



4-2021

The Injunction Function: How and Why Courts Secure Property Rights in Patents

Adam Mossoff

Professor of Law, Antonin Scalia Law School, George Mason University

Follow this and additional works at: <https://scholarship.law.nd.edu/ndlr>



Part of the [Intellectual Property Law Commons](#)

Recommended Citation

96 Notre Dame L. Rev. 1581 (2021)

This Article is brought to you for free and open access by the Notre Dame Law Review at NDLScholarship. It has been accepted for inclusion in Notre Dame Law Review by an authorized editor of NDLScholarship. For more information, please contact lawdr@nd.edu.

THE INJUNCTION FUNCTION: HOW AND WHY COURTS SECURE PROPERTY RIGHTS IN PATENTS

Adam Mossoff^{*}

INTRODUCTION

Although the United States patent system is 230 years old, the nature of patents as legal rights and as commercial assets is contentiously debated today. Some scholars characterize the U.S. patent system as a regulatory system created and defined by solely public policy goals; Mark Lemley, for instance, argues that a patent is the equivalent of a welfare benefit.¹ This is an odd comparison if only because the personal entitlement to a welfare payment is not a basis for venture capital investment,² it cannot be licensed or otherwise exchanged in the marketplace,³ and it is not a platform for innova-

© 2021 Adam Mossoff. Individuals and nonprofit institutions may reproduce and distribute copies of this Essay in any format at or below cost, for educational purposes, so long as each copy identifies the author, provides a citation to the *Notre Dame Law Review*, and includes this provision in the copyright notice.

* Professor of Law, Antonin Scalia Law School, George Mason University. For comments, thank you to Erika Lietzan, Kristen Osenga, and the participants at the Public Valuation of Private Assets Conference co-hosted by the Classical Liberal Institute of New York University School of Law and the *Notre Dame Law Review*. Thank you also to Alex Dardick, Madison DeMotts, Hannah Thurston, and Jack Pantziris for excellent research assistance.

1 See Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1072 (2005) (arguing that property is not a proper “analogy” for intellectual property and that “the closest legal analogy to intellectual property is a government-created subsidy. . . . This is also the point of the welfare system”). Similar arguments have been made about copyrights. See Tom W. Bell, *Authors’ Welfare: Copyright as a Statutory Mechanism for Redistributing Rights*, 69 BROOK. L. REV. 229, 244 (2003) (“The welfare and copyright systems both operate by redistributing rights.”).

2 See Joan Farre-Mensa, Deepak Hegde & Alexander Ljungqvist, *What Is a Patent Worth? Evidence from the U.S. Patent “Lottery,”* 75 J. FINANCE 639, 642, 649 (2020) (demonstrating that a startup with a patent increases its chance of securing venture capital financing over the next three years by forty-seven percent, and that startups with patents also have statistically higher economic growth).

3 See generally Adam Mossoff, *Patent Licensing and Secondary Markets in the Nineteenth Century*, 22 GEO. MASON L. REV. 959 (2015).

tion markets and new business models.⁴ The theoretical and constitutional debates aside,⁵ the legal and commercial reality is that the U.S. patent system has been at its core a private law system securing private property rights.⁶

The scholarly and legal debates about whether the patent system is a private law or public law system are quite “old in the art” (to turn a phrase from patent law), and they touch on all aspects of patent rights, including what remedies patent owners should receive for the violation of their property rights.⁷ As with all property rights, the remedies a patent owner receives for patent infringement have long been defined by a mix of statutes and court decisions.⁸ Some courts and scholars maintain that patent law should be conceived as a species of public law and thus governed by public policy.⁹ Yet, remedies for patent infringement have traditionally comprised the classic forms of legal relief that citizens can receive when seeking redress in courts for wrongs: damages to compensate for their losses and an injunction to prevent willful or ongoing violations of their rights.¹⁰

