates that it matters a great deal which option courts choose in measuring profits to be disgorged, for the choice can result in vastly different awards. The lower figure was the value of the misappropriated trade secret, which allowed the defendants to enter the market three months earlier, while the higher figure was the total profit on the product line over more than a decade. The normative principles developed in Part II support giving courts the power to select a higher figure in the range of possible measures of disgorgement amounts when this is necessary to deter the

²²⁹ *Id.* at 655-56.

²³⁰ 4 MILGRIM & BENSEN, *supra* note 203, § 15.02[3][i] (criticizing *USA Power*'s adoption of "'but for' approach to unjust enrichment damages [that] actually ignores any portion of defendant's profit that may have been attributable to something other than the misappropriation").

²³¹ See *USA Power*, 372 P.3d at 661.

²³² RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45(2)(a)-(b), (d) (AM. LAW INST. 1995).

defendant's conduct. But normative principles also caution against imposing excessive damages, particularly when the defendant had a plausible reason for choosing to engage in the wrongful conduct without bargaining for the right. Disgorgement awards are not supposed to be punitive.

2. Trade Secrecy's Knowledge Requirement

Unlike other major IP laws, trade secret misappropriation is not a strict liability tort. To be found liable for misappropriation, the defendant must either have known or had good reason to know that it acquired another's trade secret through improper means or that its use or disclosure of the secret was in breach of a contract or duty of confidentiality.²³³ Once a court finds misappropriation, the UTSA, DTSA, and *Restatement of Unfair Competition* provide that a disgorgement remedy is available. Because the definition of misappropriation requires knowledge or fault, there is no need for a separate requirement of conscious wrongdoing to support disgorgement awards.²³⁴

One common misappropriation scenario is when a faithless former employee goes to work for a rival and reveals or uses the plaintiff's trade secrets in furtherance of the new employer's business. In *Sperry Rand Corp. v. A-T-O, Inc.*,²³⁵ for instance, an ex-Sperry Rand employee took with him confidential manufacturing data, drawings, and bidding documents, which enabled his new employer to win a contract to build an antenna for the Coast Guard, beating out Sperry Rand's competing bid.²³⁶

²³³ See UNIF. TRADE SECRETS ACT § 1(2) (UNIF. LAW COMM'N 1985); RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 40 & cmt. d (AM. LAW INST. 1995) ("The owner of a trade secret is protected under . . . this Section only against a use or disclosure of the trade secret that the actor knows or has reason to know is wrongful.").

The "reason to know" rule differs from a requirement of conscious wrongdoing because a defendant can be liable without subjective knowledge it is violating a right. This difference narrows somewhat if conscious wrongdoing is expanded to include the case in which the defendant acts "despite a known risk that the conduct in question violates the rights of the claimant." RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51(3)(b) (AM. LAW INST. 2011); accord RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 40 cmt. d, illus. 2 (AM. LAW INST. 1995).

The absence of a formal requirement of willful misappropriation may explain why we cannot find cases in trade secret law similar to the cases in trademark law that address when a defendant may be justified in infringing on an uncertain right without bargaining for permission. This is unfortunate. Whether in a case like *Jet Spray* the law should coerce the employees to bargain with their employer about the terms and conditions of their departure seems to us an interesting question on which reasonable minds could differ.

²³⁴ See 18 U.S.C. § 1836(b)(3)(B)(i)(II) (2018) (providing for award of damages for unjust enrichment caused by misappropriation of trade secret); UNIF. TRADE SECRETS ACT § 3(a) (UNIF. LAW COMM'N 1985) (same); RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45(1) (AM. LAW INST. 1995) (same).

²³⁵ 447 F.2d 1387 (4th Cir. 1971).

²³⁶ *Id.* at 1391. Because the defendant's unjust enrichment was less than the plaintiff's actual damages, the court affirmed an award of the latter along with exemplary damages but vacated the award of attorney fees. *Id.* at 1392-95.

Another common scenario involves the misuse of confidential information revealed in the course of failed merger or joint venture negotiations. In *Texas Advanced Optoelectronic Solutions, Inc. v. Renesas Electronics America, Inc.*,²³⁷ for instance, Texas Advanced Optoelectronic Solutions, Inc. (“TAOS”) revealed confidential technical and financial information during failed merger negotiations with Renesas, a competitor in the field of ambient light sensors.²³⁸ Renesas was held liable for misusing TAOS’s secrets in a subsequent bid to supply this technology for Apple smartphones.²³⁹

3. Equitable Remedy with Safety Valves

Jury verdicts awarding disgorgement of profits for trade secret misappropriation are not uncommon.²⁴⁰ Yet more than one court has concluded that disgorgement is an equitable remedy for only judges to apply in trade secret cases.²⁴¹ The most recent such decision was the CAFC’s 2018 decision in *Texas Advanced*, which vacated a jury’s \$48.8 million disgorgement award in part because the CAFC concluded that there was no right to a jury trial when plaintiffs sought a disgorgement award in trade secret misappropriation cases.²⁴² As the CAFC’s decision appears well supported,²⁴³ we think that courts should more uniformly acknowledge the equitable nature of disgorgement and assign to judges, rather than juries, the task of assessing the amount of profits to be disgorged.

This assignment seems particularly sensible in light of the UTSA’s and *Restatement of Unfair Competition*’s admonitions that courts should sometimes decline to order disgorgement based on equitable considerations.²⁴⁴ The UTSA

²³⁷ 895 F.3d 1304 (Fed. Cir. 2018), *modifying* 888 F.3d 1322 (Fed. Cir. 2018).

²³⁸ *Id.* at 1308; *see also* Univ. Computing Co. v. Lykes-Youngstown Corp., 504 F.2d 518, 529-30 (5th Cir. 1974) (finding liability for misappropriation of trade secrets revealed during failed joint venture negotiations).

²³⁹ *Tex. Advanced*, 895 F.3d at 1310 (noting jury award of more than \$48 million in disgorged profits, plus \$10 million in exemplary damages). The Federal Circuit vacated that award and remanded for retrial on damages. *Id.* at 1318. *Texas Advanced* is discussed further *infra* text accompanying notes 242-243, 392-393.

²⁴⁰ *See, e.g.*, *Versata Software, Inc. v. Internet Brands, Inc.*, 902 F. Supp. 2d 841, 855 n.3 (E.D. Tex. 2012); *USA Power, LLC v. PacifiCorp*, 372 P.3d 629, 639 (Utah 2016).

²⁴¹ *See, e.g.*, *Sperry Rand*, 447 F.2d at 1392 (describing damages based on “profits earned by the wrongdoer by the use of the misappropriated material” as “an equitable remedy”); *Bruce v. Bohanon*, 436 F.2d 733, 736 (10th Cir. 1970) (explaining that relief “in the form of an accounting” is an equitable remedy but opining that plaintiff had jury trial right on “the core issue as to whether there has in fact been a wrongful appropriation”); *cf.* 4 MILGRIM & BENSON, *supra* note 203, § 15.02[3][j] (“Accounting is essentially the equitable opposite of damages.” (footnote omitted)).

²⁴² *Tex. Advanced*, 895 F.3d at 1319 (concluding that TAOS did not have “a Seventh Amendment right to a jury decision on its request for disgorgement of [Renesas’s] profits”).

²⁴³ *Id.* at 1322-26.

²⁴⁴ *See* RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45(1) (AM. LAW INST. 1995). A misappropriator may be “liable for the pecuniary loss to the other caused by the appropriation or for the actor’s own pecuniary gain resulting from the appropriation, whichever is greater,”

states that the general entitlement to monetary relief for trade secret misappropriation does not apply "to the extent that a material and prejudicial change of position prior to acquiring knowledge or reason to know of misappropriation renders a monetary recovery inequitable."²⁴⁵ An explanatory comment adds that "the same considerations that can justify denial of all injunctive relief also can justify denial of all monetary relief."²⁴⁶ Consider *Conmar Products Corp. v. Universal Slide Fastener Co.*,²⁴⁷ in which the Second Circuit affirmed the denial of injunctive and monetary relief where a company was unaware of an employee's improper use of another firm's trade secrets until after the company had already "invested \$40,000 in the offending machine" embodying seven secrets, most of which had fallen into the public domain by the time the company was "first charged with any duty to desist" and where any remaining secret material entered the public domain when two patents issued years later.²⁴⁸ The *Restatement of Unfair Competition* suggests that a reasonable royalty award may be appropriate when a defendant has innocently "invested in the trade secret."²⁴⁹

More generally, the *Restatement of Unfair Competition* indicates that "[w]hether an award of monetary relief [for trade secret misappropriation] is appropriate and the appropriate method of measuring such relief depend upon a comparative appraisal of all the factors of the case," including "the nature and extent of the appropriation," "the relative adequacy to the plaintiff of other remedies," "any good faith reliance" by the defendant, and "any unreasonable delay" or "related misconduct" by the plaintiff.²⁵⁰ These are the types of decisions that judges, not juries, should make. Given the diversity of subject matters protected as trade secrets, the varying significance of those secrets, and the well-recognized problems of apportionment and proportionality that modern complex technologies can generate, the wisest course is to maintain a healthy amount of flexibility in the measurement of disgorgement awards for trade secret misappropriation.²⁵¹

but the court should, exercising its discretionary power, withhold monetary relief when "such relief is inappropriate." *Id.*

²⁴⁵ UNIF. TRADE SECRETS ACT § 3(a) (UNIF. LAW COMM'N 1985).

²⁴⁶ *Id.* § 3 cmt.

²⁴⁷ 172 F.2d 150 (2d Cir. 1949).

²⁴⁸ *Id.* at 156-57. The court cited the *Restatement of Torts* for recognizing "an excuse for continued exploitation of a secret that at the time when one, who has theretofore been innocently exploiting it, first learns that he has induced the breach of an obligation, he has substantially changed his position." *Id.* at 156 (citing RESTATEMENT OF TORTS § 758(b) cmt. e (AM. LAW INST. 1939)).

²⁴⁹ RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmt. b (AM. LAW INST. 1995).

²⁵⁰ *Id.* § 45(2), (b)-(f). The circumstances under which courts should award damages for misappropriation according to a reasonable royalty measure is substantially disputed. 4 MILGRIM & BENSON, *supra* note 203, § 15.02[3][e].

²⁵¹ *Cf.* Univ. Computing Co. v. Lykes-Youngstown Corp., 504 F.2d 518, 538 (5th Cir. 1974) ("Our review of the caselaw leads us to the conclusion that every case requires a flexible and imaginative approach to the problem of damages [for trade secret misappropriation].").

B. Copyright Law

Disgorgement has a long history in copyright cases because courts sitting in equity historically conducted accountings of profits incident to grants of injunctive relief.²⁵² This remedy was first codified in the Copyright Act of 1909.²⁵³ Although the Act seemingly provided copyright owners with an entitlement to awards of both actual damages and infringer profits, courts generally allowed plaintiffs to recover one of these types of awards but not both.²⁵⁴ The Copyright Act of 1976 is more generous on this score.²⁵⁵ Plaintiffs are now entitled to claim both actual damages suffered from infringement and “any profits of the infringer that are attributable to the infringement,”²⁵⁶ subject to the general rule against double recovery.²⁵⁷ Copyright disgorgement awards are understood to serve deterrent purposes.²⁵⁸

Copyright’s disgorgement remedy deviates from traditional equitable principles in not requiring conscious wrongdoing.²⁵⁹ Copyright infringement is a strict liability offense. The disgorgement remedy is available to all whose

²⁵² See, e.g., *Stevens v. Gladding*, 58 U.S. (17 How.) 447, 455 (1855) (enjoining owner of copper plate from using it to make copies of copyrighted maps and requiring defendant to account for profits from sales of infringing maps); *Gómez-Arostegui*, *supra* note 128, at 220-27; see also *Atl. Monthly Co. v. Post Publ’g Co.*, 27 F.2d 556, 559-60 (D. Mass. 1928) (holding profits award unavailable except as incident to injunctive relief in equity).

²⁵³ Copyright Act of 1909, Pub. L. No. 60-349, § 25(b), 35 Stat. 1075, 1081, *repealed by* Copyright Act of 1976, 17 U.S.C. § 504 (2018).

²⁵⁴ *Id.* § 25(b) (making infringer liable for “such damages as the copyright proprietor may have suffered due to the infringement, as well as all the profits which the infringer shall have made from such infringement”); see also, e.g., *Sheldon v. Metro-Goldwyn Pictures Corp.*, 309 U.S. 390, 400 (1940) (endorsing awards of actual damages or infringer profits but not both).

²⁵⁵ One exception is statutory damage awards, which under the 1909 Act could be awarded per infringing act but which are now awardable only per infringed work. Compare Copyright Act of 1909 § 25(b) (giving examples of infringing acts, such as each copy of painting or each infringing performance of musical composition), with 17 U.S.C. § 504(c)(1) (stating that copyright owner may elect “to recover, instead of actual damages and profits, an award of statutory damages for all infringements involved in the action, with respect to any one work”).

²⁵⁶ 17 U.S.C. § 504(b).

²⁵⁷ 2 HOWARD B. ABRAMS & TYLER T. OCHOA, *THE LAW OF COPYRIGHT* § 17:4 (2020). As an example of a situation where a copyright owner may recover the full amount of actual damages and infringer profits, Abrams and Ochoa point to a case in which the defendant, the exclusive distributor of plaintiff’s copyrighted poster, had a number of infringing copies manufactured from another source. Thus the plaintiffs were damaged by the loss of the profit on the publisher to distributor sales it would have made to the defendant, and [were] entitled to recover the defendant’s full profits on its distributor to retailer sales as these were sales the plaintiffs could not have made.

Id. § 17:4 n.5.

²⁵⁸ See, e.g., H.R. REP. NO. 94-1476, at 161 (1976).

