RECONSTRUCTING TRADEMARK INFRINGEMENT DAMAGES FROM THE PERSPECTIVE OF OPTION THEORY

Min-Chiuan Wang⁺

Abstract

We often assume property rules and liability rules as opposing concepts. The option theory proposed by Professor Ian Ayres of Yale Law School and other scholars abolishes this dichotomy and introduces a consistent explanation for the two rule types.

This article focuses on the types of monetary relief in trademark infringement cases. Section 35 of the Lanham Act provides various methods for measuring the harm suffered by trademark owners in such cases. However, no consistent explanation to connect the different types of remedies has been introduced previously. Using option theory to blend property rules and liability rules can facilitate the establishment of a consistent theory of the methods of calculating trademark damages. This model can also account for various hybrid regimes. An accounting of profits is closest along the continuum to property rules; actual damages are closest to liability rules; and the consideration of reasonable royalties, which is located between property and liability rules on this spectrum, is consonant with the exchange paradigm suggested by the law and economics literature.

⁺Professor of Law, National Chiao Tung University, Taiwan. J.S.D., Stanford. LL.M., Harvard. LL.B., National Taiwan University.

Judicial application of the principle of equity in awarding damages allows judges the flexibility to move between property rules and liability rules to create various hybrid regimes. This theoretical construction allows courts to incorporate different policy considerations and not to limit themselves merely to measuring actual damages. This research article further suggests that courts can use the equity principle to combine different justifications and elements of calculation methods more freely in order to achieve a fuller realization of the goals of monetary damages.

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I. Introduction

Intellectual property law typically provides several methods of calculating damages. Various monetary remedies are available to a successful plaintiff in a trademark, patent, or copyright infringement case. These types of "damages" ostensibly resemble different measurements of the harm that the plaintiff has suffered from an infringement. However, a closer assessment of the literature reveals that some methods of "calculating damages" have considerably exceeded the function of measuring the right owner's actual damages. Several types of monetary remedies divide the surplus created by the defendant's use of the plaintiff's intangible asset. Regarding the types of monetary remedies for a trademark infringement, Section 35 of the Lanham Act provides that a plaintiff may claim actual damages and an accounting of the defendant's profits. In practice, a prevailing plaintiff can recover what are

¹See Kathleen M. Kedrowski & Jennifer L. Knabb, *An In-Depth Look at Historical Patent and Trademark Damages Trends*, 20 No. 3 INTELL. PROP. L. NEWSL. 6, 6 (2002) (reiterating the damages available to plaintiff's in infringement cases); *see also* Copyright Infringement and Remedies, 17 U.S.C. §§ 504–505 (2010) (highlighting that the Copyright Act provides that a plaintiff is eligible for recovery of actual damages and lost profits, or, at the copyright owner's election, statutory damages, in addition to attorney's fees and costs).

²See 5 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 30:57 (5th ed.), Westlaw (database updated Sept. 2018) (commenting that the five types of monetary remedies authorized by the Lanham Act "are merely alternative ways of measuring the injury that either the plaintiff or the public has suffered by defendant's wrong.").

³See Dennis S. Corgill, *Measuring the Gains of Trademark Infringement*, 65 FORDHAM L. REV. 1909, 1910 (1997) (cautioning that not all remedies will award the plaintiffs the correct damages).

⁴See id. at 1915 (noting that "[t]he law of remedies serves a variety of rationales.").

⁵See Trademarks, 15 U.S.C. § 1117(a) (2008) (stating the statutory damages for violations); see also 3 ANNE GILSON LALONDE, GILSON ON TRADEMARKS §14.03 (2013), LexisNexis (database updated Sept. 2018) (setting forth when courts award actual damages to the plaintiff). The cases in which the plaintiffs may claim damages under section 35(a) include an infringement of federally registered trademarks, infringement of unregistered trademarks under § 43(a), willful violation of § 43(c) to cause dilution of the plaintiff's trademark, and violation of § 43(d) to engage in cybersquatting. *Id*.

actual damages (including lost profits, injury to goodwill, and costs for corrective advertising), the defendant's profits, and/or a reasonable royalty. ⁶

These remedies are "subject to the principles of equity," according to Section 35 of the Lanham Act. The court has broad discretion to decide whether and to what extent to grant damages, according to equity and the facts of the case. A finding of trademark infringement or dilution does not necessarily mean that a prevailing plaintiff is entitled to monetary recovery. In other words, monetary recovery is not "automatic in every case where [a] plaintiff has proved infringement," All types of monetary remedies authorized by Section 35(a) of the Lanham Act are subject to the control of a court's equity power. By exercising this power, courts have ensured that monetary remedies are suitable to the facts and fairness of each case.

This article argues that the result of the prevalent application of equity principles and the methods of calculating damages in trademark infringement cases exhibit the character of hybrid regimes. All methods of calculation are ranked on a

⁶See 3 LALONDE, supra note 5, § 14.03(2) (listing the different ways courts award damages).

⁷See 15 U.S.C. § 1117(a) (reiterating that what the plaintiff is entitled to is also subject to the principles of equity).

⁸See 3 LALONDE, supra note 5, § 14.03(2) (highlighting the role of judicial discretion in awarding damages).

⁹See Champion Spark Plug Co. v. Sanders, 311 U.S. 125, 131 (1947) (denying an award of defendant's profits "where an injunction will satisfy the equities of the case"); see also David S. Almeling, The Infringement-Plus-Equity Model: A Better Way to Award Monetary Relief in Trademark Cases, 14 J. INTELL. PROP. L. 205, 211 (2007) (noting that in cases in which an injunction satisfies the equities of the case, courts will not award monetary recovery).

¹⁰See 5 McCarthy, supra note 2, § 30:89 (explaining that the Lanham act can be misread to conclude that monetary recovery is automatic when plaintiff proves infringement, contrary to the law).

¹¹See Corgill, supra note 3, at 1916 (noting that every type of monetary remedy authorized by Section 35(a) of the Lanham Act, including those fulfilling the compensatory function, is "subject to the principles of equity.").

¹²See 3 LALONDE, supra note 5, § 14.03(2) (stressing how the courts use their own subjective beliefs).

continuum.¹³ On one end are actual damages, the nature of which is primarily liability rules, but property rules are not ruled out. On the other end is accounting of profits, which is close to property rules. In the middle of the continuum is reasonable royalty, which itself is a hybrid regime that is slightly closer to liability rules. The occurrence of hybrid regimes can be traced to judicial exercise of equity power resulting in the appearance of hybrid regimes in case law.

Calculation of damages is a method of pricing the unconsented use of the plaintiff's property by the defendant. ¹⁴ Valuation of property use can be undertaken by consenting parties or by the government in cases in which the parties fail to reach an agreement; damages are determined by the courts. ¹⁵ Damages consist of property allocations by the courts when parties' transaction costs are high. ¹⁶ Under ideal conditions, the governmental allocation of property rights on behalf of the parties should approximate an equilibrium (the Pareto optimality to which the parties would have agreed).

In trademark infringement cases, monetary relief normally comprises three major types—actual damages, reasonable royalty, and accounting of profits. Ideally, any of these methods approximate an equilibrium; however, from the perspective of game theory, when a game has more than one equilibrium, the

¹³See 3 LALONDE, supra note 5, § 14.03(3)-(5) (discussing the ways actual damages, punitive damages, statutory damages are determined in Trademark Infringement cases).

¹⁴See 3 LALONDE, supra note 5, § 14.03(3)(a) (illustrating that damages are calculated when a defendant has infringed a trademark and the defendant's conduct does not need to be willful).

¹⁵See Richard Craswell, *Property Rules and Liability Rules in Unconscionability and Related Doctrines*, 60 U. CHI. L. REV. 1, 3 (1993) (articulating that an award of damages can be conceived as a "judicially-determined price" that the infringer must pay for his or her interference with the holder's entitlement).

¹⁶See Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral,* 85 HARV. L. REV. 1089, 1095 (1972) [hereinafter Calabresi & Melamed *Property Rules, Liability Rules, and Inalienability*] (suggesting that property allocations will be based on economic efficiency and asymmetry of transaction costs).

problem then becomes which optimality the court should choose and how to determine that choice.¹⁷

A simple answer is that the plaintiff should choose. This idea is based on the concept of sequential game: ¹⁸ the parties unfold their respective claims and defenses based on the plaintiff's initial choice. ¹⁹ This article investigates the preconditions of the plaintiff's choice. Case law has developed prerequisites to the plaintiff's choice—the plaintiff is not allowed to choose any type of monetary relief he or she wants. If the prerequisite for a type of monetary relief is not satisfied, the plaintiff is not allowed to choose that type of relief.

This article treats the process of judicial award of damages as an internal auction.²⁰ The concept of internal auction was developed by Professor Ian Ayers and other scholars. Ayres argued

the same allocation as a defendant-chooser rule).

¹⁷See Stephen W. Salant & Theodore S. Sims, *Game Theory and the Law: Ready for Prime Time?*, 94 MICH. L. REV. 1839, 1856 (1996) (arguing numerous games have multiple equilibria); see also Alejandro Nadal, *Coasean Fictions: Law and Economics Revisited*, 5 SEATTLE J. FOR SOC. JUST. 569, 576 (2007) (proffering that there can be multiple solutions to a "bilateral monopoly" problem and that each solution is an allocation that satisfies Pareto efficiency).

 $^{^{18}}$ See Roger A. McCain, Game Theory: A Nontechnical Introduction TO THE ANALYSIS OF STRATEGY 289 (2010) (characterizing sequential games as interactions in which the players "have to choose their strategies in some particular order"); Game Theory III: Sequential Games, POLIOCONOMICS.COM (Nov. 19, 2018), archived at https://perma.cc/3PN8-YRSN (defining sequential games as a game theory concept in which "a series of decisions are made, the outcome of each of which affects successive possibilities."); see also AVINASH DIXIT ET AL., GAMES OF STRATEGY 47 (4th ed. 2015) (noting that "sequential games entail strategic situations in which there is a strict order of play," in which players "take turns making their moves" not knowing "what the players who have gone before them have done"). ¹⁹See Ian Ayres & Paul M. Goldbart, Optimal Delegation and Decoupling in the Design of Liability Rules, 100 MICH, L. REV. 1, 16 (2001) [hereinafter Avres & Goldbart, Optimal Delegation] (defining one of the liabilities rules first analyzed by Calabresi & Melamed as representing a "plaintiff-choice rule because the plaintiff chooses who the ultimate entitlement holder will be"); but see id. at 21 (noting that there is no guarantee that a plaintiff-chooser rule will result in

 $^{^{20}}$ See Nadal, supra note 17, at 590 (conceptualizing the court's role as an auctioneer who aggregates information from both parties, calculates the supply and demand, and announces a set of prices). The term "auctioneer" denotes "an entity charged with the role of adjusting prices in accordance with the law of supply and demand." Id.

that multiple exercises of options by both parties can achieve a result that is closer to equilibrium than what traditional liability rules can produce.²¹

However, high administrative costs are incurred if multiple options are really exercised in a court proceeding. As Posner observed, negotiating a point in a wide bargaining range involves very high transaction costs. ²² Nonetheless, courts have developed a method of reducing the judicial costs—by using prerequisites of monetary relief as "focal points," including actual confusion, established royalties, and the defendant's intent. This article argues that the process of choosing a type of monetary relief is an internal auction that uses focal points.

This article applies option theory to connect property rules and liability rules in order to demonstrate that the various types of monetary remedies in trademark infringement cases are hybrid regimes located on a continuum, the two ends of which are pure property rules and pure liability rules. Focal points that appear in particular cases, such as actual confusion, prior or existing royalties, and defendant's bad faith, have a determinative effect on the allocation of monetary remedies.

Part Two of this article briefly restates the theories on which this article is primarily based, including entitlement theory, option theory, and focal points in game theory. Option theory suggests that property rules and liability rules are not a set of contradictory concepts; instead, they comprise two ends of a

²¹See Ian Ayres & J.M. Balkin, Legal Entitlements as Auctions: Property Rules, Liability Rules and Beyond, 106 YALE L.J. 703, 712 (1996) [hereinafter Ayres & Balkin, Legal Entitlements] (observing that even with the advantage of inducing the parties to reveal more information about valuation, implementing a second-order or higher-order liability rule is not without cost).

²²See Walgreen Co. v. Sara Creek Prop. Co., 966 F.2d 273, 278 (7th Cir. 1992) (observing the effects of the market value of the factory on the plaintiff's bargaining strategy). A market value of \$45 million could encourage the plaintiffs to wait for a much higher price as a means of dissolving the injunction. *Id.* Furthermore, the factory would be more likely to refuse to pay anything higher than the monetized harm. *Id.*

continuity. Part Three, which is based on the continuity of property rules and liability rules, constructs the continuum of monetary remedies in trademark infringement cases. This article argues that various types of monetary relief are hybrid regimes between property rules and liability rules that are centered on reasonable royalty. This part further attributes the formation of hybrid regimes to courts' power based on the "principles of equity" provision of Section 35 of the Lanham Act. ²³ Part Four employs the theory to explain three major types of monetary relief in trademark infringement cases and their respective focal points.

II. Basic Theories – Liability Rules, Options, and Focal Points

Inherent in the awarding of monetary relief is the idea that because the use of the asset has been non-consensually taken by the defendant, the court, in addition to measuring the plaintiff's injury, is entitled to distribute the surplus created by the defendant's infringement.²⁴ The literature on liability rules extensively discusses the nonconsensual use of legal entitlements.²⁵ Hence, this

²³See Michael Anthony Arciero, *Trademark Infringement and Plaintiff's Damages: Lanham Act § 35(a)*, 12 J. CONTEMP. LEGAL ISSUES 320, 323 (2000) (discussing the language of the Lanham Act for monetary relief).

²⁴See Graeme B. Dinwoodie & Mark D. Janis, Trademarks and Unfair Competition: Law and Policy 911 (3rd ed. 2010) (stating: "Damages are typically measured by any direct injury which a plaintiff can prove, as well as any lost profits which the plaintiff would have earned but for the infringement."). "Because proof of actual damage is often difficult, a court may award damages based on the defendant's profits on the theory of unjust enrichment." *Id*.

²⁵See Ian Ayres & Paul M. Goldbart, Correlated Values in the Theory of Property and Liability Rules, 32 J. LEGAL STUD. 121 (2003) (discussing differences between property rules and liability rules for nonconsensual takings); see also Ian Ayres & Eric Talley, Distinguishing Between Consensual and Nonconsensual Advantages of Liability Rules, 105 YALE L.J. 235, 242 (1995) [hereinafter Ayres

[&]amp; Talley, *Distinguishing*] (discussing when defendants non-consensually use the plaintiff's assets); Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 YALE L.J. 1027 (1995) [hereinafter Ayres & Talley, *Solomonic*] (analyzing the division of legal entitlements); *see also* Ayres & Balkin, *Legal Entitlements*, *supra* note 21, at 748 (developing property rules in the context of special liability rules); Ayres &

part starts with a discussion of liability rules, including Ayres' and other scholars' interpretation of liability rules from the viewpoint of option theory.

A. Nonconsensual use and liability rules

Calabresi and Melamed proposed well-known dichotomous methods of protecting legal entitlements—either by property rules or by liability rules. 26 The term "entitlement" refers to the judicial decision on who should prevail when the parties have conflicting interests.²⁷ Calabresi and Melamed suggested that the court must determine two legal decisions. The first is a "first-order" decision regarding who, among the conflicting interest holders, should have

Goldbart, Optimal Delegation, supra note 19, at 2 (elaborating how liability rules protect the victims of nonconsensual takings through compensation while property rules provide protection through deterrence).

²⁶See Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 HARV. L. REV. 1089, 1090 (1972) (depicting the continuum of liability and property rules); see also Blake Holland, The Winding Stream: Entitlement Theories and Intellectual Property Rights in Emerging Media Technologies, 25 BERKELEY TECH. L.J. 247, 248 (2010) (referencing how entitlement theories rely on Calabresi and Melamed's classification of the methods of protecting entitlements); see also Louis Kaplow

[&]amp; Steven Shavell, Property Rules Versus Liability Rules: An Economic Analysis, 109 HARV. L. REV. 713, 715 (1996) (differentiating property rules from liability rules as two "fundamental ways of protecting property rights" at the state's disposal); see also Niva Elkin-Koren & ELi M. Salzberger, Towards an Economic Theory of Unjust Enrichment Law, 20 INT'L REV. L. & ECON. 551, 554 (2000) (determining that the concept of "entitlement" is broader than the concept of "right" in private law).