4 See, e.g., JONATHAN M. BARNETT, *INNOVATORS, FIRMS, AND MARKETS: THE ORGANIZATIONAL LOGIC OF INTELLECTUAL PROPERTY* (2021); CHRISTOPHER BEAUCHAMP, *INVENTED BY LAW: ALEXANDER GRAHAM BELL AND THE PATENT THAT CHANGED AMERICA* 49–51 (2015) (detailing Bell’s use of licensing and the franchise business model); B. ZORINA KHAN, *THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT, 1790–1920*, at 9–10 (2005) (“[P]atents and . . . intellectual property rights facilitated market exchange, a process that assigned value, helped to mobilize capital, and improved the allocation of resources. . . . Extensive markets in patent rights allowed inventors to extract returns from their activities through licensing and assigning or selling their rights.”); Adam Mossoff, *The Rise and Fall of the First American Patent Thicket: The Sewing Machine War of the 1850s*, 53 ARIZ. L. REV. 165, 194–202 (2011) (detailing the creation of the first cross-licensing “patent pool” and its impact on the innovation market in sewing machines).

5 See *Oil States Energy Servs., LLC v. Greene’s Energy Grp., LLC*, 138 S. Ct. 1365, 1374 (2018) (holding that patents are public rights).

6 See generally Adam Mossoff, *Institutional Design in Patent Law: Private Property Rights or Regulatory Entitlements*, 92 S. CAL. L. REV. 921 (2019).

7 See generally, e.g., Dirk Auer, Geoffrey A. Manne, Julian Morris & Kristian Stout, *The Deterioration of Appropriate Remedies in Patent Disputes*, 21 FEDERALIST SOC’Y REV. 158 (2020); Eric R. Claeys, *The Conceptual Relation Between IP Rights and Infringement Remedies*, 22 GEO. MASON L. REV. 825 (2015); Adam Mossoff & Eric R. Claeys, *Patent Injunctions, Economics, and Rights*, 50 J. LEGAL STUD. (forthcoming 2021); Ted Sichelman, *Purging Patent Law of “Private Law” Remedies*, 92 TEX. L. REV. 517 (2014).

8 See generally Adam Mossoff, *Statutes, Common Law Rights, and the Mistaken Classification of Patents as Public Rights*, 104 IOWA L. REV. 2591 (2019).

9 See *Oil States*, 138 S. Ct. at 1373–74 (claiming that a patent is a public right because it is a “creature of statute law” and “did not exist at common law” (first quoting *Crown Die & Tool Co. v. Nye Tool & Mach. Works*, 261 U.S. 24, 40 (1923); and then quoting *Gayler v. Wilder*, 51 U.S. (10 How.) 477, 494 (1850))); Sichelman, *supra* note 7, at 569 (“Instead of viewing patents as conferring a private right on the patentee, under a public law model, a patent confers a kind of private attorney general status on the patentee that allows it to collect payment *on behalf of society*, which is then immediately remitted in full to the patentee solely in order to optimize overall social innovation incentives.”).

10 See Adam J. MacLeod, *Patent Infringement as Trespass*, 69 ALA. L. REV. 723, 728 (2018). Advocates for the “public law” conception acknowledge this fact about the patent

This Essay addresses one aspect of this legal and policy debate concerning remedies in patent law: how and why courts presumptively secured patent owners with injunctions against ongoing or willful infringements of their property rights. Prompted by the United States Supreme Court's 2006 decision in *eBay v. MercExchange*,¹¹ which created a new four-factor test for issuing injunctions on a finding of ongoing infringement of a valid patent,¹² there is a growing body of scholarly commentary on the role of injunctive remedies in securing property rights in new technological innovations.¹³ Much of this commentary focuses on how *eBay* has resulted in a significant reduction in availability of injunctive remedies for patent infringements,¹⁴ especially in the context of patents on standardized technologies, such as standard essential patents covering WiFi or 5G telecommunications technologies in mobile devices.¹⁵

This Essay builds upon this scholarly work by addressing more generally the legal and policy function of injunctive remedies in patent law, detailing newly identified primary sources in historical caselaw that courts presumptively secured to patent owners an injunction to redress ongoing or willful

statutes; for instance, Professor Sichelman argues that the remedial provisions in the Patent Act should be amended to reflect the public law theory of patents. See Sichelman, *supra* note 7, at 566–69 (explaining how §§ 283 and 284 should be amended).

11 *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).