²⁵⁹ See, e.g., *Hotaling v. Church of Jesus Christ of Latter-Day Saints*, 118 F.3d 199, 203 (4th Cir. 1997) (holding library liable for infringement of plaintiff’s copyright even though it did not know infringing copy of plaintiff’s book was indexed and available on its public lending shelves).

rights have been infringed. The principal safety valve is the copyright rule requiring apportionment of profits that may be causally attributable to the infringement.²⁶⁰ Yet, because copyright law requires right holders to prove only the defendant's gross revenues and puts the burden on the infringer to establish deductions and grounds for apportionment,²⁶¹ the potential exists for disgorgement awards that grossly exceed the amount necessary for proportional deterrence. The Supreme Court's 2014 *Petrella* decision suggests that courts may exercise equitable discretion in rendering apportionment as in trademark and trade secret law.²⁶²

1. Apportioning Infringer Profits

Since the Supreme Court's 1940 decision in *Sheldon v. Metro-Goldwyn Pictures Corp.*,²⁶³ courts have ordered apportionment of profits when infringing and noninfringing material are intermingled in a work.²⁶⁴ Prior to *Sheldon*, courts routinely disgorged all infringer profits in intermingled work cases so that if a book, for instance, contained some infringing and some noninfringing content, all profits from sales of that work would have to be disgorged.²⁶⁵ The Court in *Sheldon* acknowledged these precedents but distinguished them.²⁶⁶ When there was evidence supporting apportionment, as in *Sheldon*, the Court ruled that only profits attributable to infringement should be awarded.²⁶⁷ *Sheldon* continues to be widely cited in copyright disgorgement cases.²⁶⁸

Sheldon's allowance of profits apportionment when the infringing part constitutes a relatively small part of the defendant's otherwise noninfringing creation was perhaps inevitable given the absence of a requirement of conscious

²⁶⁰ 17 U.S.C. § 504(b).

²⁶¹ *Id.*

²⁶² *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 572 U.S. 663, 687 (2014) (instructing lower court to consider equitable factors in adjusting damage award on remand); *see also infra* text accompanying notes 315-323.

²⁶³ 309 U.S. 390 (1940).

²⁶⁴ *Id.* at 405 (“[W]e perceive no ground for saying . . . the court may make an award of profits which have been shown not to be due to the infringement.”).

²⁶⁵ *See, e.g.*, *Callaghan v. Myers*, 128 U.S. 617, 665-66 (1888). If one book in a series contained infringing material but the other books did not, only profits attributable to the book with infringing materials would have to be disgorged, not all profits from sales of the set. *See id.*

²⁶⁶ *Sheldon*, 309 U.S. at 398-402.

²⁶⁷ *Id.* (reasoning that infringement damages should not “impose a penalty by giving to the copyright proprietor profits which are not attributable to the infringement”). Although experts testified that 5-12% of the infringing movie's gross profits were attributable to infringement, the Second Circuit decided that 20% was a reasonable approximation. *Sheldon v. Metro-Goldwyn Pictures Corp.*, 106 F.2d 45, 50-51 (2d Cir. 1939), *aff'd*, 309 U.S. 390 (1940). One of us has criticized *Sheldon's* disgorgement assessment. *See Gergen, supra* note 152, at 847 (arguing that damage award in *Sheldon* “significantly exceeds the likely gain to MGM causally attributable to the wrong”).

²⁶⁸ *See, e.g.*, *Oracle Am., Inc. v. Google Inc.*, 131 F. Supp. 3d 946, 951-54 (N.D. Cal. 2015).

wrongdoing and the absence of a rule limiting recovery of total profits to cases in which the infringing material was a substantial factor in sales. Apportionment reduces the risk of awards that grossly overshoot the mark.

As with most other IP laws, copyright owners must prove only the infringer's gross revenues from a work embodying infringing material to qualify for a disgorgement award.²⁶⁹ The infringer must prove deductible expenses and grounds for apportionment.²⁷⁰ Willfulness of the infringement may affect the rigor with which courts will allow deductions from profits when determining the amount to be disgorged.²⁷¹

Perhaps ironically, the causal focus of copyright's apportionment rule makes it possible to define relevant profits expansively to include indirect profits. In *Frank Music Corp. v. Metro-Goldwyn-Mayer, Inc.*,²⁷² for example, Metro-Goldwyn-Mayer's ("MGM") Las Vegas hotel used five songs from the plaintiff's musical in one act of a ten-act musical revue celebrating Hollywood.²⁷³ The hotel's net profit on the revue was \$2,489,646.²⁷⁴ Under *Sheldon*, Frank Music was entitled to recover only a share of this profit, but the court held that it was also entitled to a share of profits from MGM's hotel and gaming operations on the theory that the show was a draw for customers.²⁷⁵

Apportionment of profit in copyright cases can sometimes be a seat-of-the-pants judgment with few clear rules or principles. In *Frank Music*, for example, the district court initially considered \$22,000 to be "a fair approximation of the profits . . . attributable to the infringement" because MGM argued that the infringing material was about six minutes of music and the show's attendance did not decrease when the infringing material was removed.²⁷⁶ The Ninth Circuit faulted the district court for failing to provide "any reasoned explanation of or formula for its apportionment," adding that the award was "less than one percent of MGM Grand's profits from the show, or roughly \$13 for each of the 1700 infringing performances," which seemed "grossly inadequate."²⁷⁷ On remand, the district court recalculated the net profit from the revue as \$6,131,606.²⁷⁸ It attributed 10% to the act containing the infringing material and 25% of that 10% to the infringing material.²⁷⁹ The Ninth Circuit concluded instead that 75% of

²⁶⁹ 17 U.S.C. § 504(b) (2018).

²⁷⁰ *Id.*

²⁷¹ See, e.g., *Hamil Am., Inc. v. GFI*, 193 F.3d 92, 107 (2d Cir. 1999) (calling for "extra scrutiny" of overhead deductions in willful infringement cases).

²⁷² 772 F.2d 505 (9th Cir. 1985).

²⁷³ *Id.* at 510.

²⁷⁴ *Id.* at 514-15.

²⁷⁵ *Id.* at 517.

²⁷⁶ *Frank Music Corp. v. MGM Inc.*, No. 83-cv-76-01105, 1983 U.S. Dist. LEXIS 20378, at *40 (C.D. Cal. Oct. 24, 1983), *aff'd in part and rev'd in part*, 772 F.2d 505 (9th Cir. 1985).

²⁷⁷ *Frank Music*, 772 F.2d at 518.

²⁷⁸ *Frank Music Corp. v. MGM*, No. 87-cv-76-01105, 1987 U.S. Dist. LEXIS 16917, at *6-7 (C.D. Cal. July 22, 1987), *aff'd in part and rev'd in part*, 886 F.2d 1545, 1549-50 (9th Cir. 1989).

²⁷⁹ *Id.* at *5-6.

the act containing infringing material was attributable to the infringing material because “defendants used not only the plaintiffs’ music, but also their lyrics, characters, settings, and costume designs,” thereby recreating the “movie version.”²⁸⁰ This appears to be apportionment by a rough ratio of infringing content to noninfringing content. In addition, the Ninth Circuit affirmed the district court’s 2% indirect profit award.²⁸¹ When the smoke cleared, Frank Music recovered more than \$1.25 million as a disgorgement award.²⁸²

Profits may be protected from disgorgement, however, when defendants can show that profits on sales of a work were not causally connected to infringing content. In *Walker v. Forbes, Inc.*,²⁸³ for example, the Fourth Circuit affirmed a jury award of \$5,823 for Forbes’ infringement of Walker’s photograph in a special issue of its magazine about the four hundred wealthiest persons in America.²⁸⁴ It held that the trial court properly allowed Forbes to show that none of its roughly \$6.5 million in profits from subscriptions or advertising revenues was causally attributable to that infringement.²⁸⁵

Walker argued that such a small award failed to serve the deterrence purpose of disgorgement, but the Fourth Circuit pointed out that disgorgement awards are “designed to remove from the defendant all benefit derived from the misappropriation of the plaintiff’s intellectual property,” not to be punitive.²⁸⁶ “If, as here, the infringement occurs as a small part of a much larger work, the fact finder properly focuses not on the profit of the work overall, but only on the profit that the infringement contributes.”²⁸⁷ This may result in the plaintiff “recover[ing] a windfall (in the form of defendant’s profit from the infringement over and above the loss to the plaintiff),” but such a windfall must be causally connected to the infringement.²⁸⁸ The court did not, however, offer further clarification.

When infringing content is published in advertisements, courts have generally rejected a plaintiff’s claims for a share of the gross revenues from sales of the

²⁸⁰ *Frank Music Corp. v. Metro-Goldwyn-Mayer, Inc.*, 886 F.2d 1545, 1549-50 (9th Cir. 1989).

²⁸¹ *Id.* at 1550.

²⁸² *Id.* at 1557 (awarding \$551,844.54 for direct profits and \$699,963.10 for indirect profits).

²⁸³ 28 F.3d 409 (4th Cir. 1994).

²⁸⁴ *Id.* at 410-11. This represented a share of Forbes’s profit from newsstand sales. *Id.* at 411.

²⁸⁵ *Id.* at 411-12. Forbes offered evidence that subscriptions and advertisements had been sold before the issue with the infringing photograph was produced. *Id.* at 412 (reviewing evidence that “advertising for a magazine’s issue is set far in advance” and that new subscribers could not receive current issue because of “lead times built into the subscription system”).

²⁸⁶ *Id.* at 414-15.

²⁸⁷ *Id.* at 415.

²⁸⁸ *Id.*

advertised product.²⁸⁹ Instead, courts have put the burden on plaintiffs to establish a causal connection between the infringement and the defendant's profits. Consider, for instance, *On Davis v. Gap, Inc.*,²⁹⁰ in which a widely distributed ad of a model wearing The Gap's branded clothes was claimed to be infringing because the model was also wearing Davis's fashionable eyewear jewelry.²⁹¹ As compensation, Davis initially asked for \$2.5 million as a lost licensing fee, a percentage of The Gap's profits from sales of clothing, and \$10 million in punitive damages.²⁹² To satisfy his burden to qualify for a profits award, Davis offered proof that The Gap's annual revenue for the year after the ad's release was \$1.668 billion.²⁹³

The Second Circuit acknowledged that "a highly literal interpretation" of copyright's disgorgement rule arguably supported Davis's claim that he had satisfied his burden to establish a prima facie right to disgorgement of The Gap's profits.²⁹⁴ However, the court opined that the statute's reference to "gross revenue" should be interpreted as "gross revenue reasonably related to the infringement."²⁹⁵ The court illustrated the point hypothetically: it would make no sense to disgorge all of a conglomerate firm's profits if one subsidiary published a book containing an infringing poem.

While the burden-shifting statute undoubtedly intended to ease plaintiff's burden in proving the defendant's profits, we do not believe it would shift the burden so far as to permit a plaintiff in such a case to satisfy his burden by showing gross revenues from agriculture, canning, shipping and real estate where the infringement consisted of the unauthorized publication of a poem.²⁹⁶

Although the facts in *Davis* were less striking, "the point remains the same: the statutory term 'infringer's gross revenue' should not be construed so broadly as to include revenue from lines of business that were unrelated to the act of

²⁸⁹ See *Compaq Comput. Corp. v. Ergonome Inc.*, 387 F.3d 403, 410-11 (5th Cir. 2004) (refusing to award profits on sales of computers based on infringement of copyright in drawing in user guides). But see *Andreas v. Volkswagen of Am., Inc.*, 336 F.3d 789, 798-800 (8th Cir. 2003) (reinstating jury award of 10% of profits of Audi—a Volkswagen subsidiary—from sales based on infringing advertisement and affirming denial of remittitur for award of ad agency's apportioned profits).

²⁹⁰ 246 F.3d 152 (2d Cir. 2001).

²⁹¹ *Id.* at 157.

²⁹² *Id.* at 156.

²⁹³ *Id.* at 159.

²⁹⁴ *Id.* at 160 (observing that statute text only required plaintiff to show proof of infringer's gross revenue).

²⁹⁵ *Id.*

²⁹⁶ *Id.*; see also *Taylor v. Meirick*, 712 F.2d 1112, 1122 (7th Cir. 1983) ("If General Motors were to steal your copyright and put it in a sales brochure, you could not just put a copy of General Motors' corporate income tax return in the record and rest your case for an award of infringer's profits.").

infringement.”²⁹⁷ The court remanded the case for an assessment of a reasonable license fee.²⁹⁸

Copyright’s generally expansive conception of profits causally attributable to infringement and its burden-shifting rules create the potential for gargantuan disgorgement awards. This is especially likely when the allegedly infringing material is a small but arguably material component in a large and very profitable enterprise, especially if it is difficult for the defendant to establish profit not attributable to infringement with reasonable certainty. For instance, in *Oracle America, Inc. v. Google Inc.*,²⁹⁹ Oracle claims that Google has realized \$9 billion in profits from its infringement of parts of the Java Application Program Interface (“API”) in its Android smartphone platform.³⁰⁰ Although Google does not charge smartphone companies to use its Android software on their devices, it earns revenues from advertising and other activities.³⁰¹ Oracle claims that Google is a willful infringer, so neither Google’s overhead expenses nor tax payments should be deducted from profits to be disgorged.³⁰² Although Google persuaded a jury that it had made only fair uses of the Java API, the CAFC agreed with Oracle that no reasonable jury could have found fair use.³⁰³ If the Supreme Court affirms the CAFC’s ruling,³⁰⁴ Oracle will undoubtedly seek a jury trial and an award of a portion of Google’s profits that may make Apple’s victory over Samsung in the design patent case seem like small potatoes.

2. Strict Liability

Copyright law is a strict liability regime. Anyone who reproduces another’s work, prepares a derivative work, distributes an infringing copy, or publicly performs or displays a protected work without authorization from the copyright owner or the law (e.g., fair use or other defenses) will be liable for

²⁹⁷ *Davis*, 246 F.3d at 160 (quoting 17 U.S.C. § 504(b) (2018)).

²⁹⁸ *Id.* at 176.

²⁹⁹ 131 F. Supp. 3d 946 (N.D. Cal. 2015).

³⁰⁰ *Id.* at 948; see also Roger Parloff, *Google vs. Oracle*, NEWSWEEK, June 7, 2019, at 30-37. The Android platform consists of 15 million lines of code, .01% of which is alleged to infringe Oracle copyrights. Petition for a Writ of Certiorari at 7, *Google LLC v. Oracle Am., Inc.*, No. 18-956 (U.S. Jan. 24, 2019).