²⁷See Madeline Morris, Structure of Entitlements, 78 CORNELL L. REV. 822, 823 (1993) (noting that society transforms an interest into an entitlement by giving it legal force); see also Calabresi & Melamed Property Rules, Liability Rules, and Inalienability, supra note 16, at 1090 (describing the "entitlement" problem as "[w]henever a state is presented with the conflicting interests of two or more people, or two or more groups of people, it must decide which side to favor."); see also Kaplow & Shavell, supra note 26, at 745-48 (discussing the notions of entitlement).

the entitlement.²⁸ The second is the "second-order" decision regarding the method of protecting the entitlement.²⁹

Property rules require the consent of the property owner before another party can engage in the use of the holder's property. As Professors Kaplow and Shavell stated, a property rule "guarantees property right assignments against infringement through the threatened use of its police powers." A legal entitlement protected by property rules may not be taken by another party without the consent of the entitlement holder and his or her agreement on the price for taking the entitlement. 31

²⁸See James E. Krier & Stewart J. Schwab, *Property Rules and Liability Rules:* The Cathedral in Another Light, 70 N.Y.U. L. REV. 440, 442 (1995) (distinguishing Calabresi and Melamed's two steps of protecting legal entitlements); see also Niva Elkin-Koren & Eli M. Salzberger, Toward an Economic Theory of Unjust Enrichment Law, 20 INT'L REV. L. & ECON. 551, 554 (2000) (identifying the two-stage structure of Calabresi and Melamed's legal decision-making rules): Benjamin Shmueli, What Have Calabresi & Melamed Got to Do with Family Affairs? Women Using Tort Law in Order to Defeat Jewish and Shari'a Law, 25 BERKELEY J. GENDER L. & JUST, 125, 131 (2010) (noting that in Calabresi & Melamed's view, the first stage of legal decisionmaking is to decide, between the conflicting rights, whose right is to be preferred); Calabresi & Melamed Property Rules, Liability Rules, and *Inalienability*, supra note 16, at 1090 (describing "first order of legal decisions" as "the entitlement to have silence, the entitlement to pollute versus the entitlement to breathe clean air, the entitlement to have children versus the entitlement to forbid them.").

²⁹See Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability, supra* note 16, at 1092 (defining "second order decisions" as "the manner in which entitlements are protected and whether an individual is allowed to sell or trade the entitlement."); *see also* Shumueli, *supra* note 28, at 132 (2010) (discussing how after the state has identified the enforceable right, the next stage is to determine the method by which to protect the right—using an injunction or damages). Calabresi and Melamed proposed three possible candidates: property rules, liability rules, and inalienability entitlements. *Id.* at 132-33. This article does not discuss inalienability rules.

³⁰See Kaplow & Shavell, *supra* note 26, at 715 (mentioning that the state could either apply property rules, which guarantee property rights against infringement "through the threatened use of [the state's] police power" or apply liability rules by "requiring transgressors to pay victims for harm suffered"); *see also* Craswell, *supra* note 15, at 7 (noting that in property law and tort law, property rules are used to deter infringement of the right owner's interests, whereas in contract law, property rules are used to deter the failure to obtain the promisor's proper consent).

³¹See Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability*, supra note 16, at 1105 (explaining that under Calbresi & Melamed's framework, property entitlements can only be transferred via sale); see also Craswell, supra

Liability rules allow another party to interfere with the holder's entitlement first and then pay damages for the use taken. 32 Liability rules remove the threshold of *ex ante* consent by the entitlement holder, instead protecting the entitlement with *ex post* compensation. 33 Calabresi and Melamed argued that to protect the entitlement with liability rules is to apply "an external, objective standard of value to facilitate the transfer of the entitlement." 34

Liability rules treat the fact that the defendant used the plaintiff's property as a given. The court's calculation of damages is based on a collective valuation of the resource taken. ³⁵ Valuation can be *ex ante* or *ex post*; it can be undertaken either through the market with the parties' consent or by collective valuation (the latter method includes valuation by judicial decisions in the form

note 15, at 3–4 (addressing how property rules deter unconsented taking of another's entitlement, unless both parties arrive at a mutually agreed price); Holland, *supra* note 26, at 248 (describing a property rule as "an absolute permission rule").

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³²See Moshood Absussalam & Dianne Nicol, A Basic Economic Case for Reordering the Patent Market with Gain-Based Legal Remedies, 2017 I.P.Q. 1, 6 (2017) (reasoning that liability rules allow another party to interfere with the holder's entitlement); see also Kaplow & Shavell, supra note 26, at 715 (noting that liability rules deter the violation of rights only by requiring the infringer to pay for the victim's loss).

³³See IAN AYRES, OPTIONAL LAW: THE STRUCTURE OF LEGAL ENTITLEMENTS 5 (1st ed. 2005) (noting that liability rules protect entitlements by compensating the entitlement holder if such takings do occur); see also Laurence R. Helfer, World Music on a U.S. Stage: A Berne-TRIPS and Economic Analysis of the Fairness in Music Licensing Act, 80 B.U. L. Rev. 93, 107 (2000) (describing liability rules as "the principle of 'take now, pay later"); see also Craswell, supra note 15, at 2 (discussing compensatory damages as the remedy for entitlement infringement under liability rule).

³⁴See Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability, supra* note 16, at 1106 (reiterating how the liability rule should continue to be used for protection of entitlement to property); Kaplow & Shavell, *supra* note 26, at 719 (suggesting a court to set "damages equal to its best estimate of harm"); Shumueli, *supra* note 28, at 133 (discussing how under liability rules, the compensation is to be objectively determined by the state or one of its institutions).

³⁵See Kaplow & Shavell, *supra* note 26, at 718 (providing that liability rules are used to mimic the result that would otherwise have been reached through private bargaining).

of awards for damage). ³⁶ These valuation methods are alternatives to each other. ³⁷

Professor Robert Merges pointed out that liability rules comprise *ex ante* exchange rules and *ex post* exchange rules between the resource use taken and the payment for such use. Compulsory licensing is an example of *ex ante* exchange rules; this is what Merges called "legislative valuation." Judicial determination of damages is an example of an *ex post* compulsory exchange rule; Merges termed it "judicially-administered valuation." Infringement has occurred and the use of the plaintiff's asset (in other words, the entitlement) has been taken; judicial award of damages requires the nonconsensual taker to pay

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³⁶See Robert P. Merges, Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations, 84 CAL. L. REV. 1293, 1316 (1996) (setting forth how Calabresi and Melamed's liability rule should be administered). Professor Merges indicated a preference for voluntary valuation (such as that intermediated by collective rights organizations) over collective valuation. Id. at 1382. Merges argued that "when private contracts or institutions are a viable alternative, bargaining should be channeled out of the legislative arena" and into the private realm. Id. at 1314-15; see also Calabresi & Melamed, Property Rules, Liability Rules, and Inalienability, supra note 16, at 1107 (contrasting market valuation with collective valuation); see also Helfer, supra note 33, at 192–93 (reiterating Merges conclusion that bargaining should be held in the private arena instead of the legislative one when "private contracts or institutions are a viable alternative").

³⁷See Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability, supra* note 16, at 1106-07 (finding that market valuation and collective valuation are alternative mechanisms). Also, highlighted in the text was that damages, as a type of collective valuation, are an alternative to negotiation. *Id.* at 1108-09; *see also* Helfer, *supra* note 33, at 108 (determining use of liability rules is a solution to the market failure problem, and, as an alternative, the parties may bargain to create a voluntary licensing arrangement).

³⁸See Helfer, supra note 33, at 107 (stipulating that compulsory licensing rates are "government-set royalty rates," the payment of which allows anyone to use the work at issue); Holland, supra note 26, at 248 (stipulating that under liability rules, as exemplified by compulsory license, courts or legislatures determine the amount owed to the entitlement holder); Merges, supra note 36, at 1299–1300 (describing "mandated rules of exchange").

³⁹See Lee Anne Fennell, Revealing Options, 118 HARV. L. REV. 1399, 1406 (2005) (exemplifying that "[w]hen a liability rule is involved, scholars have assumed that a court or other third parties will set the exercise price."); see also Merges, supra note 36, at 1316 (discussing that "[w]hile the legislature liability rules are inferior to property rules, one might nonetheless argue that the legislature should have implemented a judicially-administered liability rule, consistent with the teachings of Calabresi and Melamed.").

an objectively determined price for the entitlement. ⁴⁰ This price corresponds to the decisionmaker's best estimate of harm. ⁴¹

Ex post judicially administered liability rules differ substantially from ex ante valuation: the award of damages must encompass deterrence of infringement, so that liability rules can approach the function of property rules. This is because if the damages awarded come too close to being merely compensatory or an exchange of the value of use taken, protection of property exclusivity may be inadequate. By contrast, property rules ensure that an exchange can only take place by bargaining and voluntary consent. A judicial award of damages that results in infringement being unprofitable or even detrimental to the infringer is likely to prompt the infringer not to apply ex post liability rules but instead to bargain in advance with the entitlement holder in accordance with property rules.

 $^{^{40}}$ See Holland, supra note 26, at 248 (indicating that liability rules, such as use of compulsory license, allow the user of the entitlement to compensate the entitlement holder ex post at a price determined by legislatures or courts).

⁴¹See Kaplow & Shavell, supra note 26, at 756 (noting that the conventional liability rule is based around a courts' "best estimate of harm").

⁴²See Zhiyong Liu & Ronen Avraham, Ex Ante versus Ex Post Expectation Damages, 32 INT'L REV. L. & ECON. 339, 340-41 (2012) (affirming that awarding ex post actual damages distorts the victim's incentive to bring a lawsuit when litigation costs and the costs associated with verifying actual losses are considered); see also Kaplow & Shavell, supra note 26, at 761 (referencing: "[W]hen [a] taker expects courts' estimates of common value to be too high, takings will be rare, so that the result will be close to that achieved under the property rule.").

⁴³See Ayres & Talley, Solomonic, supra note 25, at 1032 (setting forth that property rules are "market-encouraging"); Holland, supra note 26, at 250 (reiterating Ayres and Talley's conclusion that property rules are "market-encouraging" while liability rules mimic the market); Kaplow & Shavell, supra note 26, at 721 (stressing that property or liability rules may both be sufficient to follow); Merges, supra note 36, at 1296 (arguing that in intellectual property law, property rules facilitate bargaining because "property rule entitlements drive IPR holders in high transaction industries into repeat-play bargaining" and concluding that property rules are superior in this situation).

⁴⁴See David D. Haddock et al., An Ordinary Economic Rationale for Extraordinary Legal Sanctions, 78 CAL. L. REV. 1, 13 (1990) (explaining that property law aims to "make the defendant whole," unlike the standard liability model); see also Stephen E. Margolis, The Profits of Infringement: Richard Posner v. Learned Hand, 22 BERKELEY TECH. L.J. 1521, 1528, 1533 (2007) (observing that in copyright and trademark infringement cases, judges have

Numerous studies of liability rules have shown that the most optimal method of determining compensation is carefully tailoring the damages to an amount equal to the entitlement holder's value, 45 which is the amount to which the entitlement holder would have agreed if he or she had an opportunity to enter into voluntary negotiation for the exchange. 46 The court or the administrative agency must try to simulate the most likely deal that the parties would have agreed upon if they had voluntarily negotiated. 47 This type of "hypothetical negotiation" replaces what the parties are unable to achieve when transaction costs are excessive. Reasonable royalties, often constructed by hypothetical negotiation, are used in cases of intellectual property infringement and are a result of this liability rule—based thinking. 48

discretion to ensure that the available remedies, including disgorgement of profits, provide adequate deterrence as well as incentive for the victim to sue); see also Koren & Salzberger, supra note 26, at 566-67 (highlighting that Calabresi and Melamed's paradigm assumes that property rules are more efficient for intellectual property entitlements and that courts in intellectual property cases may thus require an infringer to "disgorge his enrichment from the IP owner's property," a remedy that induces the competitor to bargain with the right owner in advance).

⁴⁵See Ian Ayres, *Protecting Property with Puts*, 32 VAL. U. L. REV. 793, 803-04 (1998) (suggesting that put options are also optimal in determining compensation because they "harness the private information of the option holder," setting the option exercise price at the "court's best estimate of the non-option holder's value" will only be done when it is efficient to do so).

⁴⁶See Ayres & Talley, Solomonic, supra note 25, at 1033 (explaining how liability rules are market-mimicking and arrange the damage amount to the plaintiff's valuation); see also Holland, supra note 26, at 251 (noting that liability rules tailor damages to closely track the entitlement holder's valuation, although tailored liability rules actually impair the information-inducing function of liability rules).

⁴⁷See Ayres & Talley, Solomonic, supra note 25, at 1033 (inferring that because "liability rules are market-mimicking," this is the best way a court can replicate the terms the parties would have); see also Holland, supra note 26, at 250 (describing how the liability rule process is more efficient and credible than property rules); but see Fennell, supra note 39, at 1416 (noting that normal liability rules, similar to central planning, have a drawback—governmental valuation, which is based on less information than valuation by private parties, may set the price too high or too low).

⁴⁸See Gregory Sidak, Bargaining Power and Patent Damages, 19. STAN. TECH. L. REV. 1, 10 (2015) (adding that it would be useful in analyzing the hypothetical negotiation to determine the lower and upper bounds of the bargaining range); see also Eric E. Bensen & Danielle M. White, Using Apportionment to Rein in

Another possible use of liability rules is to transfer most of the profits—or even all the profits—generated by the infringer from the infringement to the entitlement holder. Disgorgement can result in infringement being unprofitable and thus allow liability rules to perform the function of property rules. However, normal liability rules can also set the price at the resource's market value or the entitlement holder's valuation to fulfill their compensatory purpose. With different methods of valuation, liability rules can fulfill diverse purposes, including deterring future infringement and depriving infringers of unjust gains. S1

B. Liability rules from the perspective of option theory

We often indulge in a bipolar exercise of the imagination regarding property rules and liability rules. This is because we constrain our view of liability rules as being merely compensatory in nature.⁵² This traditional conception of compensatory damages instinctively restrains our understanding of liability rules.

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the Georgia-Pacific Factors, 9 COLUM. SCI. & TECH. L. REV. 1, 42 (2008) (noting that courts most often use "a hypothetical negotiation between willing licensor and willing licensee" to determine a reasonable royalty); Michael J. Carrozza, Hindsight at the Hypothetical Negotiation Table, 12 J. MARSHALL REV. INTELL. PROP. L. 241, 247-48 (2012) (recognizing that reasonable royalty calculations rely on factors outlined in Georgia-Pacific, and the eleventh factor negates the hindsight damage calculation method); John C. Jarosz & Michael J. Chapman, The Hypothetical Negotiation and Reasonable Royalty Damages: The Tail Wagging the Dog, 16 STAN. L. REV. 769, 782 (2013) (explaining hypothetical negotiations and reasonable royalties in intellectual property law; notably, the Georgia Pacific case where they highlight 15 factors the court considered to construct a reasonable royalty damage).

⁴⁹See Ayres & Goldbart, *Optimal Delegation*, supra note 19, at 5 (noting the recognition of two additional liability rules).

⁵⁰See Bert I. Huang, *The Equipoise Effect*, 116 COLUM. L. REV. 1595, 1597 (2016) (explaining how disgorgement—to take away an infringer's net gains—is associated with the goal of optimal deterrence or complete deterrence).

⁵¹See William G. Barber, Recovery of Profits under the Lanham Act: Are the District Courts Doing Their Job?, 82 TRADEMARK REP. 141, 144-45 (1992) (providing that an award of profits under the Lanham Act fulfills two purposes—to deter future infringement and to deprive the infringer of his or her unjust gains).