12 See Mark P. Gergen, John M. Golden & Henry E. Smith, *The Supreme Court's Accidental Revolution? The Test for Permanent Injunctions*, 112 COLUM. L. REV. 203, 204–05 (2012) (explaining how the *eBay* four-factor test, while containing elements of classic equitable doctrines, is a new legal test).

13 See *supra* note 7 (identifying some examples).

14 See, e.g., Ryan T. Holte, *The Misinterpretation of eBay v. MercExchange and Why: An Analysis of the Case History, Precedent, and Parties*, 18 CHAP. L. REV. 677, 682 (2015) (identifying how *eBay* has been misinterpreted by courts who mistakenly rely on Justice Kennedy's concurrence as opposed to the majority opinion by Justice Thomas); Kirti Gupta & Jay P. Kesan, *Studying the Impact of eBay on Injunctive Relief in Patent Cases* 15 (Univ. of Ill. Coll. of L. Legal Stud. Rsch. Paper, Paper No. 17-03, 2016), <https://ssrn.com/abstract=2816701> (identifying statistically significant reduction in courts granting injunctions under the *eBay* test for infringement of a valid patent).

15 See, e.g., Auer et al., *supra* note 7, at 163–65 (detailing FTC reports and actions with regard to injunctive remedies for standard essential patents); Richard A. Epstein, F. Scott Kieff & Daniel F. Spulber, *The FTC, IP, and SSOs: Government Hold-Up Replacing Private Coordination*, 8 J. COMPETITION L. & ECON. 1, 17, 19 (2012); Richard A. Epstein & Kayvan B. Noroozi, *Why Incentives for "Patent Holdout" Threaten to Dismantle FRAND, and Why It Matters*, 32 BERKELEY TECH. L.J. 1381, 1408 (2017) ("The flawed remedial structure announced in *eBay* is further aggravated in the interpretation and enforcement of patent remedies in multiparty situations, most notably in connection with SEPs that are licensed under FRAND principles."); F. Scott Kieff & Anne Layne-Farrar, *Incentive Effects from Different Approaches to Holdup Mitigation Surrounding Patent Remedies and Standard-Setting Organizations*, 9 J. COMPETITION L. & ECON. 1091, 1112 (2013) ("Two proposals related to injunctions are focused on patents declared as 'essential' to standard-setting organizations"); Henry E. Smith, *Property as Platform: Coordinating Standards for Technological Innovation*, 9 J. COMPETITION L. & ECON. 1057, 1059 (2013).

infringements of their property.¹⁶ The Essay proceeds as follows. First, it summarizes the 2006 *eBay* decision and how it led to courts significantly reducing injunctions as a remedy for ongoing or willful infringement of valid patents. It describes how *eBay* changed the legal doctrine for issuing injunctions from a presumptive remedy to a four-factor test and why this change matters. Second, it discusses the nature and function of injunctions as a presumptive remedy in securing property rights, both for landowners and for owners of new and useful inventions. Historical patent decisions confirm the legal doctrine, and, even more importantly, the policy and commercial function of injunctions as essential backstops in the efficient functioning of markets. Of course, an essay cannot address every legal and policy issue in the historical cases and in the economic and philosophical literature. The contribution here is narrow but important: it confirms that *eBay* indeed changed remedies doctrine in patent law, and that the resulting reduction in injunctions undermines the function of these property rights in spurring economic activities in the U.S. innovation economy.

I. EBAY AND ITS AFTERMATH IN THE LAW AND POLICY OF INJUNCTIVE REMEDIES

The question presented to the Supreme Court in *eBay v. MercExchange* was how courts should decide to issue an injunction for ongoing or willful infringement of a valid patent. The legal context for answering this fundamental question about the appropriate remedy for a legal wrong is that U.S. patents are property rights. The 1952 Patent Act expressly states that “patents shall have the attributes of personal property.”¹⁷ Before 1952, the statutes did not state this expressly, but legislators, courts, and commentators from the early American republic up through the early twentieth century consistently acknowledged that patents are property rights.¹⁸

As a result, patents have long been secured by the remedies afforded to all property rights, such as legal remedies (damages) and equitable remedies (injunctions). In the historical statutes and in caselaw, patent infringement was defined similarly to how all other property rights are violated: patent

16 The historical patent cases are based on an ongoing empirical study by the author of all nineteenth-century patent cases published in the *Federal Cases* reporter. The in-progress database is on file with the author.