³⁰¹ Bogdan Petrovan, *How Does Google Make Money from Android?*, ANDROID AUTH. (Jan. 22, 2016), <https://www.androidauthority.com/how-does-google-make-money-from-android-669008/> [<https://perma.cc/FDP8-9H4W>].

³⁰² *Oracle*, 131 F. Supp. 3d at 951.

³⁰³ *Oracle Am., Inc. v. Google LLC*, 886 F.3d 1179, 1210 (Fed. Cir. 2018). In an earlier ruling, the CAFC overturned a district court ruling that the parts of the Java API Google used in Android could not be protected by copyright law under the method exclusion of 17 U.S.C. § 102(b) (2018) and the merger doctrine. *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339, 1348, 1352 (Fed. Cir. 2014).

³⁰⁴ The Supreme Court granted Google’s second Petition for Certiorari. *Google LLC v. Oracle Am., Inc.*, 140 S. Ct. 520 (2019) (mem.). The Court heard oral arguments on October 7, 2020.

infringement.³⁰⁵ Unlike trademark, design patent, and utility patent law, however, copyright's strict liability rule is mitigated by its recognition that independent creation of the same or a substantially similar work does not infringe.³⁰⁶

Although plaintiffs in litigated copyright infringement cases often claim willful infringement,³⁰⁷ courts sometimes hold innocent infringers liable and order disgorgement of substantial amounts of their profits.³⁰⁸ Moreover, a good faith belief that one's conduct is noninfringing does not negate the availability of disgorgement. Frank Music, for example, obtained a substantial disgorgement award even though MGM Grand had a good faith belief that its use of the plaintiff's song was covered by an ASCAP license.³⁰⁹

3. Restoring Copyright's Disgorgement Remedy to Its Equitable Origins

Courts in the modern era routinely let juries award both actual damages and infringer profits in copyright cases. One treatise considers this appropriate under the Supreme Court's decision in *Dairy Queen, Inc. v. Wood*,³¹⁰ a trademark case, which it construes as holding that profits disgorgement is a legal remedy for which a jury trial is available.³¹¹ Recent scholarship has, however, called this conclusion into question.³¹² Another treatise considers this issue to be

³⁰⁵ 17 U.S.C. § 106. However, active inducement of copyright infringement requires intent to cause third-party infringement. *See, e.g., Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 915 (2005). Contributory copyright infringement requires knowingly making a material contribution to another's infringement. *See, e.g., Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 29 (2d Cir. 2012).

³⁰⁶ *See, e.g., ABRAHAM DRASSINOWER, WHAT'S WRONG WITH COPYING?* 58-59 (2015).

³⁰⁷ *See, e.g., Oracle*, 131 F. Supp. 3d at 951; *supra* notes 299-304 and accompanying text.

³⁰⁸ *See, e.g., Three Boys Music Corp. v. Bolton*, 212 F.3d 477, 482 (9th Cir. 2000) (awarding \$5.4 million damages against unconscious infringer); *ABKCO Music, Inc. v. Harrison Music, Ltd.*, 508 F. Supp. 798, 801-02 (S.D.N.Y. 1981) (disgorging 75% of net profits from infringing song even though infringement was unconscious), *modified*, 722 F.2d 988 (2d Cir. 1983).

³⁰⁹ *Frank Music Corp. v. Metro-Goldwyn-Mayer, Inc.*, 772 F.2d 505, 510 (9th Cir. 1985). Willfulness and innocence are relevant when courts award statutory damages. These damages can be awarded within a range as a court deems "just." 17 U.S.C. § 504(c)(1). But, willful infringement awards may be up to \$150,000 per infringed work. *Id.* § 504(c)(2). Innocent infringers may qualify for a reduction in the minimum statutory damage award of \$750. *Id.* Willfulness is also relevant in cases involving false domain name registrants and criminal copyright infringement. *See id.* §§ 504(c)(3), 506.

³¹⁰ 369 U.S. 469 (1962).

³¹¹ 6 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 22:149 (2020); *see also Dairy Queen*, 369 U.S. at 479.

³¹² Thurmon, *supra* note 126, at 4-5 (characterizing courts' and commentators' interpretation of *Dairy Queen* as "problematic").

unresolved.³¹³ Recently, a district court ruled that profits disgorgement in copyright cases is an equitable remedy that only courts can decide.³¹⁴

The Supreme Court's recent *Petrella* decision acknowledged the equitable character of the disgorgement remedy in copyright cases.³¹⁵ MGM obtained motion picture rights to a screenplay based on the life of boxer Jake LaMotta, coauthored by Petrella and LaMotta, in 1978 and released the resulting film *Raging Bull* in 1980.³¹⁶ After Petrella died, his rights passed to his daughter who became the sole copyright owner of an early version of the screenplay sometime after 1991.³¹⁷ MGM never sought to acquire her rights. In 1998, Paula Petrella advised MGM that she intended to assert these rights and finally sued in 2009, seeking monetary and injunctive relief for acts of infringement within the three-year statute of limitations under the Copyright Act.³¹⁸ Lower courts granted MGM's summary judgment motion, holding that the equitable doctrine of laches barred the claim.³¹⁹ The Supreme Court reversed.³²⁰

Although the Court allowed Petrella's case to proceed, it indicated that courts may consider equitable factors, such as a plaintiff's delay in bringing a claim and a defendant's reliance on that delay, in deciding whether disgorgement is an appropriate remedy and how much to apportion.³²¹ Indeed, the Court sanctioned consideration of a plaintiff's delay and the defendant's reliance at the remedial stage: "[T]he District Court, in determining appropriate injunctive relief and assessing profits, may take account of [Petrella's] delay in commencing suit. In doing so, however, that court should closely examine MGM's alleged reliance

³¹³ 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 14.03[E] (2020) ("Still, it remains to get to the bottom of the issue, to determine if an award of profits is more in the nature of restitution than punishment, and therefore falls within the scope of equity.").

³¹⁴ See *Fair Isaac Corp. v. Fed. Ins. Co.*, No. 0:16-cv-01054, 2020 WL 3446872, at *6 (D. Minn. June 24, 2020) (affirming magistrate judge's ruling in software copyright case that disgorgement of infringer's profits is an equitable remedy for which a jury trial is unavailable). In support of its conclusion, the district court quoted the Supreme Court's decisions in *Sheldon*, *id.* at *4-6, *4 n.3 (quoting *Sheldon v. Metro-Goldwyn Pictures Corp.*, 309 U.S. 390, 399 (1940)), and *Petrella*, *id.* at *4, *6 (quoting *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 572 U.S. 663, 668 n.1, 687-88 (2014)). The court further noted that *Petrella* quoted *Haas v. Leo Feist, Inc.*, 234 F. 105 (S.D.N.Y. 1916), for the proposition that in a copyright case, "[e]quity will control its peculiar remedy of an account of profits according to its own sense of justice." *Fair Isaac*, 2020 WL 3446872, at *6 (alteration in original) (quoting *Petrella*, 572 U.S. at 687).

³¹⁵ *Petrella*, 572 U.S. at 668 n.1.

³¹⁶ *Id.* at 673.

³¹⁷ *Id.* at 673-74; see *Stewart v. Abend*, 495 U.S. 207, 220 (1990) (holding that renewal rights vest in heirs upon the author's death, free from any agreement by author to transfer renewal rights at end of the original copyright term).

³¹⁸ *Petrella*, 572 U.S. at 674-75.

³¹⁹ *Petrella v. Metro-Goldwyn-Mayer, Inc.*, No. 09-cv-00072, 2010 WL 11531222, at *7 (C.D. Cal. Feb. 3, 2010), *aff'd*, 695 F.3d 946 (9th Cir. 2012), *rev'd*, 572 U.S. 663 (2014).

³²⁰ *Petrella*, 572 U.S. at 688.

³²¹ *Id.* at 687.

on Petrella's delay."³²² The Court was receptive to "any other considerations that would justify adjusting injunctive relief or profits," citing with approval the Solicitor General's observation during oral argument that "in fashioning equitable remedies, [the] court has considerable leeway; it could, for example, allow MGM to continue using Raging Bull as a derivative work upon payment of a reasonable royalty to Petrella."³²³

The same equitable considerations that the *Restatement of Unfair Competition* articulates to modulate apportionment in trademark, trade secrecy, and right of publicity cases should apply equally well in copyright cases.³²⁴ In assessing disgorgement claims, courts should heed overarching concerns about the size of the award needed for deterrence and compensation purposes and countervailing concerns to avoid overdeterrence, because excessive disgorgement awards may incent potential infringers to take excessive precautions and chill socially productive activities.

C. Design Patent Law

Of the five major U.S. IP regimes, design patent law is the most divergent from traditional equitable principles. Design patentees have a statutory right to seek an award of the defendant's "total profit" on the manufacture or sale of any "article of manufacture" that embodies the infringing design.³²⁵ While every IP regime allows total profit awards under some circumstances, design patent law lacks important limitations and safety valves found in other IP regimes. There is, for instance, no requirement of conscious wrongdoing,³²⁶ and the infringing

³²² *Id.* (citation omitted).

³²³ *Id.* at 687-88. Also significant is the Court's more recent *Liu* decision, which relied on several of its copyright and patent infringement decisions in support of the proposition that disgorgement of a wrongdoer's profits is an equitable remedy. *Liu v. SEC*, 140 S. Ct. 1936, 1943-44 (2020).

³²⁴ The *Restatement of Unfair Competition* lists the following factors as relevant to determining monetary relief for appropriation of trade secrets:

- (a) the degree of certainty . . . [of] the fact and extent of the pecuniary loss or the actor's pecuniary gain resulting from the appropriation;
- (b) the nature and extent of the appropriation;
- (c) the relative adequacy to the plaintiff of other remedies;
- (d) the intent and knowledge of the actor and the nature and extent of any good faith reliance by the actor;
- (e) any unreasonable delay by the plaintiff in . . . asserting its rights; and
- (f) any related misconduct on the part of the plaintiff.

RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45(2) (AM. LAW INST. 1995).

³²⁵ Under 35 U.S.C. § 284 (2018), design patentees can recover actual damages or a reasonable royalty which courts can increase to up to three times if the infringement is willful. Alternatively, under 35 U.S.C. § 289, design patentees can opt to be awarded the infringers' total profit on the manufacture or sale of articles of manufacture to which the design was applied. Injunctive relief is available under 35 U.S.C. § 283.

³²⁶ Design patentees have exclusive rights to control making, using, and selling articles of manufacture that embody the protected design. 35 U.S.C. § 271(a). This is a strict liability regime. *See id.*

design need not be a substantial factor in sales.³²⁷ These rules are likely to yield profit-based awards far in excess of what is appropriate for proportional deterrence.³²⁸ Moreover, an apportionment of “total profit” is seemingly impermissible in design patent law. References to equitable considerations and discretion are rare in design patent cases. The only recognized safety valve in design patent law is the ability to persuade adjudicators that the relevant “article of manufacture” whose profits must be disgorged is something less than the end product.³²⁹

Section 289’s total profit rule has led to exorbitant disgorgement awards that are impossible to justify on grounds of deterrence or compensation and that overdetter when the defendant is not selling counterfeit goods or engaged in similarly egregious conduct. This concern is not just hypothetical. Such an award was the outcome of the hard-fought litigation between Apple and Samsung over the latter’s infringement of one or more of three design patents covering a few features of the external design of Apple’s iPhone, specifically, the black, flat screen-side face with rounded corners; the flat face of the screen with a bezel; and sixteen colorful icons as arranged on the opening user interface of the device.³³⁰ While Apple charged Samsung with willful infringement, Samsung defended by asserting that it had a good-faith belief that the patents at issue were invalid.³³¹

The total profit award for design patent infringement rendered in the first series of jury trials was \$399 million, said to represent Samsung’s profit on sales of infringing smartphones.³³² The Supreme Court vacated this award, holding that the relevant “article of manufacture” whose profits must be disgorged did not have to be the end product (infringing smartphones) but could be some

³²⁷ See Mark A. Lemley, *A Rational System of Design Patent Remedies*, 17 STAN. TECH. L. REV. 219, 231 (2013) (comparing “entire market value rule” in utility patents, which requires patent owner to “show that the patent is the basis for demand of the product,” to design patent lost-profits remedy, which does not).

³²⁸ See *id.* at 221.

³²⁹ See *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 436 (2016) (“[T]he term ‘article of manufacture’ is broad enough to embrace both a product sold to a consumer and a component of that product, whether sold separately or not . . .”).

³³⁰ See *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 998-99 (Fed. Cir. 2015), *rev’d*, 137 S. Ct. 429 (2016).

³³¹ *Apple Inc. v. Samsung Elecs. Co.*, No. 4:11-cv-01846, 2011 WL 7036077, at *1-2 (N.D. Cal. Dec. 2, 2011).

³³² *Samsung*, 137 S. Ct. at 433. The history of the case is recounted in *Apple Inc. v. Samsung Elecs. Co.*, No. 11-cv-01846, 2017 WL 4776443 (N.D. Cal. Oct. 22, 2017). Initially, the jury rendered a verdict against Samsung with damages totaling \$1.049 billion for infringement of Apple’s design patents, utility patents, and trade dress. See Amended Verdict Form, *Apple Inc. v. Samsung Elecs. Co.*, 926 F. Supp. 2d 1100 (N.D. Cal. 2013) (No. 5:11-cv-01846-LHK), ECF No. 1931, *vacated and remanded*, 786 F.3d 983 (Fed. Cir. 2015), *rev’d and remanded*, 137 S. Ct. 429 (2016).

component (black, flat screen-side face).³³³ On remand, however, Apple persuaded a jury to render an even larger total profit award—\$533 million.³³⁴

Samsung's holding that the relevant article of manufacture whose profits must be disgorged can be, but is not necessarily, a component or feature of the end product is inferior to rules used in other IP regimes to avert excessive awards.³³⁵ While Congress would have to amend § 289 to limit the availability of disgorgement awards to conscious wrongdoers, courts could adapt design patent's total profit rule by allowing the plaintiff to recover the total profit on end products only when the infringing elements were a substantial or driving factor in sales. Otherwise, courts could, in effect, apportion profits when the patented design did not drive sales by deciding the relevant article of manufacture was a component or feature of the product.³³⁶ Given the history of the disgorgement remedy in IP cases, courts would be on solid ground treating disgorgement claims in design patent cases as equitable in nature. Doing so would give courts the authority to exercise equitable discretion to adjust disgorgement awards.