⁵²See Ayres & Balkin, Legal Entitlements, supra note 21, at 704 (noting:

Professors Ayres and Balkin proposed that option theory be applied to break the rigid dichotomy between property rules and liability rules. They argued that liability rules can be used to fulfill the function of property rules. As Ayres stated, "property rules are actually a special case of liability rules." From the perspective of option theory, the difference between property rules and liability rules is one of price, not of quality. Both types of rules deal with the issue of nonconsensual taking of property rights—even though property rules deal with nonconsensual taking by setting the price so high that no one would exercise it. Liability rules presuppose the possibility of nonconsensual taking by setting the price low enough so that nonconsensual taking can occur. Therefore, nonconsensual taking is not an issue of liability rules alone.

Connecting property rules and liability rules from the perspective of option theory enables the possibility of an explanation of these types of rules with a single consistent rationale. Option theory allows for the possibility of incorporating these types of monetary relief into a single framework. This single framework is established by treating property rules and liability rules as opposite ends of a spectrum, with different types of monetary relief dispersed between.

[&]quot;Liability rules permitted nonconsensual takings in return for payment of damages.").

⁵³See Ayres & Goldbart, Optimal Delegation, supra note 19, at 5 (restructuring Calabresi and Melamed's property rules and liability rules with call options and put options); see also Ayres & Balkin, Legal Entitlements, supra note 21, at 705 (stating: "The option analysis deconstructs the original distinction between property rules and liability rules.").

⁵⁴See Ayres & Balkin, Legal Entitlements, supra note 21, at 705 (stressing how the option's analysis shows the similarities between property and liability rules). ⁵⁵See Ayres & Balkin, Legal Entitlements, supra note 21, at 705 (providing in Calabresi and Melamed's original formulation, the use of liability rules encourages nonconsensual taking, whereas the use of property rules discourages nonconsensual taking); see also Calabresi & Melamed, Property Rules, Liability Rules, and Inalienability, supra note 16, at 1092-93 (setting forth how property rules do not determine the value of the entitlement, whereas liability rules do).

⁵⁶See IAN AYRES, supra note 33, at 5 (asserting that one benefit of applying option theory to property and liability is simplification).

C. Higher-order liability rules and internal auction

Traditional liability rules are "first-order" liability rules, signifying that there is only one option held by one party. Traditional liability rules presuppose only one nonconsensual taking. After the initial nonconsensual taking, the initial entitlement holder cannot take the entitlement back. This protects the liability rules with property rules. Property rules are "zero-order" liability rules, signifying that the option's exercise price is higher than any taker's valuation and therefore no one would exercise the initial option. ⁵⁸

Ayers and Balkin demonstrated that second-order or higher-order liability rules can exist in some situations—although not in all situations. Second-order liability rules grant the initial entitlement holder the option to recover the entitlement that was taken from him; specifically, they presuppose two nonconsensual takings. Higher-order liability rules allow a series of nonconsensual takings. This protects liability rules with liability rules.

Ayres suggested that higher-order liability rules be treated as a process of internal auction – after one party has exercised the option of nonconsensual taking, the other party has the option to take the entitlement back. ⁶⁰ This process continues several times.

 $^{^{57}}$ See Ayres & Balkin, Legal Entitlements, supra note 21, at 706-07 (expanding on the traditional "first-order" liability rules).

⁵⁸See Ayres & Balkin, *Legal Entitlements*, supra note 21, at 712 (arguing that property rules are zero-round auctions).

⁵⁹See Ayres & Balkin, supra note 21, at 710-11 (explaining how when a secondorder liability rule is applied, once the initial entitlement holder exercises the option to take back the entitlement, a property rule kicks in to deter further nonconsensual taking).

⁶⁰See Ayres & Balkin, Legal Entitlements, supra note 21, at 707 (expanding on the perception of liability rules as internal auctions). An internal auction means one that does not distribute the proceeds of the auction to a third party but rather among the bidders. *Id.* A liability rule with reciprocal taking options can be conceived as a type of internal auction. *Id.*

As Ayres and Balkin described, "an auction is a regime in which bids by competing players determine who will own an entitlement and how the 'proceeds' of the auction will be allocated." ⁶¹

Ayres and Balkin argued that an internal auction has the effect of forcing information, which signifies that the parties can be induced to reveal their private valuations of the asset. ⁶² Traditional liability rules can force only one party (the initial entitlement holder) to disclose private information about his or her valuation. ⁶³ Higher-order liability rules, as a process of internal auction, presume that each party can exercise the option and thus force the other party to face the price of exercising the option. The other party is thus forced to disclose his or her valuation of the asset.

Professors Kaplow and Shavell suspected that higher-order liability rules can exist. 64 They argued that based on the dual reasons of possibility and efficiency, legal rules tend to allow only one exercise of the option. For example, if pollution has already occurred, it is often not reversible. The party harmed by this pollution is for all practical purposes incapable of exercising an option to take back his or her entitlement. The efficiency rationale refers to the process of reciprocal taking, which occurs between the initial entitlement holder and the taker (sometimes also involving a third party) and can possibly result in "destructive contests." Faced with this challenge, Ayres and Balkin admitted that most

⁶¹See Ayres & Balkin, Legal Entitlements, supra note 21, at 711 (defining "auctions").

⁶²See Holland, supra note 26, at 248 (noting that Ayres and Talley elucidated the value of liability rules in forcing parties to reveal their private valuation information).

⁶³See Ayres & Talley, *Distinguishing*, *supra* note 25, at 237 (reiterating the effects of dividing legal entitlement); Ayres & Talley, *Solomonic*, *supra* note 25, at 1030 (arguing that dividing legal entitlement among parties has the effect of facilitating trade by inducing the parties to reveal their private information, thus reducing strategic behavior).

⁶⁴See Kaplow & Shavell, *supra* note 26, at 768 (inferring that the law perhaps imposes a solution superior to conventional liability rules).

⁶⁵See Kaplow & Shavell, supra note 26, at 767-68 (illustrating the potential harms of reciprocal takings under current liability rules).

liability rules allow only one nonconsensual taking. However, they still attempted to prove that second-order liability rules exist in positive law. ⁶⁶

Even if higher-order liability rules rarely occur, the idea of using an internal auction to reveal private information is inspirational. We can conceive of the internal auction process in terms of the thought process of a decision maker who experiences multiple disclosures of information, to determine whether damages are more (or less) than the value of the entitlement non-consensually taken. Accordingly, we can determine that the use of multiple transactions to reveal the parties' preferences or private information is an approach that is often used in bargaining. Through a series of such transactions, the allocation of resources can reach optimality.

A higher-order liability rule allows for moving the allocation multiple times (at least twice) within the bargaining range. By contrast, a traditional (first-order) liability rule allows only one nonconsensual taking (and determines the corresponding damages). In other words, the allocation of the resource is determined only once. A second- or higher-order liability rule uses a series of options to determine the allocation at least twice. Using multiple transactions to adjust the allocation in order to reach an equilibrium is not uncommon in economics. As Coase argued, if transaction costs are zero, which implies that the parties can deal

⁶⁶See Ayres & Balkin, Legal Entitlements, supra note 21, at 710 (proposing a second-order liability rule to give the entitlement holder a take-back option). Ayres & Balkin illustrated the second-order liability rule with a famous case in which the court acknowledged that a dock owner would be liable to the defendant if he had unmoored the defendant's ship, causing it to be damaged. *Id.* at 715-16, (citing Vincent v. Lake Erie Transp. Co., 109 Minn. 456 (1910)).

⁶⁷See Ayres & Balkin, Legal Entitlements, supra note 21, at 709 (describing entitlements as "court-supervised auctions" with predetermined sets of biddings.).

⁶⁸See James M. Buchanan & Gordon Tullock, The Calculus of Consent: Logical Foundations of Constitutional Democracy 97 (1st ed. 1962) (discussing how a higher-order liability rule permits the use of a series of transactions in order to reach an equilibrium).

an infinite number of times, then voluntary transactions can achieve an equilibrium. ⁶⁹ Higher-order liability rules simply allow the parties to negotiate back and forth under the court's supervision. ⁷⁰

Based on this interpretation of higher-order liability rules, the use of multiple factors to determine damages by adjudication is a process of internal auction, an example of which is to utilize a list of multiple factors to determine a reasonable royalty. Each factor presents itself as an opportunity to bid, which is a revelation of preference or private information. Some factors substantially influence the allocation of the "proceeds" (that is, the amount of damages). Some factors serve as adjustments and only have a minor effect on the amount of damages. Establishing the amount of damages by using factors to bid is similar to determining the exercise price of an option—that is, how the proceeds of an auction are distributed between the parties.

D. Focal points in game theory

When a game consists of multiple equilibria, there is no easy method for choosing among such equilibria. ⁷⁴ Each

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⁶⁹See R.H. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1, 6 (1960) (using an example of a farmer renting land from a cattle raiser to highlight the effect of perfect competition on economic conditions); see also Herbert Hovenkamp, *Marginal Utility and the Coase Theorem*, 75 CORNELL L. REV. 783, 785 (1990) (explaining the efficiency thesis of the Coase Theorem as a scenario without transaction costs and externalities, where the bargainers "will achieve a Pareto efficient result" that "maximizes their joint wealth").

⁷⁰See IAN AYRES, OPTIMAL LAW: THE STRUCTURE OF LEGAL ENTITLEMENTS 96 (U. of Chi. Press 2005) (outlining mechanisms of higher-order liability rules, in which the court facilitates negotiation between the litigants).

⁷¹See Ayres & Balkin, Legal Entitlements, supra note 21, at 729 (explaining how private information can be used for multiple-order liability rules, which completes the process begun by first-order rules).

⁷²See Ayres & Balkin, Legal Entitlements, supra note 21, at 711 (stressing the rules of an auction and how the proceeds are allocated).

⁷³See Ayres, supra note 33, at 95 (noting: "Higher-order liability rules allow the court to distribute the allocative power as they see fit.").

⁷⁴See Robert B. Ahdieh, Law's Signal: A Cueing Theory of Law in Market Transition, 77 S. CAL. L. REV. 215, 232 (2004) (asserting the multiple Nash

equilibrium could be chosen. If any clue causes players to believe that a particular equilibrium is more likely than the others, this belief can coordinate the players' actions so that they converge at this equilibrium, which is known as a "focal point."

According to Thomas Schelling, a focal point is a solution made salient through mutual recognition. By definition, a focal point is an equilibrium that is "more likely to be realized than the other."

The expectation by all players of a certain solution tacitly coordinates their actions; thus, their courses of action may converge. Tacit coordination can achieve higher payoffs for all players, or at least allow them to avoid the least preferred result.

The formation of a focal point does not necessarily rely on *a priori* reasoning but rather "inherently dependent on empirical evidence." Schelling stated that "[f]inding the key, or rather finding *a* key—any key that is mutually recognized as the key becomes *the* key—may depend on imagination more than on logic; it may depend on analogy, precedent, accidental arrangement, symmetry, aesthetic or geometric configuration, casuistic

Equilibria as the central feature of coordination games); *see also* Richard H. McAdams, *A Focal Point Theory of Expressive Law*, 86 VA. L. REV. 1649, 1656 (2000) (listing the various types of equilibria).

⁷⁵See Ahdieh, supra note 74, at 239 (listing the three potential mechanisms that can be used to resolve coordination games: "communication, convention, and focal points"); see also McAdams, supra note 74, at 1061 (noting that in a game with multiple equilibria, salient features—focal points—substantially facilitate coordination).

⁷⁶See Ahdieh, supra note 74, at 244 (clarifying that a focal point refers to an equilibrium choice in a coordination game, which stands out (i.e., is salient) from other solutions due to cultural or psychological reasons); see also McAdams, supra note 74, at 1060–61 (specifying that an equilibrium is focal if it has a certain feature that attracts attention to itself and renders it more prominent than other equilibria due to psychological, historical, or cultural reasons).

⁷⁷See McCain, supra note 18, at 74 (explaining Schilling's definition of a focal point).

⁷⁸See McAdams, supra note 74, at 1660 (explaining: "Because focal points do not depend entirely on a priori reasoning, Schelling contends that '[t]his corner of game theory'—coordination—'is inherently dependent on empirical evidence.").

reasoning, and who the parties are and what they know about each other."

Legal communication, similar to other types of third-party communication, provides focal points to coordinate individual actions. Legal communication is a type of third-party communication to establish the prominence of a solution among all players and thus to coordinate their actions to converge on the solution. The effect of the law to provide focal points can emanate from the law's expressive function, without resorting to the threat of sanctions. 81

The players in the game of claiming monetary damages include the parties and the judge. They attempt to seek out a "solution." A highly simple method of achieving a solution is to resort to sequential decisions; that is, to grant a party, typically the plaintiff, the option to choose the type of monetary relief first. However, this method may fail. The plaintiff may not obtain the type of monetary relief that he or she chooses because the facts of the particular case do not correspond to the remedy that the plaintiff chooses. For example, the plaintiff may elect to claim actual damages, but he or she may not be able to prove actual confusion. Another approach is to discover a focal point that already exists in the circumstances of the case, which would provide clues to the After determining a focal point, the players then solution. 84

⁷⁹See McAdams, supra note 74, at 1660 (quoting THOMAS C. SCHELLING, THE STRATEGY OF CONFLICT 57 (Harv. Univ. Press 1963) (noting how the formation of a focal point often does not always rely on formal logic).

⁸⁰See McAdams, supra note 74, at 1663 (discussing the ways in which third-party communication can individuals recognize certain solutions as "focal").

⁸¹See McAdams, supra note 74, at 1663 (claiming that "law is one means of creating a focal point" and describing the law's expressive function).

⁸²See Jay A. Soled, *Transfer Tax Valuation Issues, the Game Theory and Final Offer Arbitration: A Modest Proposal for Reform*, 39 ARIZ. L. REV. 283, 295-302 (1997) (introducing the concept of a solution in game theory); *see also* Salant & Sims, *supra* note 17, at 1853-57 (summarizing three of the various solutions that could be used in game theory).

⁸³See Almeling, supra note 9, at 207 (setting forth how the facts may not fit for the plaintiff to obtain the monetary relief they are seeking).

⁸⁴See Christopher P. Bussert & Theodore H. Davis, Jr., Calculating Profits under

concentrate their actions toward this focal point, including claims and defenses. Courts have developed focal points for awarding monetary damages by case law, including actual confusion, prior/existing royalties, and bad faith of the infringer. ⁸⁵ These rules have formalized the originally contextual injury by determining the type of remedy according to the entire circumstances of the case. ⁸⁶ An example of how to conduct a judicial internal auction by using focal points is to determine a single solution among the multiple solutions that coexist in the wide bargaining range of monetary awards by seeking a certain salient character. ⁸⁷

III. The Continuum of Monetary Relief and Equity

A. The continuum of monetary relief

Property rules and liability rules are not a set of contradictory concepts but rather the opposite ends of a continuum

Section 35 of the Lanham Act: A Practitioner's Guide, 82 TRADEMARK REP. 182, 183 (1992) (providing the relief could be dependent on the circumstances of the case).

⁸⁵See Maker's Mark Distillery, Inc. v. Diageo N. Am., Inc., 703 F. Supp. 2d 671, 700 (W.D. Ky. 2010), (citing Nalpac, Ltd. v. Corning Glass Works, 784 F.2d 752, 755 (6th Cir. 1986)) (finding monetary damages may be awarded where the infringer acts in bad faith); see also Dowagiac Mfg. Co. v. Minn. Moline Plow Co., 235 U.S. 641, 648 (1915) (holding royalty damages requires evidence of prior or existing royalties); Teaching Co. Ltd. P'ship. v. Unapix Entertainment, Inc., 87 F. Supp. 2d 567, 588 (E.D. Va. 2000) (claiming to recover damages, a plaintiff must demonstrate actual confusion).

⁸⁶See Dowagiac Mfg. Co., 235 U.S. at 650 (suggesting that in addition to the presence of reasonable royalties, courts should also look at "the nature of the invention, its utility and advantages, and the extent of the use involved" in determining remedies in infringement cases); see also Maker's Mark Distillery, Inc., 703 F. Supp. 2d at 700-01 (demonstrating the court using bad faith by the infringer in addition to circumstances of the case, such as the defendant admitting he would not have used Maker's Mark's trademark if he know he would be sued); Teaching Co. Ltd. P'ship, 87 F.Supp. at 590 (showing the court's reliance on the totality of the evidence presented in the case to find actual confusion).