17 See 35 U.S.C. § 261 (2018).

18 See, e.g., *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 187 (1933) (“A patent is property and title to it can pass only by assignment.”); *Cont’l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 424 (1908) (“[A patent] is his absolute property.” (quoting *United States v. Am. Bell Tel. Co.*, 167 U.S. 224, 250 (1897))); see also Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent “Privilege” in Historical Context*, 92 CORNELL L. REV. 953, 992–98 (2007) [hereinafter Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*] (detailing extensive use of property concepts, rhetoric, and doctrines by early to mid-nineteenth-century courts); Adam Mossoff, *Patents as Constitutional Private Property: The Historical Protection of Patents Under the Takings Clause*, 87 B.U. L. REV. 689, 700–11 (2007) (detailing additional nineteenth-century caselaw).

owners have been secured against unauthorized interferences by third parties in the acquisition, use, or disposal of their inventions. Today, the patent statutes state that any unauthorized access or use of a patented invention is an infringement.¹⁹ On a finding of infringement of a valid patent, a patent owner may receive damages for past infringement, an injunction to stop ongoing infringement or willful infringement, or both.²⁰

This Part summarizes *eBay*, which sowed confusion by simultaneously claiming that it was merely reaffirming historical caselaw on equitable remedies for patent infringement while changing this law at the same time. This created a state of legal confusion among courts exacerbated by a policy narrative about alleged abuses by patent owners of their property rights. This one-two legal and policy punch produced a significant decline in injunctions issuing for ongoing or willful infringements of valid patents.

A. A Brief Summary of *eBay*

Before *eBay*, the Court of Appeals for the Federal Circuit had developed a “general rule” that injunctions should issue on a finding of ongoing or willful infringement of a valid patent.²¹ It applied this general rule in this case, as the district court found that *eBay* infringed a valid patent owned by a patent licensing company, MercExchange.²² But the district court denied MercExchange’s petition for an injunction given that it only licensed its property rights.²³ The Federal Circuit reversed, and *eBay* petitioned the Supreme Court. *eBay* argued that the Federal Circuit’s general legal rule failed to reflect the “equitable” nature of injunctions.²⁴ The remedies doctrine for issuing injunctions was not supposed to be a rule, *eBay* argued, but rather a context-specific, equitable-type inquiry that assessed each case on its own terms.

In its decision, the *eBay* Court criticized both the district court’s general rule denying injunctions for patent owners who license their property rights and the Federal Circuit’s general rule issuing injunctions on a finding of infringement of a valid patent. The *eBay* Court thus affirmed the right of all patent owners to obtain injunctions against infringers, but it rejected any categorical or rule-based approach in favor of an allegedly “historical” four-factor inquiry: (1) the plaintiff must suffer an irreparable injury, (2) legal remedies must be inadequate, (3) the balance of the hardships between the

19 See 35 U.S.C. § 271 (prohibiting unauthorized making, using, selling, or offering to sell the invention).

20 See 35 U.S.C. § 284 (damages); *id.* § 283 (injunctions).

21 *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 392 (2006).

22 *Id.* at 393–94.

23 *Id.* at 393.

24 See H. Tomás Gómez-Arostegui & Sean Bottomley, *The Traditional Burdens for Final Injunctions in Patent Cases c.1789 and Some Modern Implications*, 71 CASE W. RESV. L. REV. (forthcoming 2021) (manuscript at 9) (<http://ssrn.com/abstract=3687893>).

defendant and plaintiff must weigh in favor of the plaintiff, and (4) an injunction must not be against the public interest.²⁵

Notably, and something often forgotten by many commentators and judges, the *eBay* Court affirmed its 1908 decision in *Continental Paper Bag Co. v. Eastern Paper Bag Co.* In *Continental Paper Bag*, the Court held that *all* patent owners were entitled to receive injunctions to stop ongoing or willful infringements of their property rights, even if they were not using their patented inventions in the marketplace through licensing or manufacturing activities.²⁶ The Court observed that all “trespasses and continuing wrongs . . . are well-recognized grounds of equity jurisdiction, especially in patent cases.”²⁷ The *eBay* Court approvingly cited *Continental Paper Bag* in rejecting eBay’s argument (and the district court’s argument) that patent licensing was legally insufficient to justify an injunction to remedy an ongoing or willful infringement of this patent.²⁸