1. Total Profit from an “Article of Manufacture” as the Measure of Disgorgement

The impetus for Congress's adoption of a special statutory disgorgement remedy for design patent infringement was the Supreme Court's 1885 decision to approve an award of only nominal damages (six cents) against a willful infringer of patented carpet designs in *Dobson v. Hartford Carpet Co.*³³⁷ In *Dobson*, a trial judge awarded Hartford \$737 in actual damages as the profits Hartford would have made had it sold 1100 yards of carpet embodying the patented design instead of Dobson.³³⁸ The Supreme Court reversed because Hartford failed to prove that customers who bought Dobson's carpets would

³³³ *Samsung*, 137 S. Ct. at 436.

³³⁴ See Jury Verdict, *Apple Inc. v. Samsung Elecs. Co.*, No. 5:11-cv-01846-LHK (N.D. Cal. May 24, 2018), ECF No. 3806; Reuters, *Jury Adds \$140 Million to Samsung's Apple Tab*, N.Y. TIMES, May 25, 2018, at B6. We are not alone in considering the *Samsung* award as excessive. See, e.g., Thomas F. Cotter, *Reining in Remedies in Patent Litigation: Three (Increasingly Immodest) Proposals*, 30 SANTA CLARA HIGH TECH. L.J. 1, 20 (2013); Lemley, *Rational System*, *supra* note 327, at 220-21 (describing “largest extant patent damages verdict in history” as “just a cost of doing business” given damages rule that “makes no sense”).

³³⁵ See *Samsung*, 137 S. Ct. at 436.

³³⁶ Samuelson & Gergen, *supra* note 2, at 230 (“[C]ourts could reformulate the article of manufacture inquiry so that a design patentee could recover the total profit on an end product only if the jury concluded that all or substantially all the profit on the product was attributable to the infringing design.”).

³³⁷ 114 U.S. 439, 447 (1885); see also *Dobson v. Dornan*, 118 U.S. 10, 18 (1886).

³³⁸ *Bigelow Carpet Co. v. Dobson*, 10 F. 385, 387 (C.C.E.D. Pa. 1882), *rev'd sub nom. Dobson v. Hartford Carpet Co.*, 114 U.S. 439 (1885). A special master reported that Hartford waived its claim for disgorgement of Dobson's profits. *Dobson*, 114 U.S. at 442. *Dornan*, by contrast, sought to disgorge Dobson's profits for infringing its design patents, but a special master found that Dobson had made no profits on sales of infringing carpets. *Dornan*, 118 U.S. at 17. *Dornan* too ended up with only a nominal damage award. *Id.* at 18.

have bought Hartford's carpets had there been no infringement; Hartford also failed to offer any evidence about what part of Dobson's profits were attributable to infringement rather than to other factors.³³⁹

The House Report supporting the new disgorgement rule warned that without the adoption of this new remedy, design patent law would be "virtually repeal[ed]."³⁴⁰ The Court's ruling had, the Report said, created an "emergency" in design industries.³⁴¹ To ensure that there would be some meaningful recovery when design patents had been infringed, Congress decided that a \$250 minimum statutory damage award should be available as "the average amount that will work substantial justice in the long run, taking into account all trades and industries that are likely to avail themselves of the design-patent laws," an amount the Report claimed would not be "too large."³⁴² The \$250 minimum would also be available in cases in which "the exact profit in dollars and cents cannot be proved under the severe and technical rules of the law."³⁴³ Yet if design patentees could prove that infringers profited on sales of products embodying infringing designs, they had a right to these profits.³⁴⁴

Design patent's total profit rule is more defendant friendly in one respect than the disgorgement rules of copyright law because defendants are allowed to deduct fixed costs, even in cases of willful infringement. In *Schnadig Corp. v.*

³³⁹ *Dobson*, 114 U.S. at 445-47 (indicating that factors other than pattern and design protected by plaintiff's design patent might influence purchasing behavior). A similar failure of proof doomed a utility patentee's damages claim in *Garretson v. Clark*, 111 U.S. 120, 121-22 (1884) (holding that plaintiff failed to produce evidence that would allow court to determine how to apportion damages for his patented improvement and not for other features of product). The *Dobson* Court held that the *Garretson* rule was "even more applicable to a patent for a design than to one for [a] mechanism." *Dobson*, 114 U.S. at 445.

³⁴⁰ H.R. REP. NO. 49-1966, at 1 (1886) (summarizing effect of Supreme Court's decision on volume of design patent applications).

³⁴¹ *Id.* at 2 ("The bill meets this emergency and provides a new rule of recovery for design patents.").

³⁴² *Id.* at 3. Courts often awarded this minimum in the late-nineteenth and early-twentieth centuries. *See, e.g.,* *Western Gas Fixture Co. v. Jefferson Glass Co.*, 296 F. 128, 129 (4th Cir. 1924) (holding that lower court erred in declining to award \$250); *Frank v. Geiger*, 121 F. 126, 127 (C.C.S.D.N.Y. 1903) (awarding \$250 against defendant who offered infringing design for sale). The \$250 minimum remains in the statute as an alternative award, although it is rarely invoked because it is a trivial sum in today's litigation contexts. *But see* *Kustom Cycles, Inc. v. Dragonfly Cycle Concepts, LLC*, No. 5:18-cv-05024, 2019 WL 2995484, at *3-4 (D.S.D. July 9, 2019) (awarding \$250 on default judgment and trebling it to \$750). Trebling § 289 disgorgement awards is inconsistent with CAFC precedents. *See* *Braun Inc. v. Dynamics Corp. of Am.*, 975 F.2d 815, 824 (Fed. Cir. 1992) ("Nothing in 35 U.S.C. § 289 authorizes an increase in a patentee's total profit. In fact, 35 U.S.C. § 289 explicitly precludes a patentee from 'twice recover[ing] the profits made from infringement.'" (alteration in original) (quoting 35 U.S.C. § 289 (2018))).

³⁴³ H.R. REP. NO. 49-1966, at 3.

³⁴⁴ *Id.* at 3. The intent was to "prevent[] the infringer from actually profiting by his infringement." *Id.* To avoid excessive awards, the 1887 Act forbade double recovery. *See* 35 U.S.C. § 289; *Braun*, 975 F.2d at 824.

Gaines Manufacturing Co.,³⁴⁵ for instance, the plaintiff owned a design patent on a three-piece, Spanish motif sectional sofa suite, which the defendant infringed.³⁴⁶ Schnadig appealed the profits award, arguing that there should be no deduction for Gaines's fixed costs.³⁴⁷ The Sixth Circuit affirmed the lower court ruling that allowed Gaines to deduct a reasonable amount of its fixed costs.³⁴⁸

Design patent's total profit rule strongly disfavors defendants, however, in that there is no possibility for apportionment once the defendant's profit on the manufacture or sale of the infringing article of manufacture has been established.³⁴⁹ In *Bergstrom v. Sears, Roebuck & Co.*,³⁵⁰ for example, the manufacturing defendant claimed that much of its profits from sales of fireplace grates embodying the patented design was attributable to the grate's functional characteristics.³⁵¹ The court rejected this apportionment argument, ordering disgorgement of more than \$1 million of after-tax profits.³⁵²

The House justified the new total profit rule by asserting that the protected design "sells" the product.³⁵³ This was commonly plausible when the total profit rule was adopted and for much of this law's history. Design patents back then issued for the overall appearance of articles of manufacture, and the infringement test established in the Supreme Court's *Gorham Co. v. White*³⁵⁴ decision turned on whether, "in the eye of an ordinary observer, giving such attention as a purchaser usually gives, . . . the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other."³⁵⁵

In the past, courts occasionally encountered design patent infringement claims presenting the doohickey problem. They rebuffed claims for total profits on end products when the design patent covered a small part. In *Young v. Grand Rapids Refrigerator Co.*,³⁵⁶ for instance, the infringed design was of a refrigerator door

³⁴⁵ 620 F.2d 1166 (6th Cir. 1980).

³⁴⁶ *Id.* at 1167.

³⁴⁷ *Id.*

³⁴⁸ *Id.* at 1175. However, the court reversed the lower court's award based on after-tax profits. *Id.* at 1171 (finding recovery of pretax profits was "result intended by the statute").

³⁴⁹ An early example is *Untermeyer v. Freund*, 50 F. 77, 79 (C.C.S.D.N.Y. 1892) (rejecting defendant's argument against disgorgement of profits on sales of watch cases embodying patented design), *aff'd*, 58 F. 205 (2d Cir. 1893).

³⁵⁰ 496 F. Supp. 476 (D. Minn. 1980).

³⁵¹ *Id.* at 495. The court rejected the defendant's argument that the design was too functional to be protected as an ornamental design for an article of manufacture. *Id.* at 489.

³⁵² *Id.* at 495. A total profit award might have been justified in *Bergstrom* because the manufacturer was a conscious wrongdoer and the aesthetic features covered by the design patent likely drove sales. *Id.* at 481-82.

³⁵³ H.R. REP. NO. 49-1966, at 3 (1886).

³⁵⁴ 81 U.S. (14 Wall.) 511 (1872).

³⁵⁵ *Id.* at 528.

³⁵⁶ 268 F. 966 (6th Cir. 1920).

latch.³⁵⁷ Because it was impossible to determine what part of the profits from sales of refrigerators was due to the attractiveness of the patented latch design, the court awarded the \$250 statutory damage minimum.³⁵⁸ The court did not take seriously Young's contention that he should recover profits from sales of refrigerators containing the infringing latches.³⁵⁹ The Second Circuit in *Bush & Lane Piano Co. v. Becker Bros.*³⁶⁰ rejected a similar claim that the plaintiff was entitled to all of the defendant's profits from sales of pianos when the patent covered only the design of the exterior casing.³⁶¹ The court observed that "recovery should have been confined to the part which alone is covered by the claim of its patent."³⁶² It would be "out of proportion to the injury done" to award all of an infringer's profits on sales of end products embodying a partial design.³⁶³ A reasonable approximation of profits subject to disgorgement was 50% of the profits on sales of pianos embodying the patented design.³⁶⁴

The doohickey problem has become more acute, as two of us have explained elsewhere, because design patent rights since 1980 have been fragmented so that ever smaller parts of end products qualify for such rights.³⁶⁵ The risk of excessive awards has consequently increased dramatically, as the *Apple v. Samsung* case illustrates.

Samsung relied on *Bush & Lane* to support its contention that partial profits disgorgement awards could be rendered under § 289.³⁶⁶ The CAFC distinguished that case because defendant's customers could choose which exterior case they wanted for their pianos, whereas no one could buy Apple's design-patented parts separately from the smartphones.³⁶⁷ The CAFC concluded that the relevant article of manufacture for disgorgement purposes must be the

³⁵⁷ *Id.* at 967.

³⁵⁸ *Id.* at 973-74.

³⁵⁹ *Id.* at 974 ("The ornamental design of the shell added something to the attractiveness of the unitary article sold; but it is not seriously contended that all the profits from the refrigerator belonged to Young."). Young asked the court to award the \$250 minimum statutory damage for each refrigerator sold with the infringing latch, but the court thought this was inconsistent with the statute. *Id.*

³⁶⁰ 222 F. 902 (2d Cir. 1915).

³⁶¹ *Id.* at 903.

³⁶² *Id.* at 904.

³⁶³ *Id.* (reasoning that piano case "may be and is sold separate and apart from the music-making apparatus").

³⁶⁴ *Bush & Lane Piano Co. v. Becker Bros.*, 234 F. 79, 83 (2d Cir. 1916) (approving equal division of profits because "plaintiff has shown a real profit attributable in some degree to the infringing design").

³⁶⁵ Samuelson & Gergen, *supra* note 2, at 194-200 (explaining that fragmentation of novel partial design elements embodied in product has broadened scope of entitlement).

³⁶⁶ See *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 1002 (Fed. Cir. 2015) (noting that Samsung based its argument for limiting the profits award to the portion of the product embodying patented design on Second Circuit piano case decisions), *rev'd*, 137 S. Ct. 429 (2016); see also *Apple Inc. v. Samsung Elecs. Co.*, No. 5:11-cv-01846, 2017 WL 4776443, at *3 (N.D. Cal. Oct. 22, 2017) (same).

³⁶⁷ *Apple*, 786 F.3d at 1002.

end product sold in the marketplace.³⁶⁸ Shortly thereafter, in *Nordock, Inc. v. Systems Inc.*,³⁶⁹ the CAFC likewise overturned a jury's reasonable royalty award of \$46,825 for infringement of a design patent on the lip and hinge plate of a dock leveler.³⁷⁰ Consistent with its decision in *Apple v. Samsung*, the CAFC ruled that if Nordock sought an award under § 289, it was entitled as a matter of law to all of Systems's profits from the sales of dock levelers embodying the patented design.³⁷¹

The Court's *Apple v. Samsung* decision overturned the CAFC's *Apple* and *Nordock* rulings by clarifying that the relevant "article of manufacture" could be a component or feature of an end product. Yet, as long as courts send the relevant "article of manufacture" issue to juries, allowing them to decide whether the relevant article is the end product or some part of it, the risk of excessive awards remains, as the verdict against Samsung demonstrates. Two other post-*Samsung* jury verdicts have resulted in total profits awards on end products, even though the patented designs covered only parts of products.³⁷² Two of us have argued elsewhere that courts should decide the relevant "article of manufacture" issue as part of claim construction; courts should also decide how much profit to disgorge as a way to mitigate the risk of excessive awards in design patent cases.³⁷³ In this way, courts could award reasonable approximations of infringer profits attributable to infringement within the current statutory framework.