⁸⁷See Ahdieh, *supra* note 74, at 244 (contending that a focal point analysis focuses on a particular solution that stands out among multiple options, and by its distinguishing nature will be preferred by a choice of all players).

with various types of intermediate regimes. Various types of monetary relief are hybrid regimes of property rules and liability rules. ⁸⁸ Different regimes simply have different portions of property rules and liability rules: some are closer to the liability rule end, whereas some are closer to the property rule end.

Trademark law has developed several types of monetary relief for the prevailing plaintiff in a trademark infringement case. ⁸⁹ Although theoretical terms such as property rules or liability rules were rarely used historically, courts and legislatures have developed several methods of measuring relevant damages. These methods, as hybrid regimes, are dispersed along the continuum between property rules and liability rules, and they enable a court to achieve various policy goals by using one type of monetary relief or a combination of multiple types. ⁹⁰ As Professor McCarthy argued, it is better to characterize these different methods as "monetary recovery," because they can achieve diverse policies that are not necessarily compensatory in nature. ⁹¹

The continuum of the types of monetary relief can be constructed in a manner that is centered on reasonable royalty. 92

⁸⁸See Shumueli, supra note 28, at 133 (noting that under various circumstances, property rules, liability rules, and inalienability rules "are mixed in application"). ⁸⁹See 15 U.S.C. § 1117 (a) (listing that a plaintiff is entitled to recover 1) defendant's profits; 2) any damages sustained by the plaintiff; and 3) the costs of the action); see also James M. Koelemay, Jr., A Practical Guide to Monetary Relief in Trademark Infringement Cases, 85 Trademark Rep. 263, 281 (1995) (noting that several categories of monetary relief are available to the plaintiff); see also 5 McCarthy, supra note 2, § 30:57 (listing "five ways of measuring monetary recovery").

⁹⁰See Danielle Conway-Jones, Remedying Trademark Infringement: The Role of Bad Faith in Awarding an Accounting of Defendant's Profits, 42 SANTA CLARA L. REV. 863, 881 (2002) (listing the goals of the Lanham Act's remedy provision—to achieve fairness and equity between the trademark owner and the infringer, to provide methods of measuring injury for a trademark owner who is unable to prove actual damages, and to render infringement unprofitable).

⁹¹See Koelemay, supra note 89, at 266-67 (listing "different rationales including unjust enrichment, deterrence, and compensation" as the policy goals that can be pursued under the court's equitable discretion); see also 5 McCarthy, supra note 2, § 30:57 (citing the five methods of measuring monetary recovery in litigation).

⁹²See Jarosz & Chapman, supra note 48, at 782 (defining reasonable royalties as a "device for retroactively reaching a just result"); see also 5 MCCARTHY, supra

The mainstream theory of reasonable royalty holds that the rate should be constructed on the basis of a hypothetical negotiation. ⁹³ Reasonable royalty is consistent with the exchange paradigm—the trademark owner's loss of use in exchange for a price paid by the user-infringer. ⁹⁴ Thus, reasonable royalty is consistent with traditional law and economics texts on liability rules—the court emulates the terms the parties would have agreed to had they had an opportunity to negotiate. ⁹⁵ Since the 1970 *Georgia-Pacific* case, a hypothetical negotiation has become the major method of constructing reasonable royalties. ⁹⁶ As constructed bargaining and

note 2, § 30:85 (describing reasonable royalties as an adequate means of calculating actual damages when there was a "period of continued use of a mark after a license ended").

⁹³See David Drews, Determining an Appropriate Royalty Rate for Reasonable Royalty Trademark Damages, 49 LES NOUVELLES 150, 150 (2014) (pointing out jurisdictions that accept the hypothetical negotiation approach in trademark infringement cases, even if the trademark owner has categorically refused to license the use of the trademark); William F. Lee & A. Douglas Melamed, Breaking the Vicious Cycle of Patent Damages, 101 CORNELL L. REV. 385, 397-98 (2016) (commenting that since 2010, the Federal Circuit has reaffirmed the hypothetical negotiation approach but has required tailoring a reasonable royalty to the facts of the case); Leah L. Scholer, Righting the Wrong in Reverse Confusion, 55 HASTINGS L. J. 737, 741 (2004) (defining reasonable royalty rate: "[T]he rate upon which parties would mutually settle if they willfully negotiated a royalty deal."). Noting that reasonable royalty remedies are based on a hypothetical negotiation to evaluate the relevant market. Id. at 742 n.32; see also Jarosz & Chapman, supra note 48, at 782 (reasoning that a hypothetical negotiation is the main tool for constructing a reasonable royalty).

⁹⁴See Daniel D. Domenico, Mark Madness: How Brent Musburger and the Miracle Bra May Have Led to a More Equitable and Efficient Understanding of the Reverse Confusion Doctrine in Trademark Law, 86 VA. L. REV. 597, 642 (2000) (contending a reasonable royalty is a "judicially determined price" for the defendant's use of the trademark); see also Scholer, supra note 93, at 753 (asserting that reasonable royalties most precisely reflect the interest of using a trademark).

⁹⁵See Omri Ben-Shahar, A Bargaining Power Theory of Default Rules, 109 COLUM. L. REV. 396, 396-97 (2009) (stating the economic approach allows for the most efficient arrangement and that parties are "best served by default rules"); see also Ayres & Talley, Solomonic, supra note 25, at 1033 (highlighting how traditional "law-and-economic literature" allow for parties to "bargain in the shadow of liability rules").

⁹⁶See Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (listing the Georgia-Pacific factors used to calculate reasonable royalties); see also Jarosz & Chapman, supra note 48, at 772 (explaining that the widespread use of the Georgia-Pacific factors led courts to consider reasonable

contracting, a hypothetical negotiation sets the price that an infringer should pay as just compensation for the loss of the trademark owner's use. 97

Reasonable royalty exhibits continuity with actual damages. ⁹⁸ This continuity results from the feature of a reasonable royalty as a type of lost profit and thus a part of actual damages. If courts move further toward liability rules, reasonable royalties can be combined with other proven damages, such as injury to the trademark owner's reputation and goodwill. ⁹⁹ Moreover, reasonable royalty is continuous with an accounting of profits, because a court can enhance the royalty for deterrence purposes and thus disgorge the infringer's profits. ¹⁰⁰ Therefore, one can construct a continuum comprising actual damages, reasonable royalty, and accounting of profits that is centered on reasonable royalty. ¹⁰¹

royalty remedies as the result of hypothetical negotiations); *see also* Lee & Melamed, *supra* note 93, at 397–98 (describing that since 1982, the *Georgia-Pacific* factors have become a preferred method for calculating reasonable royalties).

⁹⁷See Jarosz & Chapman, supra note 48, at 787 (quoting legal expert, Richard Cauley, who concluded that the most significant factor in determining reasonable royalty is "how that patent is used" by the infringer); see also Drews, supra note 93, at 151 (the Georgia-Pacific factors can be adopted to construct a reasonable royalty in a trademark infringement case).

⁹⁸See 5 McCarthy, supra note 2, § 30:85 (commenting that the imposition of a compulsory license is not a reasonable remedy for infringement).

⁹⁹See Howard Johnson Co., Inc. v. Khimani, 892 F.2d 1512, 1520 (11th Cir. 1990) (noting recovery can include lost profits or a reasonable royalty); Ramada Inns, Inc. v. Gadsden Hotel Co., 804 F.2d 1562, 1564-66 (1987) (awarding attorney's fees and prelitigation interest); Boston Professional Hockey Ass'n, Inc. v. Dallas Cap & Emblem Manufacturing, Inc., 597 F.2d 71, 75 (5th Cir. 1979) (holding: "[A]Il elements of injury to the business of the trademark owner proximately resulting from the infringer's wrongful acts."); see also Jarosz & Chapman, supra note 48, at 776 (combining or splitting awards allows a court to grant both a reasonable royalty and damages from lost profits).

¹⁰⁰See Sands, Taylor & Wood Co. v. Quaker Oats Co., 978 F.2d 947, 963 n.19 (7th Cir. 1992) (treating "a reasonable royalty as a baseline or starting point for determining the appropriate award" and taking the defendant's profits into account for reasons of deterrence); see also Scholer, supra note 93, at 741 (opining that in a willful infringement case, the court can raise the reasonable royalty rate to "reflect the fact that the junior user enjoys what is essentially a forced license").

¹⁰¹See id. (considering reasonable royalty as a baseline for determining

B. Equity applied to all kinds of monetary remedies

Trademark law's monetary remedies originated in common law and equity. Damages originated in common law, whereas accountings of profits originated in equity. Nevertheless, the pure forms of actual damages in law and accounting of profits in equity have shortcomings. The intangible nature of value represented by a trademark often renders actual damages unsuitable for trademark infringement cases because of the difficulty of measuring a business's intangible value.

Plaintiffs' lost profits are also difficult to measure and prove, and they are very likely to be speculative in nature. However, an accounting of profits has a problem: it may result in inadequate compensation for the plaintiff, such as when the

appropriate award); see also Jarosz & Chapman, supra note 48, at 775 (highlighting the flexibility regarding both the type and quantum of evidence in determination of royalty damages).

¹⁰²See Almeling, supra note 9, at 211 (historically, before the merger of law and equity, a plaintiff in a trademark infringement case sought damages at law or an injunction in equity); see also Koelemay, supra note 89, at 264 (explaining Section 35 of the Lanham Act "combined the common law remedy of damages with the equitable remedy of an accounting of profits").

¹⁰³See 6 LOUIS ALTMAN & MALLA POLLACK, CALLMANN ON UNFAIR COMP., TRADEMARKS & MONOPOLIES § 23:61 (4th ed. 2018) (providing a comprehensive analysis of the law of unfair competition as it relates to trademark infringement); Conway-Jones, *supra* note 90, at 879-80 (noting that equity courts are the proper forums for most trademark infringement cases due to the need for issuing injunctions and that equity courts are willing to award monetary relief, particularly accountings of profits, for the purpose of judicial economy). ¹⁰⁴See Conway-Jones, *supra* note 90, at 880 (stating: "[C]ompensation theory alone was no longer adequate to justify the accounting of profits remedy.").

¹⁰⁵See Almeling, supra note 9, at 215 (noting that in a trademark infringement case, it is difficult for a plaintiff to prove actual damages with reasonable certainty, because multiple factors affect whether a business succeeds in the marketplace); see also ALTMAN & POLLACK, supra note 103 (stating: "[A]t law, the object is to compensate the aggrieved party for the pecuniary loss sufferer, and this is often difficult to measure. The plaintiff must establish actual loss of profit [and this] is often speculative."); see also Conway-Jones, supra note 90, at 885 (explaining that although compensation has been an acceptable justification for courts, the compensation rationale has not brought about sufficient remedy to plaintiffs who were unable to prove actual damages due to the speculative nature of market-based harm).

defendant fails to profit despite causing harm to the plaintiff. Because every remedy has shortcomings, the Lanham Act grants courts equity power on all types of monetary remedies, and the result is that every type of remedy becomes a hybrid regime dispersed along the continuum. ¹⁰⁶ Equitable power allows courts to use different types of monetary remedies simultaneously, such as awarding both actual damages and an accounting of profits, so that the plaintiff obtains full relief. Even when applying a single type of monetary remedy, courts are allowed to mix in the principles of other remedies so that the single remedy is capable of granting the plaintiff a more complete remedy. ¹⁰⁷ For example, the consideration of deterrence can be factored into reasonable royalty.

The Lanham Act's "principles of equity" provision has conferred wide discretion on courts to award or to refuse to award every type of monetary relief. ¹⁰⁸ By exercising the power of equity, courts have fashioned various hybrid regimes by case law. ¹⁰⁹ The justifications, and sometimes the prerequisite, for awarding a particular type of monetary relief exhibit the character of a hybrid regime. ¹¹⁰ The nature of the defendant's conduct, particularly his or her intent such as willfulness, bad faith, innocence, and fraudulent or deceiving intent, has been considered in court

¹⁰⁶See Conway-Jones, supra note 90, at 889 (mentioning that several commenters find that "monetary recovery in infringement cases remains 'a confusing mélange of common law and equity principles."").

¹⁰⁷See Conway-Jones, supra note 90, at 889 (describing Section 35 of the Lanham Act, which states that monetary relief is subject to the principles of equity and the power to enter judgment according the specific circumstances of the case). Courts have established various requirements as prerequisites of monetary recovery. *Id*.

¹⁰⁸See BASF Corp. v. Old World Trading Co., Inc., 41 F.3d 1081, 1092 (7th Cir. 1994) (acknowledging how the Lanham Act allows courts a "wide range of legal and equitable remedies for a violation of the Act"); see also Koelemay, supra note 89, at 266 (indicating that case law since Champion Spark Plug Co. has generally held that monetary relief is subject to the court's equitable discretion).

See BASF Corp., 41 F.3d at 1092-95 (addressing various factors the court considered while awarding remedies, such as lost profits, a market share analysis, and equitable remedies).

¹¹⁰See Roulo v. Russ Berrie & Co., Inc., 886 F.2d 931, 941 (7th Cir. 1989) (relying on the principles of equity, a court may award an accounting of profits based on the reasons of unjust enrichment, deterrence, and compensation).

decisions regarding the various types of monetary remedies. ¹¹¹ This is the case for not only accounting of profits—which is based on property rules and thus typically considers the nature of the defendant's conduct—but also awarding of actual damages, which is based mostly on liability rules. ¹¹² For example, although the principle of actual damages is compensation for the plaintiff's harm, the defendant's intent, including intent to deceive, has been included in the reasoning of awards of actual damages by indirect inference. ¹¹³ Thus, all types of monetary remedies exhibit the features of a hybrid regime. Two types of justifications—deterrence of future infringement by rendering infringement unprofitable and compensating the plaintiff for his or her loss—coexist in accounting of profits. ¹¹⁴ One is based on property rules and the other is based on liability rules.

Because of the intangible nature of reputation-related assets and the difficulty of proving losses on intangible assets, trademark law attempts to approximate the loss of the trademark owner from various angles in order to provide fair remedy to the trademark owner. The difficulty of calculating and proving losses, as well

¹¹¹See Roulo, 886 F.2d at 942 (suggesting that these factors will be considered by the court, but the Seventh Circuit requires a finding of willful infringement); see also Koelemay, supra note 89, at 270 (highlighting Justice Thomas's thoughts on various court decisions and how they have interpreted the meaning of "willfulness").

of "willfulness"). ¹¹²See Almeling supra note 9, at 216-17 (inferring that by courts looking at defendant's misconduct to determine monetary damages, this brings up liability related rules).

¹¹³See Almeling supra note 9, at 207 (stating several courts' interpretation of the term "subject to the principles of equity" to impose two requirements—the plaintiff must prove actual confusion or willful infringement by the defendant—before a plaintiff can seek monetary remedy); see also Koelemay, supra note 89, at 267 (noting that the scienter of an infringer has long been an unwritten element of the Lanham Act Section 35(a) remedies).

¹¹⁴See Koelemay, supra note 89, at 266, 270 (outlining that the Seventh Circuit relies on unjust enrichment deterrence and compensating in giving an award, while the Supreme Court looks at the infringer's scienter and the existence of damage to the plaintiff or profit to the infringer).

¹¹⁵See Almeling, supra note 9, at 211 (observing that an accounting of profits has become a convenient proxy for the plaintiff's damages due to the difficulty of proving market-based harm).

as the coexistence of remedies in law and equity, renders all remedies in trademark law hybrid regimes. The law of damages emphasizes the court's equitable power and uses various factors to adjust the amount of damages. This is how courts use power of equity and factors to simulate the result of bargaining by the parties. ¹¹⁶

Legislative approval of applying "the principles of equity" to all types of monetary relief indicates that courts have the power to use any focal point and the corresponding type of monetary relief. This extensive juridical power allows a court to approximate an allocative equilibrium in a particular case, and it treats the judicial process of seeking an appropriate type of monetary relief as the process of seeking a solution in a game.

For example, in *Web-Printing Controls Co., Inc. v. Oxy-Dry Corp.*, although the plaintiff was unable to prove actual consumer confusion and thus was not allowed to recover actual damages, the court stated that "[o]ther avenues of relief, however, are not foreclosed." Having emphasized the judicial power to fashion "wide-ranging relief for a violation of the Lanham Act, the court turned to an inquiry on whether the plaintiff could claim an

¹¹⁶See Guido Calabresi, Transaction Costs, Resource Allocation and Liability Rules – a Comment, 11 J.L. & ECON. 67, 69 (1968) (formulating the thesis that the government could attempt to mimic the result of private bargaining); see also Jules Coleman, The Normative Basis of Economic Analysis: A Critical Review of Richard Posner's the Economics of Justice, 34 STAN. L. REV. 1105, 1108 (1982) (highlighting Judge Richard Posner's use of the court's equitable power to "mimic" the market).