In its evenhanded criticism of both the district court’s general rule denying injunctions for patent owners who only license their property and the Federal Circuit’s general rule on issuing injunctions on a finding of infringement of a valid patent, the *eBay* Court intimated that its “four-factor test” should be applied neutrally. For patent owners, though, hope springs eternal. For both legal and policy reasons, *eBay* has been neither interpreted nor applied neutrally by courts.

B. *eBay Changed the Law for Injunctions as a Presumptive Remedy for Patent Infringement*

Contrary to the *eBay* Court’s contention that it was merely reestablishing a longstanding legal test, there was no historical four-factor test for issuing injunctions as a remedy for ongoing or willful infringement of a valid patent.²⁹ Remedies scholars have pointed out that the *eBay* Court pulled out of thin air its claims that “[o]rordinarily, a federal court . . . applies the four-factor test historically employed by courts of equity” and that “[a]ccording to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test.”³⁰ Professor Doug Rendleman bluntly states that “[r]emedies specialists had never heard of the four-point test.”³¹

25 See *eBay*, 547 U.S. at 391.

26 *Cont'l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 429–30 (1908).

27 *Id.* at 430.

28 *eBay*, 547 U.S. at 393.

29 See generally Gergen et al., *supra* note 12.

30 See *eBay*, 547 U.S. at 390–91.

31 Doug Rendleman, *The Trial Judge's Equitable Discretion Following eBay v. MercExchange*, 27 REV. LITIGATION 63, 76 n.71 (2007). It appears the *eBay* Court was confused between the test for permanent injunctions and the modern test for a preliminary injunction, as there is no “historical” four-factor test for issuance of permanent injunctions, but there is a modern four-factor test for preliminary injunctions. See DOUGLAS LAYCOCK, MODERN AMERICAN REMEDIES: CASES AND MATERIALS 444 (4th ed. 2010) (observing that the

There was no historical four-factor test for issuing injunctions as a remedy for patent infringement, but the Federal Circuit was also mistaken that there was a general rule requiring injunctions. Since the United States defined and secured patents as private property rights,³² federal courts applied to patents the same legal doctrines governing the issuance of injunctive remedies as they applied to all other property rights.³³ In sum, courts applied a *presumptive remedy* of an injunction.

There is much confusion today about what is a presumptive remedy. Some lawyers and commentators assume mistakenly that this means an injunction is automatically guaranteed to a patent owner whose property right is violated by another person.³⁴ In effect, they believe that it is a per se rule that functions formalistically.³⁵ For example, an injunction issues automatically on a finding of infringement just as one is automatically liable in receiving a speeding ticket for violating a speed limit law. But this is not how presumptions function in the law generally or in remedies doctrine specifically.

In the context of patent litigation, a presumptive remedy means that, following a patent owner establishing the validity of the patent and ongoing or willful infringement of this valid property right, an injunction issued presumptively.³⁶ (Today, patents are presumed valid per statutory mandate,³⁷

four-factor test for preliminary injunctions was what “the Court tried to transfer to permanent injunctions in *eBay*”).

32 See *supra* notes 17–19 and accompanying text.

33 See, e.g., *Cook v. Ernest*, 6 F. Cas. 385, 391 (C.C.D. La. 1872) (No. 3155) (“If the rights of property so invaded were rights to land or other tangible estate, no court would hesitate for a moment to restrain the wrong-doer by injunction. The property in a patent is just as much under the protection of the law as property in land. The owner has the same right to invoke the protection of the courts, and when he has made good his claim to his patent, and shown an infringement of it, it is the duty of the courts to give him the same relief meted out to suitors in other cases.”).