Total-profits-on-end-products awards in design patent cases are defensible (or at least not too problematic) when, as in *Dobson* and *Schnadig*, the patented designs cover the overall design of the end product and the attractiveness of this design drives demand for the end products in which the designs are embodied.³⁷⁴ Defendants in such cases may have consciously copied designs created and made popular by right holders, having decided to use the designs in the

³⁶⁸ Sarah Burstein, *The "Article of Manufacture" Today*, 31 HARV. J.L. & TECH. 781, 791 (2018) [hereinafter Burstein, *AOM Today*] ("Under [the CAFC's] rule, Samsung had to disgorge its total profits from the infringing smartphones, even though Apple's design patents covered only certain parts of those phones.").

³⁶⁹ 803 F.3d 1344 (Fed. Cir. 2015), *vacated and remanded*, 137 S. Ct. 589 (2016).

³⁷⁰ *Id.* at 1355-56.

³⁷¹ *Id.* Systems's profits on sales of the infringing dock-levelers exceeded \$630,000. *Id.*; *cf.* *Pac. Coast Marine Windshields Ltd. v. Malibu Boats, LLC*, No. 6:12-cv-00033, 2014 WL 4185297, at *11 (M.D. Fla. Aug. 22, 2014) (holding that owner of design patent for boat windshields was entitled to disgorgement of defendant's profits on sales of all boats containing infringing windows).

³⁷² *See* *Microsoft Corp. v. Corel Corp.*, No. 5:15-cv-05836, 2018 WL 2183268, at *3 (N.D. Cal. May 11, 2018) (granting remittitur reducing jury award that was still based on sales of defendant's entire software product); *Jury Verdict Form*, *Columbia Sportswear N. Am., Inc. v. Seirus Innovative Accessories, Inc.*, No. 3:17-cv-01781 (S.D. Cal. Sept. 29, 2017), ECF No. 377 (reporting jury award of more than \$3 million in profits on sales of gloves that infringed patent for glove liner designs).

³⁷³ Samuelson & Gergen, *supra* note 2, at 226-31 (recommending that Congress repeal or amend § 289; that judges, not juries, render design patent disgorgement judgments; or that judges refine jury instructions and special verdict forms).

³⁷⁴ *Id.* at 206-26.

expectation that sales would increase. While total profit awards generally yield a measure of damages greater than the actual profit attributable to the infringement, the rule simplifies the calculation of damages. The surplus can be justified on deterrence grounds or as compensation, especially if there is a low probability that the infringement will be detected or that the plaintiff will sue.

A total-profits-on-end-products award cannot be justified except as punishment in cases like *Apple*, *Nordock*, and *Young*, where design patents cover only some parts of much larger end products. In such situations, total profits from end products can far exceed profit realistically attributable to the infringement and therefore can commonly be expected to be disproportionate to the actual harm that infringement causes. The deterrence justification is particularly weak when a defendant is unaware it is violating a design patent or has reasonable grounds to believe it is not infringing a valid patent. More generally, in addition to being unfair, such awards can create undesirable precautionary incentives.

2. Strict Liability

Until 1952, design patent's total profit disgorgement rule could only be imposed on knowing infringers.³⁷⁵ The 1886 House Report offered explicit reassurances that the new remedy would not be unfair because of this restriction.³⁷⁶ Innocent infringers, such as merchants who had unwittingly purchased infringing products for resale to the public, might have to pay actual damages for infringing design patents, but their profits were safe from disgorgement.³⁷⁷

In 1952, when Congress revised U.S. patent law, the design patent disgorgement provision was reworded and codified as 35 U.S.C. § 289.³⁷⁸ The recodification retained the remedy's substance with one notable exception: the new statute omitted the previous statute's requirement of knowing infringement. Congress offered no explanation for making this important change. Courts have since recognized that § 289 makes no distinction among innocent, negligent, or willful infringers: Profits must always be disgorged if the plaintiff opts for this remedy.³⁷⁹

³⁷⁵ Act of Feb. 4, 1887, ch. 105, § 1, 24 Stat. 387, 387, amended by 35 U.S.C. § 289 (2018).

³⁷⁶ H.R. REP. NO. 49-1966, at 3-4 (1886) ("The bill provides only for a recovery from the manufacturer who manufactures for purposes of sale, and from the dealers who can be proved to have been in actual conspiracy with such manufacturer in the infringement, and therefore an innocent dealer or user is not affected.").

³⁷⁷ *Id.* Because design patent law gives patentees exclusive rights to control using, making, and selling products embodying the infringing design, unwitting purchasers of infringing products could be vulnerable to profits disgorgement under current law but not under the 1887 Act. *See* 35 U.S.C. § 271(a).

³⁷⁸ Act of July 19, 1952, Pub. L. No. 82-593, 66 Stat. 792.

³⁷⁹ *See, e.g., Schnadig Corp. v. Gaines Mfg. Co.*, 620 F.2d 1166, 1171 (6th Cir. 1980). Courts have power under § 284 to increase actual damage and reasonable royalty awards by up to three times when design patent infringement is willful; however, this rarely happens because plaintiffs generally prefer total profit awards under § 289.

Design patent practitioners and firms that rely on design patents tend to believe that there is no such thing as innocent infringement of design patents.³⁸⁰ However, innocent third parties may face disgorgement claims, as in *Bergstrom*. Sears, which sold the infringing grates, was required to disgorge profits even though nothing in the opinion suggested that it had knowledge of Bergstrom's patent or that it had conspired with the manufacturer to infringe it.³⁸¹ Under the 1887 Act, Sears would not have had to disgorge profits from sales of products embodying the patented design; under § 289, it did.³⁸² Merchants are thus vulnerable to losing profits from sales of products embodying infringing designs, as are customers who unwittingly purchased infringing products.³⁸³

We question whether this law should punish a company in Samsung's position for failing to bargain with Apple for a license to use the patented design elements. Samsung had good faith arguments that the design patents were invalid and that its use of the design elements did not infringe them, even if valid. Requiring Samsung to bargain for a license in this situation would, of course, be a cheaper way to resolve the dispute outside of court. But forcing a potential infringer to bargain gives a putative design patent holder an incentive to overclaim patent rights and an opportunity to constrain competition by using the threat of punitive total profit damages if a competitor proceeds without a license.

3. Disgorgement Shorn from Its Equitable Roots

Codification of the total profit remedy in 1887 was a first step in severing design patent's disgorgement remedy from its equitable roots. In the nineteenth century, design patent infringement claims generally were still brought in equity when plaintiffs sought an injunction. In *Untermeyer v. Freund*,³⁸⁴ a late nineteenth-century case involving infringement of a design patent for a watch case, the defendant argued that a court of equity could not render a design patent total profit award because this was a penalty and only juries could award penalties.³⁸⁵ The Second Circuit decided that Congress had expressly authorized

³⁸⁰ See, e.g., Brief of the Boston Patent Law Ass'n as Amicus Curiae in Support of Respondent at 2, *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429 (2016) (No. 15-777).

³⁸¹ *Bergstrom v. Sears, Roebuck & Co.*, 496 F. Supp. 476, 498 (D. Minn. 1980).

³⁸² Bergstrom was able to recover some but not all of Sears's profits on sales of infringing grates; the court allowed more than \$330,000 in deductions from Sears's profits on sales of the grates, perhaps due to its noninvolvement in the infringement. *Id.* at 497-98.

³⁸³ The design patent entitlement has been fragmented by judicial willingness to allow design patents to issue on ever-smaller elements of articles of manufacture, making the risk of inadvertent design patent infringement much higher than in the past. See Sarah Burstein, *The "Article of Manufacture" in 1887*, 32 BERKELEY TECH. L.J. 1 (2017) [hereinafter Burstein, *AOM in 1887*]; Burstein, *AOM Today*, *supra* note 368, at 789-93. Courts today do not invalidate design patents for lack of ornamentality unless there are, in effect, no alternative designs available to achieve the same function. See, e.g., Christopher Buccafusco & Mark A. Lemley, *Functionality Screens*, 103 VA. L. REV. 1293, 1350 (2017).

³⁸⁴ 58 F. 205 (2d Cir. 1893).

³⁸⁵ *Id.* at 210.

equity courts to enforce a penalty by enacting the 1887 law,³⁸⁶ failing to connect the statutory total profit remedy to the equitable remedy of accounting for profits.³⁸⁷

The disgorgement remedy was further separated from its equitable roots by the 1952 amendment that removed the requirement that defendants must have knowingly participated in design patent infringement to be liable to a disgorgement award.³⁸⁸ This eliminated an important limit on the remedy that reduced the risk of overdeterrance.

The total profit remedy in design patent law would still bear a family resemblance to the disgorgement remedy of trademark law if the nature of the design patent entitlement had not dramatically changed. Until 1980, design patents generally protected only the overall look of a product and could not be infringed unless the plaintiff had established that the defendant's product sufficiently resembled the plaintiff's product so that an ordinary person would likely be deceived.³⁸⁹ (In effect, this was a stronger limitation on the total profit rule than trademark's substantial factor rule.) It was also unlikely that competitors would sell products whose overall appearance resembled the patented design innocently or in good faith.

However, the design patent entitlement changed when appellate courts approved the extension of design patent protection to ever-smaller parts of articles of manufacture without requiring that the infringing element be a substantial factor in purchaser decisions.³⁹⁰ Consequently, firms now face infringement liability if a small part of its product overly resembles a patented small feature of a right holder's product. This creates a significant risk of good

³⁸⁶ *Id.* at 211.

³⁸⁷ Yet, the court stated, "If the profits upon the whole article are clearly due to the patented part, which gives to the article its marketable value, they are the measure of recovery." *Id.* This suggests that the court perceived Untermeyer's design as having driven Freund's sales. Some design patent cases have invoked equitable principles in applying the total profit rule. *E.g.*, *Bush & Lane Piano Co. v. Becker Bros.*, 222 F. 902, 904-05 (2d Cir. 1915) ("[G]iving the owner of a design patent for a receptacle intended to hold an expensive article of manufacture the profits made on the sale of the receptacle and its contents, must certainly lead to inequitable results and cannot be sustained."); *Bergstrom*, 496 F. Supp. at 496 ("Congress has chosen to prevent the unjust enrichment of infringers, and this overriding purpose is furthered by allowing the injured patentee to recover profits from the producer of the infringing article as well as the other sellers in the chain of distribution."). The Second Circuit in *Bush & Lane* rejected the plaintiff's claim for total profits on the sale of pianos when the design patent covered only the exterior casing, saying that such an award would "shock the conscience." *Bush & Lane*, 222 F. at 905.

³⁸⁸ See *supra* text accompanying note 378-379.

³⁸⁹ See Samuelson & Gergen, *supra* note 2, at 194.

³⁹⁰ *In re Zahn*, 617 F.2d 261, 267 (C.C.P.A. 1980) (reversing patent office's denial of patent on design of part of article of manufacture); see also Burstein, *AOM in 1887*, *supra* note 383, at 8-10; Samuelson & Gergen, *supra* note 2, 194-200 (noting that, since *Zahn*, it has become common for design patent applicants to claim separate patents in parts of end products).

faith infringement, particularly when defendants use a design on the reasonable belief that the patent is invalid.

The CAFC in *Nordock* and *Samsung* perceived no problem with sending total profit awards to juries, which fails to recognize the equitable nature of the disgorgement remedy.³⁹¹ However, the CAFC is now on record through its *Texas Advanced* decision, a trade secrecy case, recognizing that disgorgement is an equitable remedy for IP violations that can be imposed only by judges.³⁹² The CAFC relied on the history of disgorgement as an equitable remedy in copyright and patent cases and perceived no reason why disgorgement in trade secrecy cases should be handled any differently, and it rejected TAOS's argument that the Supreme Court's *Dairy Queen* decision held otherwise.³⁹³ Two of us have argued elsewhere that the total profit remedy in § 289 could and should also be classified as an equitable remedy.³⁹⁴ We fault the Supreme Court's decision in *Samsung* for failing to articulate the equitable character of the disgorgement remedy, which would have precluded the punitive \$533 million jury award after remand from the Court's ruling.³⁹⁵ It is heartening that one of the litigants in *Columbia Sportswear North America, Inc. v. Seirus Innovative Accessories, Inc.*³⁹⁶ recently urged the CAFC to hold that disgorgement is an equitable remedy that only judges can render.³⁹⁷ The CAFC declined to consider that issue but deemed it "important."³⁹⁸ So the issue is now teed up for that court's review.

D. Utility Patent Law

The starkest contrast between remedies in utility patent ("patent") law and those in other IP regimes lies in patent law's omission of disgorgement as a remedy for infringement since the mid-twentieth century.³⁹⁹ Before then, equity courts rendered such awards in patent infringement cases.⁴⁰⁰ Courts understand

³⁹¹ The CAFC made no reference to equitable principles in its *Samsung* and *Nordock* decisions.

³⁹² *Tex. Advanced Optoelectronic Sols., Inc. v. Renesas Elecs. Am., Inc.*, 895 F.3d 1304, 1325 (Fed. Cir. 2018).

³⁹³ *Id.* at 1319-27.

³⁹⁴ Samuelson & Gergen, *supra* note 2, at 228.

³⁹⁵ *See id.* at 227-29 ("Not only has disgorgement in IP cases historically been done in equity, but judges are much less likely to make awards that are punitive or otherwise grossly excessive.").

³⁹⁶ 942 F.3d 1119 (Fed. Cir. 2019).

³⁹⁷ *Id.* at 1132.

³⁹⁸ *Id.* Also deemed "important" was whether the relevant article of manufacture was the end product (gloves) or a component (design patent on liner). *Id.*

³⁹⁹ *See, e.g., SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 964 (2017) (noting that Congress abolished patent disgorgement remedy in 1946).