¹¹⁷ See Almeling, supra note 9, at 212 (drawing attention to judicial recognition of a certain prerequisite for a type of monetary relief (i.e., a solution), which has the effect of eliminating unlikely strategy profiles and focusing the parties on strategy profiles that are likely); see also Salant & Sims, supra note 17, at 1853 (noting that the process of searching for a solution results in eliminating the strategy profiles that rational actors are unlikely to adopt).

¹¹⁸See Web-Printing Controls Co., Inc. v. Oxy-Dry Corp., 906 F.2d 1202, 1204–05 (7th Cir. 1990) (stating: "A plaintiff wishing to recover damages for a violation of the Lanham Act must prove the defendant's Lanham Act violation, that violation caused confusion among consumers of the plaintiff's product, and, as a result, that the plaintiff suffered actual injury.").

accounting of profits and whether an award of attorney's fees was proper. 119

Another example is *International Star v. Tommy Hilfiger*, in which the plaintiff was likewise unable to prove actual confusion and thus could not claim actual damages, but the Second Circuit, however, turned to the defendant's bad faith and held that the unavailability of actual damages did not preclude the plaintiff from claiming an accounting of profits or attorney's fees. ¹²⁰ These cases demonstrate that a court's equity power allows it to move relatively freely along the spectrum of monetary remedies. A plaintiff's failure to "bid" by proving a certain focal point, such as the failure to prove actual confusion, results in his or her ineligibility for an award of actual damages, but the court may still establish another focal point (such as bad faith of the defendant) and allocate the entitlement to the type of relief corresponding to that focal point. ¹²¹

C. Auction by focal points

Professor McCarthy stated that "[t]he case law on monetary recovery in trademark infringement cases is a confusing mélange of common law and equity principles." He observed that courts have attempted to balance a number of factors—including the plaintiff's proven damages, the defendant's willfulness or negligence, actual consumer confusion, and the defendant's

¹¹⁹See id. (reflecting on the variation of remedies awarded under the Lanham Act, including, but not limited to, an award of damages and recovery of the defendant's profits).

¹²⁰See International Star v. Tommy Hilfiger, 80 F.3d 749, 753 (2d Cir. 1996) (holding district court used incomplete findings of fact in denying actual damages).

¹²¹See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36, cmt. g(3) (AM. LAW INST. 1995) (stating that a plaintiff may recover damages equivalent to proven pecuniary harm; otherwise, the court may determine the appropriate amount of damages).

¹²²See 5 MCCARTHY, supra note 2, § 30:85 (referencing McCarthy's argument about the present state of case law regarding monetary recovery in trademark infringement lawsuits).

realized profits—to provide the plaintiff with an appropriate remedy in a particular case. ¹²³

McCarthy's statement can be interpreted as indicating that in the judicial process of measuring damages, some determinative factors (or a factor) emerge to determine the court's allocation at a certain approximate point (a type of monetary relief). According to this interpretation, the claim of monetary relief can be treated as a game with multiple equilibria (multiple methods of calculating monetary relief). Focal points may work to facilitate the resolution of the game, making a particular equilibrium salient to all players. ¹²⁴ These prerequisites for a certain type of monetary relief fulfill the function of focal points, which are adequate to pinpoint the monetary relief (one of several possible "solutions") through a certain method of calculation (such as actual damages, a reasonable royalty, or an accounting of profits). ¹²⁵ After these factors have determined the approximate allocation of monetary relief, the court must fine-tune the relief amount.

To state the process in terms of an internal auction, the plaintiff bids with a certain focal point (such as the existence of

¹²³See Koelemay, supra note 89, at 263 (discussing whether factors such as scienter, actual confusion, and actual injury are requirements for monetary relief); see also 5 McCarthy, supra note 2, § 30:85 (outlining several factors used by courts to balance common law and equity principles, including: "[W]hether defendant was willful, negligent, or innocent; whether plaintiff suffered losses in any provable amount; whether there is proof of actual confusion of some customers; and whether defendant realized profits from its infringing action."); see also 3 LALONDE, supra note 5, § 14.03[2] (listing the aggravated, willful, and fraudulent nature of the defendant's conduct as the factors that a court will consider in awarding monetary relief).

¹²⁴See Robert B. Ahdieh, *The Strategy of Boilerplate*, 104 MICH. L. REV. 1033, 1051 (2006) (arguing: "[A] boilerplate may offer a 'focal point' of sorts, facilitating resolution of the game."). Ahdieh asserts that the use of boilerplate language in bargaining is necessary to create a balanced deal for both parties. *Id.* ¹²⁵See Tom Ginsburg & Richard H. McAdams, *Adjudicating in Anarchy: An Expressive Theory of International Dispute Resolution*, 45 WM. & MARY L. REV. 1229, 1265 (2004) (indicating that if an equilibrium has a feature that draws unique attention to itself, it may be classified as "focal"). A focal point is a means of coordination that indicates a particular equilibrium among the multiple equilibria of a game. *Id.* "An equilibrium is focal if it has some feature that draws unique attention to itself, making it stand out among all equilibria." *Id.*

actual confusion or the defendant's willfulness), and the defendant bids by denying that focal point or by proposing another focal point (such as the defendant's good faith). The parties bid by proposing some focal point, and the court closes the deal by recognizing the existence of that focal point. If the bid through a certain focal point is successful, the damages allocated would be in the form of a certain type of monetary relief that corresponds to that focal point.

The judicial process of using focal points to bid in an internal auction approximates the equilibrium of entitlement allocation. 127 These focal points are analogous to tools in a court's toolbox that a judge may fetch to ensure that his or her judgment approaches an equilibrium. The legislative mandate that the principles of equity are applied to all types of remedies allows a court to move freely among different types of remedies and even to forge a hybrid regime in a particular case. Moving along the continuum of monetary relief, the court's allocation of the entitlement depends on whether a party succeeds in bidding with a focal point. Establishment by case law of a certain prerequisite for a particular type of monetary relief illustrates how adjudication can establish focal points. 128

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¹²⁶See Resource Developers, Inc. v. Statue of Liberty-Ellis Island Found., Inc., 926 F.2d 134, 140 (2d Cir. 1990) (citing PPX Enterprises, Inc. v. Audiofidelity Enterprises, Inc., 818 F.2d 266 (1987) (stating: "[U]pon a proper showing of [the defendant's] deliberate conduct, the burden shifts to the defendant to demonstrate the absence of consumer confusion."); see also 5 MCCARTHY, supra note 2, § 30:74 (mentioning the process in which the plaintiff or the defendant attempts to prove certain factors, namely "intentionally deceptive conduct," which can be conceived as bidding in an internal auction).

¹²⁷See Ayres & Balkin, *Legal Entitlements*, *supra* note 21, at 706 (explaining Coase Theorem that when there is full information, or focal points, "efficient deals would be struck under ideal bargaining conditions," regardless of the initial allocation of entitlements).

¹²⁸See McAdams, supra note 74, at 1666 (noting that in regards to the establishment of focal points by adjudication: "[L]egal expression can, like other types of third-party communication, provides a focal point for coordinating individual action.").

IV. Three Types of Monetary Relief along the Continuum

A. Actual damages

Actual damages refer to all losses of the plaintiff caused by the defendant's infringement. More precisely, a defendant in a trademark infringement case is responsible for all injuries suffered by the plaintiff that are proximately caused by the defendant. This process applies the general principles of torts. 131

Actual damages may include the plaintiff's injuries or lost profits—such as lost royalties or profits on future sales—both of which must be proven by the plaintiff. The former refers to all injuries approximately caused by the defendant's wrongful conduct, including injury to reputation or goodwill and additional expenses incurred such as the expenses for preventing consumer confusion and the costs of corrective advertising. The latter refers to the plaintiff's loss of profits caused by the defendant's act (*i.e.*, the profits the plaintiff could have made in the litigation, were it not for the

¹²⁹See 3 LALONDE, supra note 5, § 14.03(3)(a) (highlighting that "[r]ecoverable damages in a trademark infringement action are designed to compensate for all injuries to the plaintiff proximately caused by the infringing acts of the defendant.").

¹³⁰See ALTMAN & POLLACK, supra note 103, § 23:65 (4th ed. 2018) (characterizing trademark infringement damages as those "proximately resulting from the infringer's wrongful acts, such as profit which otherwise would have been made on lost sales."); see also Arciero, supra note 23, at 321 (stating that courts have recognized four separate categories of damages: "lost profits due to diverted trade, lost profits due to price reduction, harm to reputation and goodwill; and costs of corrective advertising"); see also 3 LALONDE, supra note 5, § 14.03(3)(a) (mentioning that trademark infringement damages are "designed to compensate for all injuries that the plaintiff proximately caused by the infringing act").

¹³¹See 5 MCCARTHY, supra note 2, § 30:72 (measuring the plaintiff's damages "under the tort standard under which the infringer-tortfeasor is liable for all injuries caused to plaintiff by the wrongful act, whether or not actually anticipated or contemplated by the defendant when it performed the acts of infringement").

¹³²See Aladdin Mfg. Co. v. Mantle Lamp Co. of America, 116 F.2d 708, 717 (7th Cir. 1941) (reiterating other types of injuries plaintiff may be compensated for by the defendant); see also 3 LALONDE, supra note 5, § 14.03(3)(a) (outlining different types of injuries that a defendant's wrongful conduct could cause).

defendant's infringement). The plaintiff must prove both the fact and the amount of damages; the plaintiff must also provide a reasonable basis for the computation of these damages so that the court can reach an approximation of the amount. ¹³³

Liability rules grant the entitlement holder fair compensation for his or her loss. ¹³⁴ Thus, whether the plaintiff can prove actual damages has a considerable effect on whether the court grants an award of damages. If the plaintiff suffered no injury, liability rules *per se* do not support an award of damages. ¹³⁵ In cases where the plaintiff cannot prove actual damage, the court can consider that equity has been satisfied by injunctive relief and thus refuse to award damages. ¹³⁶

If a court's decision is purely based on liability rules, the defendant's intent should have no effect on the court's decision regarding the award of compensatory damages. Willfulness of the defendant's conduct is not directly related to the measurement of the right holder's injury. However, although awarding actual damages is the type of relief that is closest to the liability-rule end of the spectrum (restoration of the plaintiff's prior position), the

¹³³See Koelemay, supra note 89, at 284 (demonstrating that courts require strict proof of the fact of damage, while providing more leniency to the proof of the amount of damages); see also 5 McCarthy, supra note 2, § 30:76 (articulating that courts normally draw a strict distinction between proving the fact of damage and proving the amount of damage).

¹³⁴See 5 MCCARTHY, supra note 2, § 30:72 (emphasizing the role of equity in granting compensation for the entitlement holder).

¹³⁵See Almeling, supra note 9, at 215-16 (stating that "without tangible instances of actual confusion, courts doubt the plaintiff has suffered any actual injury that deserves monetary relief.").

¹³⁶See 5 McCarthy, supra note 2, § 30:77 (summarizing that the court may consider an injunction to be adequate punishment to the infringer where it is doubtful whether the plaintiff has suffered any actual damages).

¹³⁷See Mark A. Thurmon, *Confusion Codified: Why Trademark Remedies Make No Sense*, 17 J. INTELL. PROP. L. 245, 318 (2010) (explaining that, in some cases, damages for infringement should be rewarded even when the defendant did not act intentionally).

¹³⁸See 5 McCarthy, supra note 2, § 30:75 (noting that although wrongful intent to cause confusion or deception is not a prerequisite to recovery of actual damages, the existence of such intent is relevant).

defendant's willfulness or the fraudulent nature of the defendant's conduct can affect the court's decision to award actual damages. ¹³⁹ The Restatement (Third) of Unfair Competition confirms that the nature of the defendant's conduct is a proper factor for determining damages. ¹⁴⁰ The Restatement suggests that in cases involving "a defendant who acted without an intent to confuse or deceive," the court may grant an award of damages, but "the decision to award damages is properly influenced by the nature of the defendant's conduct." ¹⁴¹ The defendant's intent to cause confusion, deception, or diversion of sales has become part of courts' consideration in determining the award of actual damages. This indicates that actual damages may still fulfill the function of deterring intentional infringement. Even for an award of actual damages, which is located at the liability-rule end of the spectrum, the rationale of deterrence sometimes still implicitly influences courts' decisions.

Similarly, even if the purpose of actual damages is to reimburse the plaintiff, the defendant's innocence can sometimes insulate him or her from liability of damages, especially when the plaintiff is unable to prove any actual injury. The court can merely grant injunctive relief, unless the plaintiff can prove pecuniary loss. 143 If the court's grant of injunction in a particular

¹³⁹See Thurmon, supra note 137, at 313-14 (discussing the courts' power to award actual damages in proportion to the degree of the infringer's culpability). ¹⁴⁰See Damages: Trademark Infringement and Deceptive Marketing, RESTATEMENT (THIRD) OF UNFAIR COMPETITION, § 36, cmt. j (stating that a

RESTATEMENT (THIRD) OF UNFAIR COMPETITION, § 36, cmt. j (stating that a person may recover for their "pecuniary loss" resulting from another person's offending conduct); *see also* 5 McCarthy, *supra* note 2, § 30:75 (commenting on the importance of considering the defendant's intent).

¹⁴¹See 5 MCCARTHY, supra note 2, § 30:75 (reiterating the influence of the defendant's conduct on the decision to award damages).

¹⁴²See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36 cmt. g (creating the inference that where a loss has occurred, but the defendant is innocent, awarding of damages may be inappropriate).

¹⁴³See General Electric v. Speicher, 877 F.2d 531, 536 (7th Cir. 1989) (holding that the victim of an innocent infringer is entitled to simple damages); see also 5 MCCARTHY, supra note 2138, § 30:75 (asserting that where the plaintiff has proven with reasonable certainty that his or her injuries were caused by the defendant's infringing act, a bona fide infringer may not necessarily shield

case is adequate ("satisfied the equities of the particular case")—often in situations where the defendant is without intent, bad faith, or fraud—the court will not grant monetary damages. ¹⁴⁴ The fact that the defendant's innocence can sometimes insulate him or her from liability of damages is not based on the thinking behind liability rules, but it is instead based on property rules; there is no need to deter willful infringement in this situation.

Because the principles of equity have become the primary tenet of damages in trademark infringement cases, the methods of calculating damages exhibit the features of hybrid regimes. ¹⁴⁵ Even relief calculated through actual damages, which is the method that is closest to liability rules, can also exhibit the character of property rules when courts consider the nature of the defendant's conduct or the defendant's intent. ¹⁴⁶

Case law has established that actual consumer confusion serves as the focal point for awarding actual damages. Most circuits consider that actual confusion must be proven before a court can award actual damages. Without proving actual

himself or herself from the liability).

¹⁴⁴See Almeling, supra note 9, at 210 (noting that in a typical trademark infringement case, injunctive relief satisfies the equities of the case and that monetary relief is not necessary); see also 3 LALONDE, supra note 5, § 14.03(2) (suggesting that the awarding of damages must fall in accordance with the equities and circumstances of the case).

¹⁴⁵See 5 McCarthy, supra note 2, § 30:72 (indicating that Section 35 of the Lanham Act subjects any monetary award to the principles of equity; courts have used the power of equity to carefully control monetary relief).

¹⁴⁶See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36 cmt. j (maintaining that "the decision to award damages is properly influenced by the nature of the defendant's conduct.").

¹⁴⁷See Koelemay, supra note 89, at 279 (asserting some courts look to evidence of actual confusion as a proxy for evidence of the existence of legal injury to the plaintiff); but see Almeling, supra note 9, at 213 (arguing that actual confusion appears in the context of the availability of monetary relief is "improper" and "double-counting").