34 See, e.g., Shyamkrishna Balganesh, *Demystifying the Right to Exclude: Of Property, Inviolability, and Automatic Injunctions*, 31 HARV. J.L. & PUB. POL’Y 593, 651 (2008) (“The automatic rule mandating the grant [of an injunction] . . . articulated by the Federal Circuit thus concretized the connection between property and injunctive relief through the right to exclude.”); George M. Sirilla, William P. Atkins & Stephanie F. Goeller, *Will eBay Bring Down the Curtain on Automatic Injunctions in Patent Cases?*, 15 FED. CIR. BAR J. 587, 588 (2006) (“The Federal Circuit’s virtually automatic issuance of a permanent injunction has recently come under attack.”).

35 This is the way per se rules function in antitrust. See Richard A. Epstein, *Monopolization Follies: The Dangers of Structural Remedies Under Section 2 of the Sherman Act*, 76 ANTITRUST L.J. 205, 223 (2009) (“The most destructive trope in *Alcoa* was Learned Hand’s soaring rhetoric on the necessity of per se illegality even when all the direct evidence suggests that the particular scheme might make economic sense.”).

36 See, e.g., *Conover v. Mers*, 6 F. Cas. 322, 323 (C.C.S.D.N.Y. 1868) (No. 3123) (“[W]here, as here, the patent has been sustained on full hearing, and the infringement is clear . . . the complainant is entitled to have his rights promptly protected by injunction.”); *Potter v. Muller*, 19 F. Cas. 1170, 1170 (C.C.S.D. Ohio 1864) (No. 11,334) (“The rule as to granting or continuing injunctions in patent right cases is now well settled by the modern usages of the courts of the United States. They are now granted without a previous trial at

and in the nineteenth century, courts adopted various presumptions in favor of patent validity.)³⁸ In 1858, for instance, a court held that “[i]f the rights of a party, under a patent, have been fully and clearly established, and an infringement of such rights is threatened, or, if, when they have been infringed, the party has good reason to believe they will continue to be infringed, an injunction will issue.”³⁹

As a presumptive remedy, an injunction was not automatically guaranteed for a patent owner—nor for any property owner—as it could be rebutted by a defendant.⁴⁰ A defendant could defeat an injunction by proving that the patent was invalid or that the defendant did not infringe it.⁴¹ Alternatively, a defendant found liable for ongoing infringement of a valid patent could still defeat an injunction by proving classic counterclaims in equity for why an injunction should not issue, such as unreasonable delay that prejudiced the defendant (“laches”),⁴² “public interest” concerns of threats

law in cases where the owner of the patent shows a clear case of infringement, and has been in the possession and enjoyment of the exclusive right for a term of years without any successful impeachment of its validity.”).

37 See 35 U.S.C. § 282 (2018) (“A patent shall be presumed valid.”).

38 See, e.g., *Miller v. Androscooggin Pulp Co.*, 17 F. Cas. 301, 303 (C.C.D. Me. 1872) (No. 9559) (“The complainant has for a long time been in exclusive possession under the . . . patent, with the acquiescence of the public therein, and there is no evidence of any interruption of the exclusive possession under this patent, tending in any way to weaken the presumption in favor of his title arising from this enjoyment and acquiescence.”); *Hayden v. Suffolk Mfg. Co.*, 11 F. Cas. 900, 902 (C.C.D. Mass. 1862) (No. 6261) (recognizing that an issued patent establishes a “prima facie case for the plaintiff in the question of title”); *Orr v. Badger*, 18 F. Cas. 831, 832 (C.C.D. Mass. 1844) (No. 10,587) (“Dr. Orr was in quiet enjoyment of the benefit of his invention for several years under the original patent, and received considerable sums of money. This is prima facie evidence of the right.”); see also Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*, *supra* note 18, at 998–1001 (discussing “presumption favoring liberal construction of patents” adopted by early courts).

39 *Poppenhusen v. N.Y. Gutta Percha Comb Co.*, 19 F. Cas. 1056, 1056–57 (C.C.S.D.N.Y. 1858) (No. 11,281).

40 See, e.g., *Bachelor v. Moulton*, 2 F. Cas. 307, 310 (C.C.S.D.N.Y. 1873) (No. 706) (“The plaintiff’s title and the validity of his claims are free from doubt, and have been established, and the infringement by the defendants’ machine is clear. An injunction must issue on all the claims.”); *Day v. New Eng. Car Co.*, 7 F. Cas. 248, 248–49 (C.C.S.D.N.Y. 1854) (No. 3686) (“Under the rules of equity pleading . . . the defendants must disprove the invention, or the right of the plaintiff as assignee, or the infringement of the patent Otherwise, the plaintiff will be entitled to an injunction on his proofs.”).