⁴⁰⁰ *See, e.g., Elizabeth v. Pavement Co.*, 97 U.S. 126 (1878) (disgorging contractor's profits derived from installing infringing pavement). In 1870, Congress gave equity courts power to award both actual damages and infringer profits. *See Act of July 8, 1870, ch. 230, § 55, 16 Stat. 198, 206* (stating that "upon bill in equity," prevailing patentee "shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the

Congress to have repealed this remedy in 1946.⁴⁰¹ Patent law instead provides for a reasonable royalty measure of damages.⁴⁰² In practice, reasonable royalty damages are often calculated with some attention to infringer profits.⁴⁰³ Courts can award up to treble damages in cases of willful infringement.⁴⁰⁴ Damages based on a multiple over a reasonable royalty can serve much the same deterrent and compensation functions as disgorgement.⁴⁰⁵

1. From Disgorgement to Reasonable Royalty Awards

Patent law has long wrestled with the doohickey problem. Before Congress repealed the disgorgement remedy, courts in patent cases adopted rules that were initially too strict in small-improvement and component-part patent cases, which defeated the purposes of deterrence and compensation and that were later too generous, creating the problem of overdeterrence. We briefly review this history and then explain that courts may consider infringer profits when calculating a reasonable royalty.

a. *Disgorgement Prior to 1946*

Patent law encountered the doohickey problem early on in cases in which a patent covered only a small improvement or component of a product made or sold by the defendant.⁴⁰⁶ When a patentee exploited its rights through licensing, the obvious solution was to base damages on the patentee's standard royalty. In *Seymour v. McCormick*,⁴⁰⁷ for instance, the defendant manufactured and sold

complainant has sustained thereby," with "the same powers to increase" damages as "in actions upon the case").

⁴⁰¹ See, e.g., *SCA Hygiene*, 137 S. Ct. at 964; see also H.R. REP. NO. 79-1587, pt. 2, at 1 (1946) (showing proposed legislative change to existing law in which provision allowing recovery of profits from infringement has been removed).

⁴⁰² 35 U.S.C. § 284 (2018) ("Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.").

⁴⁰³ See *Ga.-Pac. Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (concluding that profit-related data may be considered under widely used multifactor test for assessing reasonable royalties in patent cases), *modified in part sub nom.* *Ga.-Pac. Corp. v. U.S. Plywood-Champion Papers Inc.*, 446 F.2d 295 (2d. Cir. 1971).

⁴⁰⁴ 35 U.S.C. § 284; see also, e.g., *Graco, Inc. v. Binks Mfg. Co.*, 60 F.3d 785, 792 (Fed. Cir. 1995) ("Willfulness of the infringement is the sole basis for the court's exercise of its discretion to enhance damages under [§ 284].").

⁴⁰⁵ John M. Golden & Karen E. Sandrik, *A Restitution Perspective on Reasonable Royalties*, 36 REV. LITIG. 335, 373-74 (2017) ("Reticulation of measures, burdens, and presumptions with respect to reasonable royalties to take account of such gradations of fault or responsibility might enable patent law to better deter socially undesirable infringing activity and to better promote socially desirable innovation by patent-obtaining inventors and their followers alike.").

⁴⁰⁶ H.R. REP. NO. 79-1587, pt. 1, at 2.

⁴⁰⁷ 57 U.S. (16 How.) 480 (1854).

reapers in competition with Cyrus McCormick.⁴⁰⁸ McCormick had patented several reaper inventions, but most of these patents had expired.⁴⁰⁹ By the time Seymour began infringing, McCormick held patents only on an elevated seat and its connection to the reel.⁴¹⁰ While the Court recognized that awarding an infringer's entire profits might be appropriate in some cases, this remedy was inappropriate when a standard licensing fee existed.⁴¹¹ McCormick recovered that fee for each of the 300 machines found to infringe.⁴¹²

In the absence of a standard license fee, courts rendered profit-based awards under a standard articulated by the Supreme Court in *Elizabeth v. Pavement Co.*⁴¹³ in 1878.

It is also clear that a patentee is entitled to recover the profits that have been actually realized from the use of his invention, although, from other causes, the general business of the defendant, in which the invention is employed, may not have resulted in profits,—as where it is shown that the use of his invention produced a definite saving in the process of a manufacture. On the contrary, though the defendant's general business be ever so profitable, if the use of the invention has not contributed to the profits, none can be recovered. The same result would seem to follow where it is impossible to show the profitable effect of using the invention upon the business results of the party infringing. . . . But when the entire profit of a business or undertaking results from the use of the invention, the patentee will be entitled to recover the entire profits, if he elects that remedy.⁴¹⁴

The central point was that the disgorgement recovery should equal, not exceed, “the profits that have been actually realized from the use of [the patented] invention.”⁴¹⁵ Because the City of Elizabeth had made no profits from its use of the infringing pavement, no disgorgement remedy was available against it.⁴¹⁶ However, the contractors who installed the infringing pavement had to turn over their profits to the patentee.⁴¹⁷

Rules assigning burdens of proof ended up doing a great deal of work in patent disgorgement cases, particularly when combined with rules that forbade speculation. When the patented invention was “a complete thing,” such as a new

⁴⁰⁸ *Id.* at 480-81.

⁴⁰⁹ *Id.* at 480.

⁴¹⁰ *Id.* at 481.

⁴¹¹ *Id.* at 489 (reflecting that there is no rule of damages which will equally apply in all cases).

⁴¹² *Id.* at 489-91.

⁴¹³ 97 U.S. 126 (1878).

⁴¹⁴ *Id.* at 138-39 (citations omitted).

⁴¹⁵ *Id.* at 138.

⁴¹⁶ *Id.* at 140 (“The city of Elizabeth made no profit at all. It paid the same for putting down the pavement in question that it was paying to the defendant in error for putting down the Nicholson pavement proper . . . but damages are not sought, or, at least, are not recoverable, in this suit. Profits only, as such, can be recovered therein.”).

⁴¹⁷ *Id.*

form of pavement, the infringer bore the burden of showing that profits were not wholly attributable to the patented invention.⁴¹⁸ Failure to proffer such proof resulted in total profit awards. Yet, when the patent was “for an improvement, and not for an entirely new machine or contrivance,” such as a new “method of moving and securing in place the movable jaw or clamp of a mop-head,” the patentee bore the burden of showing the extent to which the infringer’s use of the patented invention contributed to its profits.⁴¹⁹ Failure to proffer sufficient proof resulted in awards of only nominal damages.⁴²⁰

Because courts came to recognize that this rule undercompensated patent holders, the Supreme Court decided in some early twentieth-century cases that patentees could effectively shift the burden of proof to defendants by offering evidence that the patented invention and other parts of the product were “inextricably commingled”⁴²¹ such that “it was impossible to make a separation of the profits.”⁴²² The infringer, in effect, became a “trustee for the plaintiff in respect of profits.”⁴²³ In less than a generation, this arrangement was deemed to over-enforce patent rights. As Judge Learned Hand said in 1933,

A rigid insistence upon this [rule] would cast [the infringer] for full profits in all cases except those in which by artificial and unreal distinctions courts should come to satisfy themselves that they could dissect the contribution of the prior art from that of the invention. . . . [T]he character of the tort ought not really to have such sanguinary results.⁴²⁴

b. *The 1946 Act and the Reasonable Royalty Alternative*

Dissatisfaction with disgorgement proceedings led Congress to amend the monetary remedy provisions for patent infringement in 1946. A House Report explained,

Frequently a suit for patent infringement involves the infringement of only an improvement in a complex machine, and it is impossible to apportion profits due to the improvement. In such circumstances the proceedings before masters, which are conducted in accordance with highly technical rules and are always expensive, are often protracted for decades and in many cases result in complete failure of justice.⁴²⁵

The 1946 amendment changed the patent remedy provision in two key ways: it eliminated any reference to disgorgement, and it provided that a reasonable

⁴¹⁸ *Id.* at 141.

⁴¹⁹ *Garretson v. Clark*, 111 U.S. 120, 121 (1884).

⁴²⁰ *Id.* at 120.

⁴²¹ *Westinghouse Elec. & Mfg. Co. v. Wagner Elec. & Mfg. Co.*, 225 U.S. 604, 618 (1912).

⁴²² *Id.* at 621-22.

⁴²³ *Id.* at 619 (quoting *Root v. Ry. Co.*, 105 U.S. 189, 214 (1882)).

⁴²⁴ *Cincinnati Car Co. v. N.Y. Rapid Transit Corp.*, 66 F.2d 592, 593 (2d Cir. 1933).

⁴²⁵ H.R. REP. NO. 79-1587, pt. 1, at 2 (1946); see also *Recovery in Patent Infringement Suits: Hearing on H.R. 5231 Before the H. Comm. on Patents*, 79th Cong. 3, 7 (1946) (statement of Rep. Robert K. Henry) (“Absolutely artificial and unsound rules have been invented to solve the impossible problem of how to apportion profits.”).

royalty should be a minimum award for patent infringement.⁴²⁶ Although courts were initially divided over the significance of this amendment, they ultimately accepted that the 1946 Act had, in effect, repealed disgorgement as a remedy for patent infringement.⁴²⁷ Congress expected reasonable royalty awards would more likely result in reasonable approximations without undue effort than disgorgement awards had done.⁴²⁸

Although reasonable royalty awards took some time to become established in patent law, their emergence and ultimate predominance were perhaps unsurprising given that the standard common-law measure of damages for wrongful takings or uses of property has long been the market value of what was taken or used.⁴²⁹ In IP law, this is a reasonable royalty.⁴³⁰ To prove what constitutes a reasonable royalty for infringement, patentees can use general evidence, such as any advantage that the use of the invention conferred on the defendant,⁴³¹ and thereby obtain more than merely nominal damages.⁴³² Judge

⁴²⁶ Act of Aug. 1, 1946, ch. 726, 60 Stat. 778.

⁴²⁷ See Caprice L. Roberts, *The Case for Restitution and Unjust Enrichment Remedies in Patent Law*, 14 LEWIS & CLARK L. REV. 653, 664-65 (2010). In 1964, a plurality of four Justices stated that “[t]he purpose of the [1946] change was precisely to eliminate the recovery of profits as such and allow recovery of damages only.” *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 505 (1964). Lower courts treated this conclusion as authoritative. See Golden & Sandrik, *supra* note 405, at 345. The Supreme Court reaffirmed this conclusion in 1983 in *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 654 (1983); see also *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 964 (2017) (“The remedy of damages seeks to compensate the victim for its loss, whereas the remedy of an accounting, which Congress abolished in the patent context in 1946, sought disgorgement of ill-gotten profits.” (footnote omitted)).

⁴²⁸ *Recovery in Patent Infringement Suits*, *supra* note 425, at 4 (statement of Rep. Robert K. Henry) (explaining how “eliminat[ing] an accounting for profits, and mak[ing] evidence at once admissible to show reasonable royalty” can prevent inquiry that “grows into a very intricate prolonged and expensive investigation”); H.R. REP. NO. 79-1587, pt. 1, at 1-2 (explaining how “mak[ing] the basis of recovery in patent-infringement suits general damages . . . not less than a reasonable royalty” can enable avoidance of “always expensive” and “often protracted” proceedings to account for profits). Over time, reasonable royalty adjudications have proven to be difficult as well. See, e.g., Stuart Graham, Peter Menell, Carl Shapiro & Tim Simcoe, *Final Report of the Berkeley Center for Law & Technology Patent Damages Workshop*, 25 TEX. INTELL. PROP. L.J. 115, 140 (2017).

⁴²⁹ See RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT § 51 (AM. LAW INST. 2011); see also Golden & Sandrik, *supra* note 405, at 341-42.

⁴³⁰ *Ga.-Pac. Corp. v. U.S. Plywood-Champion Papers Inc.*, 446 F.2d 295, 296 (2d Cir. 1971) (applying “willing buyer-willing seller” rule in determining a reasonable royalty” to derive market value).

⁴³¹ Golden & Sandrik, *supra* note 405, at 342.

⁴³² The CAFC has recognized that it would be inappropriate to award no damages for patent infringement except in extreme and arguably unrealistic circumstances, *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014), *overruled in part by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015), for example, “in a case completely lacking any evidence on which to base a damages award” or in a case where “at the time of infringement,

Learned Hand described the reasonable royalty remedy as “a device in aid of justice, by which that which is really incalculable shall be approximated, rather than that the patentee, who has suffered an indubitable wrong, shall be dismissed with empty hands.”⁴³³ It prevents otherwise-prevailing plaintiffs who cannot prove lost profits from walking away with nothing.

c. *The Role of Profits in Reasonable Royalty Calculations*

Estimates of profits attributable to infringement are routinely considered in determining a reasonable royalty when the patentee does not have a standard license price. Patent law thus still needs rules and procedures for estimating profits.⁴³⁴ Patentees are entitled to a jury trial on what constitutes a reasonable royalty because this sort of market-based award is a remedy that was available in an action at law in the eighteenth century.⁴³⁵

Despite its abrogation of disgorgement, patent law sometimes allows recovery of all or, more likely, some fraction of a defendant’s total profit on a product or project resulting from infringement.⁴³⁶ Although the general rule is that “[a] patentee is only entitled to a reasonable royalty attributable to the infringing features,”⁴³⁷ under the “entire market value rule,” a patentee may recover a royalty rate “based on the value of an entire apparatus . . . when the feature patented constitutes the basis for consumer demand”—or, alternatively put, “drove demand for the entire product.”⁴³⁸ In other cases, courts derive the royalty base by determining “the smallest salable unit” of the device that

the defendant considered the patent valueless and the patentee would have accepted no payment for the defendant’s infringement.” *Id.* at 1328.

⁴³³ *Cincinnati Car Co. v. N.Y. Rapid Transit Corp.*, 66 F.2d 592, 595 (2d Cir. 1933).

⁴³⁴ Courts often invoke hypothetical royalty negotiations in calculating a reasonable royalty. *See, e.g.*, *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1312 (Fed. Cir. 2011). Such negotiations commonly contemplate sharing the gains from the trade. *Ga.-Pac. Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (noting that courts sometimes consider “the amount which a prudent licensee . . . would have been willing to pay as a royalty and yet be able to make a reasonable profit” in reasonable royalty determination), *aff’d sub nom. Ga.-Pac. Corp. v. U.S. Plywood-Champion Papers Inc.*, 446 F.2d 295 (2d Cir. 1971).