¹⁴⁸See Web-Printing Controls Co., Inc. v. Oxy-Dry Corp., 906 F.2d 1202, 1204–05 (7th Cir. 1990) (noting that a plaintiff claiming damages under the Lanham Act must prove that a defendant's violation caused actual consumer confusion about the plaintiff's products); see also 3 LALONDE, supra note 5, § 14.03(3)(b) (reiterating what the Lanham Act states a plaintiff must prove to recover damages).

consumer confusion, the court may not award actual damages. This view is supported by the Restatement: an award of monetary damages requires some evidence of actual consumer confusion or deception. 149

To receive compensation for actual damages, the plaintiff must prove injury by actual consumer confusion or deception. ¹⁵⁰ Proving actual confusion or deception enables the court to grant compensation for actual damages. ¹⁵¹ In other words, the plaintiff "bids" by proving actual confusion or deception, whereas the defendant "bids" by proving a lack of actual confusion or deception. ¹⁵² This reciprocal process forms an internal auction in the mind of the court.

The Restatement confirms that the plaintiff must prove that some consumers were actually confused or deceived in order to receive compensation for actual damages. ¹⁵³ In other words, the Restatement solidifies the following rule: some evidence of actual confusion or deception is required to justify the award of actual damages. Nevertheless, actual confusion can be proven by circumstantial evidence, such as consumer surveys. The illicit nature of the defendant's conduct can also be used as circumstantial evidence of actual confusion or deception. ¹⁵⁴

¹⁴⁹See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36 cmt. j (noting that the plaintiff must prove that they were actually deceived in order for the court to award monetary damages).

¹⁵⁰See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36 cmt. j (stressing the plaintiffs' burden to receive monetary damages).

¹⁵¹See Zelinski v. Columbia 300, Inc., 335 F.3d 633, 639 (7th Cir. 2003) (indicating that to recover damages under the Lanham Act, a trademark owner must prove that the violation caused actual consumer confusion and thus she suffered actual injury); see also PPX Enterprises, Inc. v. Audiofidelity Enterprises, Inc., 818 F.2d 266, 271 (2d Cir. 1987) (describing that the plaintiff normally has a greater burden to prove entitlement to damages by proving actual confusion or deception caused by the violation).

¹⁵²See 3 LALONDE, supra note 5, § 14.03(2) (explaining the different burdens the plaintiffs and defendants must prove).

¹⁵³See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36 (explaining that often times actual confusion or deception is not available, and finding proof can be found instead in circumstantial evidence such as consumer surveys or market analysis).

¹⁵⁴See Zelinski, 335 F.3d 633, 639 (holding that although testimony of actual

The existence of actual confusion or deception can be inferred from the defendant's intent. The Second Circuit's decision in *PPX Enterprises, Inc. v. Audiofidelity Enterprises, Inc.* is an example. The *PPX* decision inferred actual consumer deception from the fact that the defendant intentionally caused the deception. Thus, proving the defendant's intent is another method for the plaintiff to receive compensation for actual damages. Therefore, actual confusion serves as a focal point for awarding actual damages, and the defendant's intent to cause confusion or deception serves as a proxy for actual confusion.

Subsequently, the Second Circuit's decision in *Getty Petroleum Corp. v. Island Transportation Corp.* also confirmed this rule. ¹⁵⁷ In this case, the court held that some evidence of consumer confusion (either direct or circumstantial evidence, such as consumer testimony or surveys) is often required for the plaintiff to recover actual damages. Nonetheless, evidence of actual confusion is not absolutely necessary and can be replaced by evidence of deception. ¹⁵⁸

The rationale for this rule is the difficulty of proving actual marketplace damage. Thus, evidence of actual confusion becomes a proxy for hard-to-prove actual marketplace damage. However,

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confusion was not overwhelming, given the facts of the case, the jury was entitled to use common sense to infer that consumers were deceived); *see also* 5 MCCARTHY, *supra* note 2, § 30:74 (stating that circumstantial evidence of actual confusion includes the nature of the defendant's conduct).

¹⁵⁵See PPX Enterprises, Inc, 818 F.2d at 272 (contending that Autofidelity's recordings "tend[ed] to create confusion among consumers" due to their misrepresentations, it was sufficient for the jury to find actual confusion).

¹⁵⁶See PPX Enterprises, Inc, 818 F.2d at 273 (asserting that since the defendant's products were patently fraudulent, the plaintiff need not provide direct or circumstantial evidence of actual confusion).

¹⁵⁷See Getty Petroleum Corp. v. Island Transportation, 818 F.2d 650, 655 (2d Cir. 1989) (reasoning that a plaintiff seeking recovery of damages under the Lanham Act often must prove actual consumer confusion or deception caused by the violation; merely proving likelihood of confusion is inadequate).

¹⁵⁸See id. at 656 (stating that the defendant's knowing and intentional infringement of the trademark can be considered to be an "implicit finding" that consumers actually but mistakenly believed they were purchasing the trademark owner's products).

actual confusion is also difficult to prove. ¹⁵⁹ Thus, the court is allowed to infer actual confusion from evidence of deception "where the conduct at issue was so deceptive that consumers could not help but be confused." ¹⁶⁰ Furthermore, the court may infer deception from evidence of the defendant's intent to cause consumer deception. ¹⁶¹ In other words, this is a series of indirect inferences established through proxies: if a plaintiff can prove the defendant's deceptive intent, he or she can prove deception; if the plaintiff can prove deception, he or she can prove actual confusion; and if the plaintiff can prove actual confusion, he or she may recover actual damages.

However, a finding of likelihood of confusion does not necessarily lead to an award of actual damages. To obtain an award of actual damages, the plaintiff must prove actual confusion, or deception, or intent to cause deception. One commentator observed that these rules have become "black-letter rules." The most critical among these factors is actual confusion, which serves

¹⁵⁹See Keith M. Stolte, Remedying Judicial Limitations on Trademark Remedies: Monetary Relief Should Not Require Proof of Actual Confusion, 75 DENV. U. L. REV. 229, 245 (1997) (noting that actual confusion is "notoriously difficult to prove"); see also Mark A. Thurmon, Federal Trademark Remedies: A Proposal for Reform, 5 AKRON INTELL. PROP. J. 137, 166 (2010) (stating that evidence of actual confusion and actual dilution is hard to establish).

¹⁶⁰See 3 LALONDE, supra note 5, § 14.03(3)(b) (pointing out: "It may be possible to show actual confusion where the conduct at issue was so deceptive that consumers could not help but be confused.").

¹⁶¹See Getty, 818 F.2d at 657 (establishing that the jury was able to infer from the evidence given that there was actual consumer confusion); see also Resource Developers, Inc., 926 F.2d at 139 (permitting that once a defendant's deliberate deception has been proven, a presumption may be drawn that the defendant has successfully confused the public).

¹⁶²See Dowagiac Mfg. Co. v. Minn. Moline Plow Co., 235 U.S. 641, 648 (1915) (inferring royalty damages requires evidence of prior or existing royalties); see also Maker's Mark Distillery, Inc. v. Diageo N. Am., Inc., 703 F. Supp. 2d 671, 700 (W.D. Ky. 2010) (finding monetary damages may be awarded when the infringer acts in bad faith); Teaching Co. Ltd. P'ship. v. Unapix Entertainment, Inc., 87 F.Supp. 2d 567, 588 (E.D. Va. 2000) (claiming that to recover damages, plaintiff must prove actual confusion).

¹⁶³ See Stolte, supra note 159, at 233 (mentioning how courts today apply "black letter principles" rather than analyzing remedies "based on the individualized facts of each case").

as the focal point of the court's internal auction. The parties "bid" by the presence or absence of this focal point. Nonetheless, an indirect inference using proxies allows the defendant's intent—which here denotes the defendant's deceiving intent—to take part in the process of determining the award of actual damages. ¹⁶⁴ Case law founded on judicial exercise of equity has conferred the feature of a hybrid regime on the awarding of actual damages. ¹⁶⁵

Numerous circuit courts allow the use of actual confusion as the focal point to "auction" the monetary relief to actual damages and the use of deception or the intent to deceive as the proxy for actual confusion. Nonetheless, some circuits, especially the Ninth Circuit, have been reluctant to approve such black-letter rules and have insisted on returning to the equity nature of monetary relief by basing their decisions on the totality of the circumstances of the case. 167

¹⁶⁴See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 36, supra note 140 (noting that "the decision to award damages is properly influenced by the nature of the defendant's conduct," including whether the defendant intentionally caused confusion or deception); see also Koelemay, supra note 89, at 279 (stating that actual confusion can be presumed from proof of the infringer's intent to deceive).

¹⁶⁵See Aladdin Mfg. Co. v. Mantle Lamp Co. of America, 116 F.2d 708, 716 (7th Cir. 1941) (discussing the forms of damages that the complainant is entitled to recover).

¹⁶⁶ See Int'l Star Class Yacht Racing Ass'n. v. Tommy Hilfiger, U.S.A., Inc., 80 F.3d 749, 753 (2d Cir. 1996) (holding: "[Evidence] of actual confusion is ordinarily required for recovery of damages for pecuniary loss sustained by the plaintiff."); see also Web-Printing Controls Co., Inc. v. Oxy-Dry Corp., 906 F.2d 1202, 1204–05 (7th Cir. 1990) (holding that to recover damages, the plaintiff must prove that the defendant's violation caused actual confusion among consumers); see also Brunswick Corp. v. Spirit Reel Co., 832 F.2d 513, 525 (10th Cir. 1987) (holding: "[T]o recover damages plaintiff must prove it has been damaged by actual consumer confusion or deception resulting from the violation."); see also 5 MCCARTHY, supra note 2, § 30:74 (noting that the plaintiff wishing to recover damages for a violation of the Lanham Act must prove the defendant's violation of the act which caused actual confusion among the consumers).

¹⁶⁷See Lindy Pen Co., Inc. v. Bic Pen Corp., 982 F.2d 1400, 1411 (9th Cir. 1993) (holding that "an inability to show actual damages does not alone preclude a recovery" of monetary damages); see also 3 LALONDE, supra note 5, § 14.03(3)(b) (noting the Ninth Circuit expressed a specific "preference for those opinions permitting relief based on the totality of the circumstances").

Using focal points, as well as the black-letter rules that solidify focal points, is a means of reducing information costs. 168 This is because a focal point stands for a series of inferences—to recover actual damages, the plaintiff must prove that he or she suffered actual injury; to prove actual injury, the plaintiff must prove that the defendant's infringement engendered actual consumer confusion that caused the plaintiff to incur losses on sales or goodwill. ¹⁶⁹ The opponents of using black-letter rules (and thus focal points) have based their opposition on the possibility that courts would lose sight of the equity nature of monetary relief. Actual confusion is difficult is to prove; it can be expensive if proven by survey evidence. In addition, inference from multiple proxies is "the merging of the fiction of likelihood of confusion into the fictional realm of actual confusion"—in other words, two fictions added together are not necessarily better than one. 170 Moreover, neither the text of the Lanham Act nor its legislative history requires actual confusion as a prerequisite for awarding actual damages. 171

The fundamental position of the opponents of focal points is to return to the "totality of the circumstances" as the basis of

¹⁶⁸See Henry E. Smith, On the Economy of Concepts in Property, 160 U. PA. L. REV. 2097, 2106-08 (2012) (explaining that formal concepts can economize on information costs); see also Almeling, supra note 9, at 212 (describing some courts' choice to use actual confusion as the prerequisite for awarding actual damages as "circumscribing the universe of 'the principles of equity' to a few limited fact patterns"). This is exactly the function of formalism to save information costs—by using formal rules to bypass the "universe" of open-ended contextual inquiry. *Id.*

¹⁶⁹See Web-Printing Controls Co., 906 F.2d at 1205 (explaining how plaintiffs can recover under the Lanham Act if the violation caused the actual confusion and as a result, actual injury occurred).

¹⁷⁰See Stolte, supra note 159, at 245 (concluding that without significant evidence of actual consumer confusion, use of multiple proxies can be burdensome and unfair).

¹⁷¹See Choice Hotels Int'l, Inc. v. Pennave Assocs., 43 Fed. Appx. 517, 519 (3d Cir. 2002) (holding that the text of the Lanham Act itself does not require proof of actual confusion for an award of damages); see also Stolte, supra note 159, at 243 (furthering that if the fact finder determines there is a likelihood of confusion then it will violate the act).

determining monetary relief. ¹⁷² In other words, they argue for a return to the judicial task of seeking an equilibrium within a wide bargaining range, thus reviving "a full consideration of equities." ¹⁷³

B. Reasonable royalty

i. Reasonable royalty and liability rules

The monetary relief of reasonable royalty is closer to the liability-rule end of the continuum. ¹⁷⁴ A reasonable royalty is used as a method of measuring actual injury to the plaintiff. ¹⁷⁵ A reasonable royalty award exemplifies a situation in which courts should carefully tailor damages and is consistent with "tailored liability rules."

However, some methods of constructing a reasonable royalty entail using "untailored liability rules," because the first task in such methods is to fix the amount of damages at a number that is "one size to fit all plaintiffs." This process of imprecisely

¹⁷²See Almeling, supra note 9, at 220 (pointing out that requiring proof of willfulness in every case

may deny recovery before the court even considers the particular circumstances of the case).

¹⁷³See Almeling, supra note 9, at 207-08 (proposing an "Infringement-Plus-Equity" model, in which the plaintiff must prove both infringement and an equity reason to be eligible for monetary relief).

¹⁷⁴See Mark A. Lemley, *Distinguishing Lost Profits from Reasonable Royalties*, 51 WM. & MARY L. REV. 655, 661 (2009) (focusing on the principles behind awarding reasonable royalties).

¹⁷⁵See Howard Johnson Co., Inc. v. Khimani, 892 F.2d 1512, 1520-21 (11th Cir. 1990) (stating that the district court relied on precedent in its decision-making to use lost royalty payments to replicate the actual damages); see also Lemley, supra note 174, at 661 (clarifying that reasonable royalties are also a method of compensating the plaintiff and making the plaintiff whole).

¹⁷⁶See Ayres & Talley, Solomonic, supra note 25, at 1033 (defining: "[T]ailored liability rules are appropriate when parties do not have the opportunity to contract, subsequent scholars have overlooked the possibility that *untailored* rules-which fix damages at one size to fit all plaintiffs regardless of plaintiffs' actual valuation-may promote trade when contracting is possible.").

¹⁷⁷See Ayres & Talley, Solomonic, supra note 2525, at 1033 (explaining that untailored rules may promote trade when contracting is possible).

allocating an entitlement prompts the parties to disclose their private information about valuation. One such example is the 25% rule of thumb in patent law. Another example is the use of an established royalty or a royalty rate from a prior licensing agreement—if an established royalty can be determined, it is used as the proper starting point to construct a reasonable royalty, because "royalties normally received for the use of the mark are the proper measure of damages for the misuse of the mark." These two rules are examples of the use of focal points. The existence of a focal point becomes an implicit prerequisite for courts to hold an internal auction or to determine a Solomonic division.

In cases of holdover licensees, courts are most certain to use reasonable royalties to measure damages in trademark infringement suits. Holdover licensee cases demonstrate that reasonable royalties are suitable for the exchange paradigm. In a holdover licensee case, the franchisor loses its use of a trademark or the royalty, which is the price of the use. ¹⁸⁰ Thus, a court can award the market value of the franchisor's lost use. Additionally, an existing royalty rate, either having been offered or accepted,

¹⁷⁸See Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 589 (1993) (analyzing that specified knowledge could assist the trier of fact to understand the evidence); Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1312 (4th Cir. 2011) (analyzing the "25% rule of thumb" as applied to approximate a reasonable royalty rate).

¹⁷⁹ See Ramada Inns, Inc. v. Gadsden Hotel Co., 804 F.2d 1562, 1565 (1987) (examining cases that sought damages for royalties based on precise calculations); Bandag, Inc. v. Al Bolser's Tire Stores, Inc., 750 F.2d 903, 920 (5th Cir. 1984) (referencing a Fifth Circuit opinion that noted that it is impossible for prior licensees to be granted exclusive licenses); Gucci America, Inc. v. Guess, Inc., 858 F. Supp. 2d 250, 253 (S.D.N.Y. 2012) (pointing out that due to the difficulty of calculating a reasonable royalty in a vacuum, courts tend to refuse to award a reasonable royalty unless a prior licensing agreement can be found); see also Brian J. Love, The Misuse of Reasonable Royalty Damages as

a *Patent Infringement Deterrent*, 74 Mo. L. REV. 909, 920 (2009) (speculating that if the circumstances are not changed, established royalties normally control in determining reasonable royalties); *see also* Bensen & White, *supra* note 48, at 6 (stating a reasonable royalty is intended to approximate an established royalty).

¹⁸⁰See Khimani, 892 F.2d 1512, 1519-20 (addressing when franchisor loses trademark or royalty rights and the price effects).

reduces the judicial costs of constructing a hypothetical negotiation. A court need not attempt to determine an equilibrium to which the parties would have agreed within a wide bargaining range; an existing royalty rate is presumed to be an equilibrium, subject to any party's production of evidence to demonstrate otherwise. ¹⁸¹

A reasonable royalty is another means of distributing the gains from an act of infringement between the trademark owner and the infringer. An award of a reasonable royalty, as noted by Professor McCarthy, is considered to be "more workable" than an accounting of profits. An accounting of profits is also a method of distributing the gains between the trademark owner and the infringer, but it presumptively allocates all the gains from an infringement act to the trademark owner, subject to deduction of proven costs and expenses. By contrast, an award of reasonable royalties must leave some profits with the infringer. Although some differences exist, the two methods also have some areas of commonality.

The court's equity power can be used to determine any type of damages, including reasonable royalty, thus rendering reasonable royalty a type of hybrid regime. Factoring deterrence into the calculation of reasonable royalty is a move toward the property-

¹⁸¹See La Quinta Corp. v. Heartland Properties LLC, 603 F.3d 327, 340 (6th Cir. 2010) (stating the royalties normally received for such use of the trademark based on common business practices); see also Khimani, 892 F.2d at 1518 (affirming award of damages based on the royalty rate to which the parties had consented).

¹⁸²See Bensen & White, *supra* note 48, at 7 (reasoning in awarding reasonable royalties in patent law). Reasonable royalties distribute profits between the patent holder and the infringer. *Id.*

¹⁸³See 5 MCCARTHY, supra note 2, § 30:85 (distinguishing reasonable royalty and an accounting of profits).

¹⁸⁴See 5 MCCARTHY, supra note 2, § 30:85 (observing how the Seventh Circuit held that compensation for profits lost as a result of trademark infringement is not simply the cost of doing business).

rule end of the continuum and away from liability-rule end. ¹⁸⁵ As the Ninth Circuit stated:

[A]n award of little more than nominal damages would encourage a counterfeiter to merely switch from one infringing scheme to another. . . . [and] [t]he judicial penalties imposed under such an approach would be simply factored into the infringer's profit and loss statement. If after deducting this "judicial expense" the entrepreneur still earns a suitable return on his investment he will continue the infringing activities. ¹⁸⁶

Moreover, as stated by the Seventh Circuit in the "THIRST-AID" decision, "*Nunc pro tunc* payment of the royalty fee becomes simply the "judicial expense" of doing business." ¹⁸⁷ If paying a royalty *ex post* is simply a "judicial expense of doing business," then a potential infringer has no incentive to obtain a license in advance. ¹⁸⁸ In addition, the uncertainty of estimating the likely result of a hypothetical negotiation should be borne by the infringer. ¹⁸⁹ This allocation of burden serves the function of property rules to deter nonconsensual taking. ¹⁹⁰

¹⁸⁵See Love, supra note 179, at 911 (observing Federal Circuits' willingness in patent infringement suits to raise reasonable royalties for reasons related to deterrence).

¹⁸⁶See Playboy Enters., Inc. v. Baccarat Clothing Co., Inc., 692 F. 2d 1272, 1274-75 (9th Cir. 1982) (expanding upon the decision in *Fleischmann Distilling Corp.*, which stated: "[W]here trademark infringement is deliberate and willful both the trademark owner and the buying public are slighted if a court provides no greater remedy than an injunction.").

¹⁸⁷See 5 MCCARTHY, *supra* note 2, § 30:85 (stating: "Courts require that a recovery of damages requires proof that some consumers were actually confused or deceived.").

¹⁸⁸See Sands, Taylor & Wood v. Quaker Oats Co., 34 F.3d 1351 (1994) (explaining that *nunc pro tunc* payments do not incentivize infringers to obtain a license beforehand).

¹⁸⁹See La Quinta, 603 F.3d at 341-42 (accepting the licensee's calculation of royalties but trebling the sum due to willful holdover); see also Sands, Taylor & Wood, 34 F.3d at 1351 (reasoning that the wrongdoer should bear the risk of any uncertainty in the amount of damages awarded rather than the victim receiving a less amount of damages); Howard Johnson Co., Inc. v. Khimani, 892 F.2d 1512, 1519-20 (11th Cir. 1990) (basing actual damages on lost profits); see also 5 McCARTHY, supra note 2, § 30:85 (describing the practice of the Seventh Circuit to enhance reasonable royalty awards in cases of a holdover license).

¹⁹⁰See Sands, Taylor & Wood 34 F.3d at 1351 (enhancing a lost royalty to ensure

Thus, adding the consideration of deterrence to the calculation of reasonable royalty is a move toward the property-rule end of the spectrum. ¹⁹¹ Even if reasonable royalty awards are most consistent with the exchange paradigm (a payment in exchange for a lost use), in practice, awarding reasonable royalties—especially with judicial enhancement—is not based purely on liability rules. ¹⁹² Reasonable royalty is therefore a type of hybrid regime—even though it is mostly based on liability rules, it still contains some features that are derived from property rules.

ii. From reasonable royalty to actual damages

Reasonable royalty can be seen as belonging to the category of actual damages (as part of lost profits). Reasonable royalty is a method of measuring the plaintiff's injury, which is known as "general damages." General damages refer to an imprecise

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that the malefactor, not the victim, bears the burden of uncertainty in calculating damages).

¹⁹¹See All Star Championship Racing, Inc. v. O'Reilly Automotive Stores, Inc., 940 F. Supp. 2d 850, 866 (C.D.Ill. 2013) (noting that a holdover licensee's use of a previously licensed trademark was subject to counterfeit mark enhancement under the Lanham Act); see also Travis R. Wimberly, *Holdover Trademark Licensees and the Counterfeiting Loophole*, 88 Tex. L. Rev. 415, 417-18 (2009) (discussing how including deterrence in the calculation of reasonable royalty shifts toward the property-rule end).

¹⁹²See A&H Sportswear Co., Inc. v. Victoria's Secret Stores, Inc., 967 F. Supp. 1457, 1479-80 (E.D. Pa. 1997) (applying a factor test to determine a "reasonable royalty").

¹⁹³See A&H Sportswear, 967 F. Supp. at 1479 (explaining that if record of lost profits or sales is not available, the court should look to the cost of reasonable royalty for the measure if lost profits); see also Gucci America, Inc. v. Guess, Inc., 858 F. Supp. 2d 250, 253 (S.D.N.Y. 2012) (providing that a plaintiff of a trademark infringement suit can recover reasonable royalty under the category of actual damages); see also 5 MCCARTHY, supra note 2, § 30:86 (inferring that in patent law, where lost profits and reasonable royalties are clearly distinguished, their boundary has become blurred); see also Lemley, supra note 174, at 661 (suggesting that reasonable royalties are like lost profits because they compensate patentees for their losses).

¹⁹⁴ See RiteHite Corp. v. Kelley Co., Inc., 56 F.3d 1538, 1566 (Fed. Cir. 2013) (noting a reasonable royalty is a type of general damage awarded when receiving more than nominal damages).

method of calculating damages—a court or jury may estimate the plaintiff's injury based on the facts and the circumstances of the case.

An award of reasonable royalty does not preclude the court from awarding compensatory damages that the plaintiff is able to prove, such as the costs of corrective advertising. This combination of general damages and actual damages is known as a "combined award" or "split award." An award of reasonable royalty combined with actual damages demonstrates that the court can use its equity power to formulate a hybrid regime in a particular case in order to grant the plaintiff an adequate remedy.

iii. From reasonable royalty to accounting of profits

One effect of property rules is to deplete the profits made from the malefactor's infringement in order to reduce his or her incentive to exercise the option of nonconsensual taking. The problem of reasonable royalty, however, is that it is an *ex post* forced exchange (coerced cooperation); thus, payment of damages is merely a cost of doing business. The award of reasonable royalty is a type of coerced exchange. A coerced exchange may fail to compensate fully the right owner's subjective value—a situation that is not consistent with the principle of property A situation in which a defendant pays a royalty *ex post* rules.

¹⁹⁵See Jarosz & Chapman, *supra* note 48, at 776 (setting forth that damages based on reasonable royalties and lost profits are called "combined" or "split" awards). ¹⁹⁶See Ayres & Balkin, *Legal Entitlements*, *supra* note 21, at 705 (indicating that property rules differ from liability rules, in that property rules will deter people from nonconsensual taking).

¹⁹⁷ See Sands, Taylor & Wood v. Quaker Oats Co., 34 F.3d 1351, 1352 (1994) (expressing the concern that merely awarding a royalty may not be an adequate compensation because it is only "a rough approximation of the [victim]'s loss"). ¹⁹⁸ See Lemley, supra note 174, at 656 (defining that a reasonable royalty reflects the price that a buyer is willing to pay for the license).

¹⁹⁹See Abraham Bell & Gideon Parchomovsky, *Taking Compensation Private*, 59 STAN. L. REV. 871, 882 (2007) (articulating that nonconsensual taking may wipe out surplus subjective value).

based on liability rules is no less preferable than (or is at least equivalent to) a situation in which he or she enters into licensing negotiations beforehand. ²⁰⁰

Because reasonable royalty is a mechanism of *ex post* exchange based on the "willing licensor–willing licensee" approach, reasonable royalty damages have the risk of becoming inadequate compensation—or just a "judicial cost" of doing business—because the defendant would lack the incentive to follow property rules and to choose not to infringe. ²⁰¹ In trademark law, as indicated by the Ninth Circuit, "it is essential that the trial courts carefully fashion remedies which take all the economic

²⁰⁰See Love, supra note 179, at 924 (articulating the Court's aversion to incentivizing infringement when an actor is faced with choice between "licens[ing] the patent and misappropriate[ing] the technology").

²⁰¹See Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075, 1081 (Fed. Cir. 1983) (holding that a royalty based on a hypothetical negotiation between a willing licensor and a willing licensee is reasonable); see also Playboy Enters., Inc. v. Baccarat Clothing Co., Inc., 692 F. 2d 1272, 1275 (9th Cir. 1982) (criticizing the remedy of reasonable royalties for allowing the infringer to avoid any economic harm); see also Adidas America, Inc. v. Skechers USA, Inc., 2017 WL 3319190, at *1, *28 (D. Or. Aug. 13, 2017) (reasoning that an award based on a royalty rate would "only serve as a judicial cost" and thus fail to deter a defendant from infringing in the future.); Thomas F. Cotter, Four Principles for Calculating Reasonable Royalties in Patent Infringement Litigation, 27 SANTA CLARA COMPUTER & HIGH TECH. L.J. 725, 740-41 (2011) (suggesting that courts should have the discretion to award enhanced damages in order to make up for the inadequacy of awards based on ex post negotiations); D. Christopher Holly, The Book of Wisdom: How to Bring a Metaphorical Flourish into the Realm of Economic Reality by Adopting a Market Reconstruction Requirement in the Calculation of a Reasonable Royalty, 92 J. PAT. & TRADEMARK OFF. Soc'y 156, 164 (2010) (noting that the most common method of calculating reasonable royalty damages is the flawed willing licensor-licensee approach); Bensen & White, supra note 48, at 50-51 (suggesting the need for a "more concrete framework" to replace the reasonable royalty approach in providing compensation); see also Lee & Melamed, supra note 93, at 415 (noting how some courts and commentators argue that purely ex ante hypothetical negotiations can undercompensate the entitlement holder and thus fail to satisfy the Patent Act's requirements); see also Lemley, supra note 174, at 662 (pointing out that traditional reasonable royalty awards tend to undercompensate plaintiffs); see also MCCARTHY, supra note 2, § 30:87 (illustrating the use of a reasonable royalty's failure to deter infringement by putting the defendant in the same position they would have been in if they had obtained a license from the plaintiff).

incentive out of trademark infringement."²⁰² Thus, in awarding a reasonable royalty, courts have allowed a move toward property rules, including enhancement of damages for the purpose of deterrence. ²⁰³ Courts also distribute the risk of uncertainty in calculating damages to the infringer, such as ambiguities or lack of information necessary for constructing a hypothetical negotiation, to ensure that the trademark owner is not undercompensated. ²⁰⁴

iv. Reasonable royalty and call options

Setting the amount of damages at a reasonable royalty appears to be among a plaintiff's choices of monetary relief. Nevertheless, a reasonable royalty can be considered as the result of the defendant's call option, because the defendant can obtain the use of trademark (an entitlement) in exchange for a reasonable price for that entitlement. ²⁰⁵ This model of valuation is consistent with the concept of nonconsensual taking of a call option. ²⁰⁶ Thus, when parties are

²⁰²See Baccarat Clothing Co., Inc., 692 F.3d at 1275 (emphasizing that inefficient remedies in trademark infringement suits have harmful consequences on both the plaintiff and the consuming public).

²⁰³See Lee & Melamed, supra note 93, at 404 (observing the phenomenon of inflating reasonable royalty damages through ex post considerations); see also Lemley, supra note 174, at 662-69 (highlighting cases where courts awarded enhanced damages in response to the inadequate amounts under a reasonable royalty calculation); see also Love, supra note 179, at 916-23 (illustrating how courts sometimes increase reasonable royalties to avoid undercompensating the plaintiff).

plaintiff). ²⁰⁴ See Sands, Taylor & Wood v. Quaker Oats Co., 34 F.3d 1350-51 (1994) (holding that the uncertainty in calculating damages should be borne by the malefactor and not by the victim).

²⁰⁵See Bradley R. Stark, *Understanding Options for Lawyers: Puts and Calls*, 10-WTR PIABA B.J. 30, 30 (2003) (defining a call option as the right to buy an underlying asset at a set price and within a set time frame); *see also* Michael S. Knoll, *Put-Call Parity and the Law*, 24 CARDOZO L. REV. 61, 68 (2002) (noting that a call option allows its holder to buy a certain amount of the underlying asset at a set price on or before a fixed date).

²⁰⁶See Ayres & Goldbart, Optimal Delegation, supra note 19, at 6 (analyzing how call options are designed to compensate "the initial entitlement holder for any nonconsensual transfers of that entitlement"); see also Knoll, supra note 205, at 70 (declaring that a call option writer will deliver the asset to the person who has the ability to receive it).

calculating damages with a reasonable royalty, it is consistent with liability rules.²⁰⁷

Calculating damages on the basis of a reasonable royalty serves the purpose of Solomonic division, which is to induce the parties to disclose their private information about the valuation of the entitlement. ²⁰⁸ Ayers and Talley found that untailored liability rules have this merit. The use of untailored liability rules entails setting the amount of damages at a "one-size-to-fit-all-plaintiffs" price. 209 The construction of a reasonable royalty, when starting with an established royalty rate, is similar to the application of untailored liability rules, only more precise. 210 This is because an established royalty rate is not the same for all plaintiffs across all industries; instead, it is close to the valuation of the entitlement in a particular case. 211 However, it is still imprecise and therefore forces the parties to disclose private information about their valuation.

 $^{^{207}}$ See Drews, supra note 93, at 150 (alluding to the fact that reasonable royalty rates are calculated by the amount lost to the victim); see also Kaplow & Shavell, supra note 26 at 715 (explaining that liability rules protect against "harmful externalities").

²⁰⁸See Ayres & Talley, *Distinguishing*, supra note 25, at 237 (noting that the use of untailored liability rules is a type of Solomonic division); see also Ayres & Talley, Solomonic, supra note 25, at 1029-30 (explaining the concept of Solomonic division and its relation to private information).

²⁰⁹See Ayres & Talley, Solomonic, supra note 25, at 1033 (explaining that untailored liability rules are beneficial because it eliminates the need for judicial costs associated with tailoring).