⁴³⁵ *See Gergen, supra* note 152, at 828. Professor Cotter argues that “there is a nontrivial argument that awards of reasonable royalties could be recharacterized as a form of equitable relief.” Cotter, *supra* note 334, at 9. We disagree. The conventional remedy in an action for assumpsit in which the defendant took or used the plaintiff’s property was the market value of what the defendant took or used.

⁴³⁶ Patent cases sometimes address a subtle issue that other IP regimes have generally ignored: how to apportion profit between plaintiff and defendant when the combination of their entitlements and resources was responsible for some portion of profits. *See Roberts, supra* note 427, at 480.

⁴³⁷ *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 904 F.3d 965, 977 (Fed. Cir. 2018).

⁴³⁸ *Id.* at 978 (first quoting *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1336 (Fed. Cir. 2009); and then quoting *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1329 (Fed. Cir. 2014)).

incorporates the patented technology and then “estimat[ing] what portion of that smallest salable unit is attributable to the patented technology.”⁴³⁹

When engaging in a hypothetical-negotiation approach to calculating reasonable royalties, the CAFC has emphasized that “[w]hat an infringer’s profits actually turned out to have been during the infringement period” is only relevant “as some evidence bearing on a directly relevant inquiry into anticipated profits.”⁴⁴⁰ A reasonable royalty need not be based on the infringer’s profits at all. If a patentee would expect to lose profits as a result of the infringer’s sales, these anticipated lost profits could constitute a reasonable royalty.⁴⁴¹ A reasonable-royalty calculus can also consider “the commercial relationship between the licensor and licensee,” such as whether they are competitors.⁴⁴² When an infringer is a direct competitor of the patentee, this may justify increasing the percentage of associated profits to which a reasonable royalty corresponds, thereby making a reasonable royalty award more closely approximate a disgorgement award.⁴⁴³

In the past decade, the CAFC has somewhat clarified burdens and tightened standards for proving reasonable royalties.⁴⁴⁴ Consistent with the origins of the reasonable royalty as “a device in aid of justice,”⁴⁴⁵ the CAFC has stressed that it has “never required absolute precision in [the] task” of calculating a reasonable royalty, for “it is well-understood that [the] process may involve some degree of approximation and uncertainty.”⁴⁴⁶ But with Congress having recently threatened to enact new statutory language to regulate the assessment of reasonable royalty awards,⁴⁴⁷ the CAFC has acknowledged that, even without such amendments, there are significant constraints on the acceptable size and, relatedly, evidentiary bases for reasonable royalty awards. In *Lucent*

⁴³⁹ *Id.* at 977.

⁴⁴⁰ *Aqua Shield v. Inter Pool Cover Team*, 774 F.3d 766, 770 (Fed. Cir. 2014).

⁴⁴¹ *See Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1555 (Fed. Cir. 1995) (en banc) (upholding district court’s award of reasonable royalty equaling “one-half [of patentee’s] expected lost profits” without explaining why prudent patentee would accept royalty for less than its expected losses from licensed activity).

⁴⁴² *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 853 (Fed. Cir. 2010) (considering Microsoft’s direct competition with i4i in reasonable royalty calculation).

⁴⁴³ *See id.* at 853-56 (upholding admissibility of expert testimony that partly relied on infringer’s status as “a direct competitor” as justification for “increas[ing] the baseline royalty rate”); *see also Rite-Hite*, 56 F.3d at 1554-55 (concluding infringer’s status as “a strong competitor” properly influenced district court’s assessment of reasonable royalty).

⁴⁴⁴ *See* John M. Golden, *Reasonable Certainty in Contract and Patent Damages*, 30 HARV. J.L. & TECH. 257, 261 (2017) (describing “a series of decisions tightening the evidentiary standards for establishing the value of reasonable royalty damages”).

⁴⁴⁵ *Cincinnati Car Co. v. N.Y. Rapid Transit Corp.*, 66 F.2d 592, 595 (2d Cir. 1933); *see also supra* text accompanying note 433.

⁴⁴⁶ *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1328 (Fed. Cir. 2014).

⁴⁴⁷ *See* John M. Golden, *Principles for Patent Remedies*, 88 TEX. L. REV. 505, 582-83 (2010) (discussing proposed legislation intended “[t]o help limit awards of reasonable-royalty damages to no more than that fraction of the infringer’s revenue ‘properly attributable’ to use of the patented invention”).

Technologies, Inc. v. Gateway, Inc.,⁴⁴⁸ for instance, the CAFC vacated a jury award of \$357.7 million for infringement of a patent on a method of entering data into fields on a computer screen without use of a keyboard because “the portion of the profit that can be credited to the infringing use . . . is exceedingly small.”⁴⁴⁹

2. Strict Liability

Like trademark, copyright, and design patent law, utility patent law is a strict liability regime.⁴⁵⁰ Unlike copyright law, the strict liability rule of patent law is not mitigated by independent creation defenses.⁴⁵¹ Moreover, because patent law grants exclusive rights to control uses of patented inventions, not just making and selling them,⁴⁵² even innocent consumers and dealers may be liable for patent infringement.⁴⁵³

The main respect in which willful infringement is taken into account in patent cases is through the power the Patent Act gives courts to increase actual damages, including a reasonable royalty, by up to three times.⁴⁵⁴ The Supreme Court has stated that “[t]he sort of conduct warranting enhanced damages has been variously described in our cases as willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant or—indeed—characteristic of a pirate.”⁴⁵⁵ Subjective bad faith is the touchstone of enhanced actual damage awards.⁴⁵⁶

⁴⁴⁸ 580 F.3d 1301 (Fed. Cir. 2009).

⁴⁴⁹ *Id.* at 1333.

⁴⁵⁰ See *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015).

⁴⁵¹ See, e.g., Robert P. Merges, *A Few Kind Words for Absolute Infringement Liability in Patent Law*, 31 *BERKELEY TECH. L.J.* 1, 6 (2016) (“[P]atent law’s disregard for independent invention lives on.”). However, the Patent Act provides a limited exemption from infringement liability for prior users who, “acting in good faith, commercially used [patented] subject matter in the United States . . . at least 1 year before the earlier of” the patented subject matter’s “effective filing date” or a relevant date of public disclosure of the patented subject matter traceable to the inventor. 35 U.S.C. § 273(a) (2018).

⁴⁵² 35 U.S.C. § 271(a).

⁴⁵³ See, e.g., *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 483 (1964) (finding that purchasers of infringing convertibles were direct infringers). The license that Ford negotiated with Aro released Ford’s customers as well as the firm from liability. *Id.* at 495-97 (holding that when patentee issues implied license to use via sale or authorization to sell, patentee cannot restrict license).

⁴⁵⁴ 35 U.S.C. § 284. Willful infringement affects eligibility for attorney fee awards. *Id.* § 285.

⁴⁵⁵ *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1932 (2016). Enhanced damages are “generally reserved for egregious cases of culpable behavior.” *Id.*

⁴⁵⁶ The Court rejected the CAFC’s heightened standard for enhanced damages under which a plausible defense to an infringement claim would insulate the infringer from enhanced awards, perceiving that rule to be unfair because “someone who plunders a patent—infringing it without any reason to suppose his conduct is arguably defensible—can nevertheless escape any comeuppance under § 284 solely on the strength of his attorney’s ingenuity.” *Id.* at 1933.

In practice, this power to treble patent damage awards functions somewhat like a disgorgement remedy because the risk of being ordered to pay a multiple of reasonable royalty damages encourages erstwhile infringers to bargain for a license. Unfortunately, as with the disgorgement remedy, the reasonable royalty remedy is not well calibrated to achieve this purpose to the extent that the royalty is pegged to the defendant's profit. Further, the degree of enhancement is not necessarily calibrated properly to achieve or even advance a goal of proportional deterrence. Trebling a reasonable royalty could generate an award that exceeds what disgorgement would have provided and could result in overdeterrence if, for example, the ex ante probability of enforcement was relatively high. On the other hand, the factor-of-three cap on enhancing damages can prevent a court from being able to achieve the desired level of proportional deterrence when the background probability of rights enforcement is very low.⁴⁵⁷

3. Equitable Considerations

Prior to 1946, judges sitting in equity rendered disgorgement awards in patent cases. In *Livingston v. Woodworth*,⁴⁵⁸ for instance, the Supreme Court reversed an award of almost \$4000, twice the actual profits made from the infringement.⁴⁵⁹ A master sought to justify this award because the defendants were wrongdoers who should have to pay more than their profits.⁴⁶⁰ The Court responded, "We are aware of no rule which converts a court of equity into an instrument for the punishment of simple torts."⁴⁶¹ Enhanced damage awards were only available in the law courts, and only profits that infringers made from infringement could be disgorged.⁴⁶²

Equitable considerations also informed the commitment to disgorge only profit attributable to infringement (i.e., "apportionment") and to take a flexible approach to evidentiary requirements. In *Dowagiac Manufacturing Co. v. Minnesota Moline Plow Co.*,⁴⁶³ for instance, a patentee failed to offer evidence about the value attributable to a machine component whose patent was infringed and failed even to "attempt[] to show that [apportionment] was impossible."⁴⁶⁴ The Court observed: "It well may be that mathematical exactness was not possible, but . . . that degree of accuracy is not required but only reasonable approximation, which usually may be attained through the testimony of experts and persons informed by observation and experience."⁴⁶⁵ In *Dowagiac*, the

⁴⁵⁷ See *supra* text accompanying note 194.

⁴⁵⁸ 56 U.S. (15 How.) 546 (1854).

⁴⁵⁹ *Id.* at 560 (noting that penalty against appellants would be "peculiarly harsh and oppressive.").

⁴⁶⁰ *Id.* at 559.

⁴⁶¹ *Id.*

⁴⁶² See *id.* at 560.

⁴⁶³ 235 U.S. 641 (1915).

⁴⁶⁴ *Id.* at 646-47.

⁴⁶⁵ *Id.* at 647.

master had found no obstacle to apportionment,⁴⁶⁶ and while the patented component was an important part of the machine, the value of the machines was not wholly attributable to the patented part.⁴⁶⁷ The Court remanded the case for a proper apportionment determination.⁴⁶⁸ In the Court's words, "the result to be accomplished is a rational separation of the net profits so that neither party may have what rightfully belongs to the other."⁴⁶⁹

The reasonable royalty measure of damages has enabled courts to exercise some analogous flexibility in providing monetary relief that serves the interests of justice.⁴⁷⁰ Laches is no longer a complete defense to infringement, as it had been under precedents from multiple circuits,⁴⁷¹ as long as the infringement occurred within the Patent Act's six-year time limitation on recovery for infringement.⁴⁷² Even so, as the Court said in *General Motors Corp. v. Devex Corp.*,⁴⁷³ "undue delay in prosecuting [a] lawsuit" may justify a court's "limit[ing] prejudgment interest, or perhaps even deny[ing] it altogether."⁴⁷⁴ Further, a patentee's litigation misconduct can have relevance for the availability of enhanced damages⁴⁷⁵ and attorney fee awards.⁴⁷⁶

IV. REFLECTIONS ON THE DISGORGEMENT REMEDY ACROSS IP REGIMES

The five major IP regimes have virtually identical remedial rules on awards of actual damages and grants of injunctive relief, yet quite different rules about disgorgement of infringer profits. Trademark and trade secrecy laws are the most consonant with traditional equitable principles, and their rules do the best job modulating the disgorgement remedy so that it serves the purpose of deterrence without tipping too far into punishment. This result is generally achieved by

⁴⁶⁶ *Id.* at 646-47.

⁴⁶⁷ *Id.* at 643.

⁴⁶⁸ *See id.* at 650-51 (observing that "[o]rdinarily" Court's reasoning "would lead to an affirmance" of award of only nominal damages, but "[t]he hearings before the masters" occurred at time when relevant precedent on apportionment was "not harmonious").

⁴⁶⁹ *Id.* at 647.

⁴⁷⁰ *See supra* text accompanying notes 444-446.

⁴⁷¹ *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 963-66 (2017).

⁴⁷² *Id.* at 967; *see also* 35 U.S.C. § 286 (2018) ("[N]o recovery shall be had for any infringement committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action.").

⁴⁷³ 461 U.S. 648 (1983).

⁴⁷⁴ *Id.* at 657.

⁴⁷⁵ *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1933 (2016) ("The subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless.").

⁴⁷⁶ *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. 545, 554 (2014) (holding that § 285 authorizes district courts to award attorney fees in cases "that stand[] out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated").

rules that (1) make possible awards in excess of the profit probably attributable to infringement but that also limit profits that are subject to disgorgement through a substantial factor rule or devices such as apportionment, (2) condition liability on conscious wrongdoing, (3) provide equitable discretion so that a court can adjust the size of an award based on the egregiousness (or lack thereof) of the defendant's conduct, and (4) provide further equitable safety valves such as laches defenses. The strict liability rules of copyright, design patent, and utility patent laws notwithstanding, there is sufficient flexibility in the remedial regimes of these laws for courts to render disgorgement awards that adequately deter infringement and compensate right holders for infringement without tipping too far into punishment. We make several recommendations to help courts achieve this balance.

A. *Conscious Wrongdoing*

We strongly support retention of the traditional approach of generally requiring conscious wrongdoing, as defined here,⁴⁷⁷ for disgorging infringer profits in trademark cases, either through a statutory amendment or judicial application of equitable principles in the aftermath of the 2020 Supreme Court decision in *Romag*. The Court held that willfulness is not a precondition to a profit award in a trademark case, but Justice Gorsuch's opinion for the majority acknowledges that "a trademark defendant's mental state is a highly important consideration in determining whether an award of profits is appropriate."⁴⁷⁸ The concurring opinions of Justices Alito and Sotomayor underscore this point.⁴⁷⁹

A conscious wrongdoing requirement is a traditional restriction on the disgorgement remedy and has long been a part of trademark law. We have argued that conscious wrongdoing is preferable to willfulness as an expression of the requirement because it more clearly identifies the rule's two parts. First, an actor must be consciously aware that it is (or may be) infringing an IP right. The requirement of conscious awareness enables the disgorgement remedy to function as a deterrent in cases where an actor knows that it is violating an IP entitlement, especially where the actor can reasonably bargain with the IP holder in advance.⁴⁸⁰ The requirement also helps limit the burden on innocent parties who might otherwise either be discouraged from pursuing socially productive activities or be burdened with undertaking unduly costly efforts to clear rights about whose existence and bounds they might have little reason to be aware. Parties who are conscious of a specific and substantial risk of infringement are the ones whom the law can most productively encourage to seek out right holders and to negotiate for the right to use another's IP.

⁴⁷⁷ See *supra* text accompanying notes 104-108.

⁴⁷⁸ *Romag Fasteners, Inc. v. Fossil, Inc.*, 140 S. Ct. 1492, 1497 (2020).

⁴⁷⁹ *Id.* (Alito, J., concurring) ("[W]illfulness is a highly important consideration in awarding profits . . . but not an absolute precondition."); *id.* at 1498 (Sotomayor, J., concurring in judgment) ("[The statute] does not impose a 'willfulness' prerequisite for awarding profits in trademark infringement actions.").

⁴⁸⁰ See *supra* text accompanying notes 190-194.

Second, the wrongfulness prong goes to the absence of extenuating circumstances that justify the infringer's decision to proceed without bargaining for the right. The *Restatement of Restitution* gives the example of trespass by necessity.⁴⁸¹ However, the issue of necessity rarely comes up in IP cases. In trademark cases, infringement is usually found not to be willful in circumstances where the infringer had a good faith belief that it was not committing a trademark violation. In many of these cases, the defendant acted reasonably in deciding to proceed without resolving the known legal uncertainty by bargaining with the plaintiff to obtain a license.

While Congress would have to amend the copyright and design and utility patent laws to limit the availability of disgorgement to conscious wrongdoers, courts can, consistent with *Petrella*, take knowledge and fault (or the lack thereof) into account as a matter of equitable discretion in cases involving these rights. It is difficult to reconcile disgorgement awards against innocent or good faith infringers with traditional equitable principles as well as with the goal of achieving proportional deterrence, which we have argued is the proper aim of disgorgement in the IP context.⁴⁸²

B. *Measures for Disgorgement*

All five IP regimes have a rule under which a right holder can recover the total profit a wrongdoer made from infringement. This rule generally measures damages by the defendant's total profit on sales of products or a project involving the infringing conduct. In all IP regimes, when the total profit rule applies, the burden is on the plaintiff to establish gross revenues on sales or on a project that involved infringing conduct. The burden is then generally on the defendant to establish deductions. IP regimes vary somewhat in what deductions are allowable. We think that there should be more consistency in how deductions are handled across IP regimes. The total profit rule will generally yield a damage measure that exceeds the profit for which the infringing conduct is more likely than not a but-for cause. But this is appropriate as long as total profit awards are restricted to cases of conscious wrongdoing and as long as the excess is not substantially disproportionate to that needed to reasonably deter the defendant from wrongful conduct.

IP regimes vary significantly in the rules used to determine when the total profit rule applies. In trademark law, the total profit rule applies only when the infringing mark is a substantial factor in purchaser decisions. In design patent law, the defendant's total profit on an end product will be awarded under the Supreme Court's *Apple v. Samsung* decision if the fact finder determines that the end product is the relevant "article of manufacture." Some trade secret cases require the misappropriated element to be sufficiently important to drive demand. This rule is akin to the "entire market value" rule of modern patent law, which uses this test to determine the upper bound of (i.e., the "base" for) a

⁴⁸¹ RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT § 40 cmt. c, illus. 9 (AM. LAW INST. 2011).

⁴⁸² See *supra* text accompanying notes 31-34 & 156-159.

reasonable royalty. When disgorgement was an available remedy in patent cases, courts tried several different apportionment rules and found all to be wanting, including a rule that conditioned an award of total profit on a finding that a patented invention was a “complete thing.” The ultimate result was the withdrawal of disgorgement from the basket of remedies available for patent infringement in favor of reasonable royalty awards.

IP regimes vary about whether the egregiousness of the defendant’s conduct is a factor in determining whether to apply the total profit rule. When disgorgement is treated as an equitable remedy, as is common in trademark law and trade secrecy cases, the egregiousness of the defendant’s conduct does factor into this determination. No one, however, has suggested that the egregiousness of the defendant’s conduct should be treated as a factor in deciding the relevant “article of manufacture” in a design patent infringement case. This fact highlights one of the limitations of using that lever to try to replicate a traditional equitable approach to administering disgorgement.

A total profit rule, such as that applied in trademark cases, can have a tendency to enable excessive disgorgement awards from the standpoint of either proportional deterrence or common notions of fairness. But it can be justified as a sort of third-best measure to avoid the problems and costs of apportionment with which IP regimes commonly have to grapple. Nonetheless, this justification is, at best, contingent. It demands that the availability of a total profit award be substantially limited.

Among the approaches currently used in IP regimes to limit the application of the total profit rule, the best appears to be trademark’s restriction of total profit awards to cases in which the infringing conduct was a substantial factor in producing the profit. When an infringer makes profits on sales of end products, the question is whether the infringing conduct was a substantial factor in a purchaser’s decision. The substantial factor test is a causal test, which gets at the ultimate issue (i.e., the likelihood that those profits are attributable to the infringement) more directly than asking whether the right infringed was the complete thing sold or trying to determine what was the relevant “article of manufacture.” The substantial factor test is often used in tort law for intentional torts because the test of more likely than not but-for causation is thought to be too demanding. This test is also often used when harm involves influencing human decisions. It recognizes the complexity of human decision-making and the difficulty of identifying a particular factor in a decision as a but-for cause.

Limiting total profit awards to cases in which the infringing conduct was a substantial factor in producing the profit should largely eliminate total profit awards in cases where the relevant IP right corresponds to only a small part of the value of an infringing product, project, or process. These cases present what we have called the doohickey problem. This problem is most often associated with patent law, where inventions often account for only a small fraction of a multitude of features, often separately innovative, that characterize modern complex products such as smartphones or many forms of software, as illustrated by the date-picking function in *Gateway*. The intensity of the doohickey problem in patent law explains why this regime abandoned the disgorgement remedy: in such circumstances, the rough compromise reflected by a total profit rule

conditioned on satisfaction of a substantial factor test seems too likely to lead to disproportionate disgorgement in too many cases to be tolerable as a simplifying compromise. Frequently, however, the doohickey problem means that a court must estimate the profit attributable to infringement, especially in copyright and trade secrecy cases. Similar issues can arise in assessing a reasonable royalty (i.e., expected profit being a natural upper bound on a reasonable royalty in situations where that profit is substantially positive). In calculating a reasonable royalty, patent law instructs courts to use the estimate of the total profit on infringing sales as a royalty base only when the patented features are sufficiently important to drive demand, an approach that might be viewed as a variant of trademark's substantial factor rule for disgorging total profits.

It is worth emphasizing that the doohickey problem is a common feature in IP regimes that is not confined to patent law. Although this problem in other regimes has not led to the elimination of disgorgement as a remedy, the problem can bring into sharp relief the potential for disgorgement awards to be excessive (i.e., beyond what seems properly attributable to violations of the IP rights in question or, arguably simply alternatively stated, beyond what seems plausibly justified by a goal of proportional deterrence). One example was the total profit award for infringing design patents on limited aspects of the exterior case and screen in *Apple v. Samsung*. We think it highly unlikely that a court would have found that the patented features were a "substantial factor" in the general mass of purchasing decisions for Samsung smartphones, although a court would perhaps have found the patented features to be a "substantial factor" for a fraction of purchasers. Romag's claim for \$26 million of Fossil's profits based on the presence of counterfeit snaps is an example from trademark law. *Romag* also illustrates why it is important to have redundant rules to guard against excessive awards. One ground for withholding a disgorgement remedy was that Fossil was not a willful infringer, but an alternative ground was the plaintiff's misconduct in waiting until it was too late for Fossil to correct the problem before notifying Fossil of its claim.

IP regimes vary a great deal in approaches used to determine a disgorgement award when the total profit rule does not apply. When there is a plausible basis for apportionment of profit on causal grounds, courts generally will apportion profit on that basis. Examples include: (1) a fractional award of total profit based on the fraction of purchasers for whom the infringing feature of a product was a substantial factor in purchasing the product; (2) when the infringing feature is a separately sold component of a larger product, an award of the total profit that would have been made if the component was always sold separately; (3) when infringement saves the defendant an expense, an award of the saved expense; and (4) when infringement accelerates the defendant's entry into a market, an award of the total profit made by the defendant during that period. Trade secrecy law best reflects this general approach, for it provides a menu of such rules from which courts may choose.

In some problematic cases, there is no plausible basis for the apportionment of profit on causal grounds. This problem is regularly confronted in copyright law, where courts, perhaps by delegating relevant fact-finding and assessment to juries, often seem to make seat-of-the-pants judgments about what fraction of

total profit is a fair award. We are of two minds of what should be done in these cases. One approach would dispense with the pretense that apportionment has much to do with causal analysis and would instruct courts to pick a fraction of total profit that seems reasonable and that never exceeds a relatively small multiple of a reasonable royalty.

Another approach would be to make apportionment a matter of causation to the extent that this is possible. This would require approximating and categorizing defendant profits into three categories. First would be the profits solely attributable to value added by the defendant, for example in a case such as *Apple v. Samsung*, due to the defendant's innovative, noninfringing designs for aspects of smartphones. Upon sufficient proof, these profits should never be awarded to the plaintiff. Second would be the profits solely attributable to the plaintiff's IP, with no relevant contribution from the defendant. These should always be awarded to the plaintiff. Finally, there may be profits outside the first two types that are due to the extra value attributable to the defendant's having combined infringing and noninfringing elements. These profits should be apportioned between the plaintiff and the defendant, presumably based on the relative merit or cost of their respective contributions combined with a sense of what would have best served the ex ante interest of encouraging reasonable bargaining between them.

C. *Equitable Discretion and Safety Valves*

Treating disgorgement as an equitable remedy is an additional way that courts can ensure the proper deployment and tailoring of disgorgement awards. Courts can and should deny disgorgement or limit its extent in accordance with equitable principles. The Supreme Court explicitly endorsed subjecting disgorgement to equitable restrictions in *Petrella*. Courts in all IP cases should be reminded of, and should embrace, the equitable status of disgorgement as a remedy in IP law. Courts should heed the *Restatement of Unfair Competition's* articulation of various factors that should inform disgorgement of profits as a remedy in IP cases.⁴⁸³

The historical treatment of the disgorgement remedy as equitable in character in IP cases, as the CAFC chronicled in *Texas Advanced*, means that courts, not juries, should make disgorgement awards. In doing so, courts should take into account a range of equitable considerations, including laches and litigant misconduct. The trademark statute exemplifies this principle by its explicit statement that damage remedies are "subject to principles of equity" and by its authorization of courts to adjust awards upward or downward to achieve justice in a particular case.⁴⁸⁴ Too often, courts and practitioners, particularly in copyright and design patent cases, appear to have forgotten this key aspect of the disgorgement remedy, one that can be crucial to ensuring that IP remedies and IP law more generally serve their social-welfare-promoting purposes. We therefore recommend that disgorgement of infringer profits be deemed equitable

⁴⁸³ See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45(2) (AM. LAW INST. 1995).

⁴⁸⁴ 15 U.S.C. § 1117(a) (2018).

and that, while judges may ask juries for advisory opinions on profits to be disgorged, they should retain authority to make equitable adjustments.

Viewing disgorgement as an equitable remedy implies some flexibility but also corresponding unpredictability or even vagary in its deployment. Unpredictability or vagary may sound undesirable, but to some degree, this quality may be a necessary feature of equity's correction for the limitations of law's "generality" by providing an added capacity to deal with novelty, complexity, or the threat or reality of opportunistic or otherwise sharp behavior.⁴⁸⁵ Further, the set of limitations on disgorgement's deployment and measurement that we prescribe—and that follow at least in part from viewing it as an equitable remedy—help guide and constrain disgorgement's flexibility.⁴⁸⁶ As Part II showed, this guidance and constraint can in turn keep the availability of the disgorgement remedy from doing more harm than good, in particular by restraining its potential to generate disproportionate monetary awards; this, however, can run counter to the background goal of proportional deterrence, which is often inadequately promoted by a simple damages remedy.

CONCLUSION

This Article has reviewed various doctrinal and normative principles of the law of disgorgement and considered how courts have employed the disgorgement remedy in relation to those principles in five major IP regimes: trademark, trade secrecy, copyright, design patent, and utility patent. The overall picture is somewhat inconsistent and incoherent. The trademark and trade secrecy regimes appear largely—and reasonably—to function in accordance with the general principles of disgorgement articulated by the *Restatement of Restitution and Unjust Enrichment* and the *Restatement of Unfair Competition*, respectively. These sources indicate that disgorgement should be treated as an equitable remedy to be applied most notably in cases of conscious wrongdoing, as defined here,⁴⁸⁷ and subject to a further restriction that disgorgement should be limited to profits properly attributable to the infringement. Trademark's substantial factor test for the application of its total profit rule provides a good working model for how a court can assess attributability.

The complexity of many modern products seems to have strained the capacities of courts to engage in predictable and well-reasoned decision-making in applying the disgorgement remedy. These difficulties were so severe in utility patent law as to justify dropping disgorgement as a remedy for infringement, although patent law retains a reasonable royalty measure for damages that can effect a partial disgorgement. In navigating these and other difficulties with the tailored deployment of the disgorgement remedy, courts can advance IP regimes' social-welfare-promoting goals by rendering decisions that are more

⁴⁸⁵ See Smith, *supra* note 138 (manuscript at 6) (“[W]hen regular law seeks generality and ex ante certainty, it cannot handle those problems in which intense interaction can lead to unforeseen and undesired results.”).

⁴⁸⁶ Cf. *id.* (manuscript at 41) (discussing equity's penchant “ex post tailored standards”).

⁴⁸⁷ See *supra* text accompanying note 103.

consistent with general principles of disgorgement and that recognize disgorgement as an equitable remedy. Disgorgement has great remedial potential to deter wrongdoing and to compensate right holders, but the difficulties of apportionment generate a capacity for disproportion best managed with the tools that equity offers.

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