²¹⁰See Hanson, 718 F.2d at 1078 (Fed. Cir. 1983) (stating: "The reasonable royalty may be based upon an established royalty, if there is one."); see also Monsanto Co. v. McFarling, 488 F.3d 973, 978-79 (Fed. Cir. 2007) (affirming that an established royalty bests fits because the parties have already agreed upon

²¹¹See Nickson Indus., Inc. v. Rol Mfg. Co., 847 F.2d 795, 798 (2nd Cir. 1998) (highlighting that absent evidence of abnormal situations, an established royalty is the best measure of a reasonable royalty rate); see also Monsanto, 488 F.3d at 978-79 (suggesting an established royalty rate will occur when a party uses conduct comparable in prior similar deals); see also Laura B. Pincus, The Computation of Damages in Patent Infringement Actions, J. Bus. L., MAR. 213, 229 (1992) (describing that courts normally look to an established royalty in determining a reasonable royalty rate).

Because untailored liability rules can force the parties to disclose private information, Ayers and Balkin argued that untailored rules can reduce judicial information costs, which denote the costs of tailoring damages. Construction of a reasonable royalty typically begins with a search for a preexisting comparable licensing price, which serves the purpose of Solomonic division. This division is not random because it follows the experience of prior licenses. This step decreases the judicial information costs of tailoring because it reduces the effort required for the court to estimate the terms of a hypothetical negotiation. Then, the court adjusts the royalty rate according to the private information disclosed by the parties with regard to the particular circumstances of each case. ²¹⁴

C. Accounting of profits

Accountings of profits originated from equity. ²¹⁵ The court may award an accounting of the defendant's profits to the plaintiff. This type of monetary relief is closer to property rules than any

²¹²See Studiengesellschaft Kohle v. Dart Indus., Inc., 666 F. Supp. 674, 680 (D.Del. 1987) (distinguishing between finding a reasonable royalty rate by looking at existing licenses versus hypothetical negotiations); see also Pincus, supra note 211211, at 240 (discussing the Studiengesellschaft decision, which held that a reasonable royalty rate is based upon prior licenses).

²¹³See Monsanto, 488 F.3d at 978–79 (declaring that an established royalty is the best measure of a "reasonable" royalty because it removes the need to guess the terms of the parties' hypothetical negotiation); see also Liguo Zhang, How IPR Policies of Telecommunication Standard-Setting Organizations Can Effectively Address the Patent Ambush Problem, 41 Int. Rev. of Int'l Prop. & Competition

L. 380, 404 (2010) (explaining that the "willing licensor-willing licensee" approach is the most common because it reduces judicial costs.).

²¹⁴See Pincus, supra note 211, at 230 (stating that an established royalty "may be modified upward or downward depending upon the circumstances of each case").

²¹⁵See ALTMAN & POLLACK, supra note 103103, § 23:61 (noting that an accounting of profits is the "equitable counterpart of an action for damages at law"); see also 5 MCCARTHY, supra note 2, § 30:59 (concluding that an accounting of profits is historically derived from equity jurisprudence).

other type, except for punitive damages. ²¹⁶ It can be deemed as an exercise of the plaintiff's put option.

As its origin, awarding the infringer's profits to the plaintiff is based on the rationale that the infringer's sales are equivalent to the plaintiff's lost sales. However, the logic of diverted sales is imprecise. ²¹⁷ It is based on the premise that the trademark owner's brand is the major factor driving the infringer's profits. 218 There is, however, no reason to believe that every sale of the defendant is diverted from the plaintiff. In addition, the parties' profit margins may not be equivalent. 219

In cases in which both parties are direct competitors, the infringer's profits come closer to the lost profits of the trademark owner. 220 However, even in cases in which the parties are direct competitors, the infringer's profits are only a "rough measure" of the plaintiff's injury for lost profits. ²²¹ Professor McCarthy

²¹⁶See Ayres & Goldbart, Optimal Delegation, supra note 19, at 2 (noting: "[D]isgorgement and prison terms are traditional property-rule remedies.").

²¹⁷See Corgill, supra note 4, at 1919 (stipulating that using the infringer's profits as a proxy for the compensation of the plaintiff's lost profits is at most suspect). ²¹⁸See Conway-Jones, supra note 90, at 879–80 (reiterating that the infringer's profits is a proxy for the trademark owner's lost profits); see also Corgill, supra note 4, at 1918 (maintaining that common law courts viewed an infringer's profit as a proxy for the trademark owner's lost profits).

²¹⁹See Corgill, supra note 4, at 1920 (suggesting that even if one-to-one diversion of sales is likely, the infringer's profit margin is not the same as the trademark owner's profit); see also 5 McCarthy, supra note 2, § 30:59 (elaborating on the flaws in measuring a plaintiff's lost sales in a competitive relationship).

²²⁰See James M. Koelemay, Jr., Monetary Relief for Trademark Infringement under the Lanham Act, 72 TRADEMARK REP. 458, 487 (1992) (recalling that the difficulty in proving lost profits led courts to use defendants' profits to measure damages in cases where the parties were in direct competition); see also ALTMAN

[&]amp; POLLACK, supra note 103, § 23:62 (4th ed. 2018) (observing how some courts hold that only when the parties are in direct competition can the defendant's profits be used to calculate the plaintiff's compensatory damages); see also Corgill, *supra* note 4, at 1917 (reviewing how the compensation rationale for an accounting of profits has historically been limited to the situation of direct competition).

²²¹See Venture Tape Corp. v. McGills Glass Warehouse, 540 F.3d 56, 63 (1st Cir. 2009) (holding that the infringer's profits serve as a rough measure of the harm suffered by the plaintiff); see also Corgill, supra note 3, at 1919–20 (presuming that this method of calculating lost profits is rarely reliable); see also 5 MCCARTHY, supra note 2, § 30:59 (maintaining that plaintiff's loss of sales is an imperfect measure).

acknowledged that the infringer's profits are "only an approximation" of the plaintiff's loss. ²²² As a measurement of the plaintiff's loss, the infringer's profit is only "rough but reasonable" or "rough but useful." ²²³

If direct competition does not exist between the parties, the plaintiff's loss of profits and the infringer's profits are not logically related. Because the mainstream rule is that the plaintiff's inability to prove actual damages does not exclude an award of the infringer's profits, an accounting of profits must be premised on some justification other than compensation for the plaintiff's actual injury. In addition to compensating the trademark owner, courts have acknowledged two other theories for the award of an accounting—to prevent unjust enrichment and to deter future infringement. 225

An accounting of profits is not automatically available to a prevailing plaintiff. The court's decision should be determined by weighing the equities of the case. 227 For example, the Fifth

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²²²See 5 MCCARTHY, supra note 2, § 30:59 (maintaining that it is inappropriate to qualify all sales by the defendant as an encroachment on the plaintiff's ability to make sales).

²²³See 5 McCarthy, supra note 2, § 30:59 (describing how "rough but reasonable" is the primary measure of plaintiff's loss is in a competitive relationship).

²²⁴See ALTMAN & POLLACK, supra note 103, § 23:62 (noting: "[A]ctual confusion is not a prerequisite to an accounting of profits."); see also 5 MCCARTHY, supra note 2, § 30:59 (elaborating that an award for lost profits must be justified by a means other than the plaintiff's actual injury).

²²⁵See Bryan M. Otake, *The Continuing Viability of the Deterrence Rationale in Trademark Infringement Accountings*, 5 UCLA ENT. L. REV. 221, 234 (1998) (noting that courts sometimes invoke all three theories); *see also* Koelemay, *supra* note 220, at 489-90 (highlighting the two theories for awarding an accounting of profits).

²²⁶See Champion Spark Plug Co. v. Sanders, 311 U.S. 125, 131 (1947) (expressing: "[I]t does not stand for the proposition that an accounting will be ordered merely because there has been an infringement.").

²²⁷See 87 LONNIE E. GRIFFITH ET AL., TRADEMARKS, TRADE NAMES, AND UNFAIR COMPETITION § 365 (2018) (referencing: "[P]rofits may be awarded in trademark infringement case in order to make trademark infringement unprofitable under the rationale of unjust enrichment."); see also 5 McCarthy, supra note 2, § 30:57 (explaining: "In a given case, a court may award one or more, or none, of the five types of recovery to the plaintiff."). "They are merely alternatives ways of measuring the injury that either the plaintiff or the public

Circuit listed the following factors, known as the *Pebble Beach* factors, to be weighed for the decision of an accounting:

(1) whether the defendant had the intent to confuse or deceive, (2) whether sales have been diverted, (3) the adequacy of other remedies, (4) any unreasonable delay by the plaintiff in asserting his rights, (5) the public interest in making the misconduct unprofitable, and (6) whether it is a case of palming off. ²²⁸

The most crucial of these factors are the nature of the infringing conduct (*e.g.*, whether it involved palming-off) and the defendant's intent—including whether the infringement was willful or fraudulent, and whether the defendant acted in good faith. However, some courts have required a demonstration of bad faith as a prerequisite for awarding profits. ²³⁰ If the plaintiff cannot prove the defendant's bad faith, such courts refuse to grant an

has suffered by defendant's wrong." *Id. See also* Stolte, *supra* note 159, at 230 (noting that the availability of an accounting of profits depends on the equities of the circumstances of the case).

²²⁸See Quick Technologies, Inc. v. The Sage Group PLC., 313 F.3d 338, 348–49 (5th Cir. 2005) (listing the factors the court may consider in determining an award); Pebble Beach Co. v. Tour 18 I Ltd., 155 F.3d 526, 554 (5th Cir. 1998) (stating the relevant factors involved in the court's determination of whether an award of profits is appropriate in a trademark infringement action).

²²⁹See Seatrax, Inc. v. Sonbeck International, Inc., 200 F.3d 358, 369 (5th Cir. 2000) (affirming the case-by-case evaluation approach in determining whether an award of an accounting of profits is appropriate); *Quick Technologies*, 313 F.3d at 349 (referencing how willful infringement is a critical factor); Rolex Watch USA, Inc. v. Meece, 158 F.3d 816, 823 (5th Cir. 1998) (stating that there is no limit to the number of relevant factors); *see also* ALTMAN & POLLACK, *supra* note 103, § 23:62 (suggesting that one of the most important factors that the court will consider is the bad faith intent of a defendant to deceive the plaintiff); *see also* 5 MCCARTHY, *supra* note 2, § 30:57 (recognizing that there are at least five ways of measuring monetary recovery).

²³⁰See Elizabeth L. Plitzuweit, Supreme Court Denies Certiorari in Contessa: Courts Remain Split in Determining Standard for Awarding Profits in Trademark Infringement Cases, 26 No. 2 INTELL. PROP. L. NEWSL. 5, 7 (2008) (declaring that the bad faith requirement is a necessity under the conservative view); see also Almeling, supra note 9, at 216 (highlighting that the federal circuits have split decisions as to whether an accounting of profits is conditioned upon the finding of willful infringement); see also 6 ALTMAN & POLLACK, supra note 103,

^{§ 23:62 (}elaborating that even if the plaintiff suffers some financial loss, some courts require a demonstration of bad faith as a prerequisite for awarding an accounting of profits).

accounting.²³¹ This position is represented by the Second Circuit.²³²

Accountings of profits were originally based on the same rationale as compensation for actual damages (*i.e.*, they were all based on liability rules). Therefore, courts attempted to base the award of the infringer's profits on the plaintiff's lost sales, treating the infringer's profits as an *ex post* compensation to the plaintiff. Nonetheless, it is currently well accepted that in the case of noncompeting parties, the plaintiff's injury rarely corresponds to the infringer's profits. As one commentator stated, "an infringer's profits are rarely, if ever, a reliable evidentiary surrogate for the trademark holder's lost profits."²³³

It is easier to justify accountings of profits by property rules, especially when the court transfers to the plaintiff all or most of the infringer's profits, which may be disproportional to the plaintiff's actual loss. Property rules engender what courts call the "deterrence" theory. Corresponding to the purpose of deterrence, the prerequisite for an award of profits (or at least one critical factor for such an award) is the willfulness or egregiousness of the infringer's conduct. Accountings of profits, compared with a party's

²³¹See Otake, supra note 225, at 231-32 (noting how some courts hold that bad faith or intent is a prerequisite for an accounting of profits, but some courts reject or limit such a requirement).

²³²See Int'l Star Class Yacht Racing Ass'n. v. Tommy Hilfiger, U.S.A., Inc., 80 F.3d 749, 753 (2nd Cir. 1996) (reiterating the necessity of bad faith as a prerequisite for granting profits); Banff Ltd. v. Colbert Inc., 996 F.2d 33, 35 (2d Cir. 1993) (reaffirming the necessary requirement for bad faith when awarding profits); George Basch Co., Inc. v. Blue Coral, Inc., 968 F.2d 1532, 1540 (2d Cir. 1992) (holding that the requirement for bad faith was not met and therefore no profits could be awarded).

²³³See Corgill, supra note 4, at 1920 (asserting how unreliable an infringer's profits can be when determining a trademark holder's lost profits).

²³⁴See Corgill, supra note 4, at 1925 (paralleling property and tort law to the granting and calculation of profits awarded to a trademark holder).

²³⁵See 5 McCarthy, supra note 2, § 30:59 (highlighting how willfulness is a necessary requirement to deter infringer's from unjust enrichment); see also Plitzuweit, supra note 230, at 7 (emphasizing the deterrence policy adopted by the Ninth Circuit has made willful infringement a critical factor for an accounting of profits).

awards of actual damages or reasonable royalties, come closer to the property-rule end of the spectrum.

The rules on accountings of profits exhibit the usage of focal points. Although not required by the Lanham Act, numerous courts require a demonstration of bad faith as a prerequisite for awarding an accounting. This rule has been deeply entrenched in federal case law and is supported by the Restatement of Unfair Competition. Bad faith has become the focal point for awarding an accounting. If bad faith is demonstrated, the allocation of entitlements between the parties moves close to depleting all or most of the defendant's profits to fulfill the function of property rules.

An accounting of profits can also be viewed as the plaintiff's exercise of his or her put option. ²³⁷ The plaintiff demands that prior trademark use be sold to the defendant at a price that is sufficiently high to typically render the defendant's actions unprofitable. ²³⁸ An accounting of profits also employs the principle of Solomonic division. With an accounting of profits, the court can initially allocate the entitlements on all or most of the defendant's profits, requiring the plaintiff only to demonstrate the defendant's gross sales and awaiting further disclosure of private information by the defendant, such as the defendant's deductible costs and other necessary expenses. ²³⁹

This method of allocation conforms to the information-forcing effect of Solomonic division.

²³⁷See Knoll, supra note 205, at 70 (noting that a put option grants its holder the right—but not the obligation—to sell the underlying asset to the writer for the exercise price); see also Stark, supra note 205, at 30 (defining a put option as the right to sell an underlying asset at a set price and in a set time frame).

²³⁶See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 37 cmt. e (discussing the bad faith requirement for unfair competition claims); see also Stolte, supra note 159, at 230 (discussing the differences between the requirement to establish bad faith and the Lanham Act which does not require this element).

²³⁸See GRIFFITH ET AL., supra note 227, § 365 (explaining how trademark infringement is unprofitable to the infringer); see also ALTMAN & POLLACK, supra note 103, § 23:63 (4th ed. 2018) (quoting: "No one will deny that on every principle of reason and justice the owner of the trademark is entitled to so much of the profit as resulted from the use of the trademark.").

V. Conclusion

This article applies the principle of internal auction, together with the use of focal points in game theory, to explain that the several types of monetary relief in trademark infringement cases have commonalties. Professor Ayres and other scholars have reinterpreted property rules and liability rules with option theory so that these methods of protecting entitlements are blended. This interpretive approach allows for a consistent explanation of the types of monetary relief. It also illuminates the hybrid regime feature of the various types of monetary relief so that courts can utilize various remedy policies in a particular case.

Judicial determination of monetary remedies, as a process of internal auction, distributes the proceeds of infringement between both parties. Just as a higher-order liability rule can adjust the ownership of the entitlement and the distribution of proceeds back and forth, the various types of monetary relief for trademark infringement are different allocation schemes dispersed on a continuum between pure property rules and pure liability rules. The use of focal points has a determinative effect on the allocation result. Focal points, such as actual confusion, a prior or existing licensing royalty, and bad faith, are used to determine the type of monetary remedy that the court eventually adopts.

²³⁹See Bussert & Davis, supra note 84, at 187-88 (stating that a plaintiff must establish "the defendant's gross sales under the infringing mark").

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