41 See, e.g., *Stow v. City of Chicago*, 23 F. Cas. 195, 199 (C.C.N.D. Ill. 1877) (No. 13,512) (dismissing complaint and denying injunction given defendant proving that patent is invalid); *Smith v. Clark*, 22 F. Cas. 487, 488 (C.C.D. Mass. 1850) (No. 13,027) (dismissing complaint and denying injunction given defendant proving that he did not infringe the patent).

42 See, e.g., *Goodyear v. Honsinger*, 10 F. Cas. 692, 695 (C.C.N.D. Ill. 1867) (No. 5572) (considering laches argument by defendant but ultimately issuing preliminary injunction for patent owner); *Parker v. Sears*, 18 F. Cas. 1159, 1163 (C.C.E.D. Pa. 1850) (No. 10,748) (denying request for preliminary injunction given patent owner “standing by, for so many years, without complaint or demand of compensation”); *Stevens v. Felt*, 23 F. Cas. 10, 11

to public health and safety,⁴³ a cloud on the title,⁴⁴ or other equitable defenses.⁴⁵

In practice, courts did usually issue injunctions for patent owners, as Chief Justice John Roberts pointed out in his concurrence in *eBay*,⁴⁶ but not because injunctions issued automatically on a finding of infringement. Rather, courts applied to patents the same doctrinal rules governing remedies for all property rights. As one court explained in 1879: “[T]he court has no discretion, but is bound to grant a preliminary injunction where the validity of the complainant’s patent has been established by protracted and expensive litigation, and the proof of infringement is clear.”⁴⁷

(S.D.N.Y. 1843) (No. 13,397) (denying preliminary injunction given “no reason is shown why the plaintiff has suffered [infringement] to go on for so long a period without enforcing his right under the patent”); *Cooper v. Mattheys*, 6 F. Cas. 482, 485, 487 (C.C.E.D. Pa. 1842) (No. 3200) (denying an injunction given evidence of laches by the plaintiff patent owner).

43 See, e.g., *Bliss v. Brooklyn*, 3 F. Cas. 706 (C.C.E.D.N.Y. 1871) (No. 1544) (denying injunction for infringement of a patent on fire hoses used by city fire department on public interest grounds of threat to public health and safety in the city); *Hodge v. Hudson River R.R. Co.*, 12 F. Cas. 276, 278–79 (C.C.S.D.N.Y. 1868) (No. 6560) (granting conditional preliminary injunction on payment of royalty during pendency of lawsuit given defendant’s argument that, as a “common carrier” that carries U.S. mail and is part of an interconnected railway system, the public would be harmed).

44 See, e.g., *Morris v. Lowell Mfg. Co.*, 17 F. Cas. 822, 823 (C.C.D. Mass. 1866) (No. 9833) (“Nor am I sure that their title is so entirely clear as to make it a matter of course to issue the [preliminary] injunction without regard to the damage it might do the defendants.”); *Isaacs v. Cooper*, 13 F. Cas. 153, 153–54 (C.C. Pa. 1821) (No. 7096) (“If the bill states an exclusive possession of the invention, or discovery for which the plaintiff has obtained a patent, an injunction is granted, although the court may feel doubts as to the validity of the patent. But if the defects in the patent, or specification, are so glaring that the court can entertain no doubt as to that point, it would be most unjust to restrain the defendant . . .”).

45 See, e.g., *Potter v. Fuller*, 19 F. Cas. 1148, 1150–51, 1154 (C.C.S.D.N.Y. 1862) (No. 11,327) (reviewing and rejecting numerous defenses, including laches, “oppressive conduct” by plaintiffs, and others, before issuing preliminary injunction); see also *Smith*, *supra* note 15, at 1079, 1081–88 (discussing how balance of hardship, unclean hands, laches, and other defenses would apply in considering issuing injunctions in cases involving SEPs).

46 See *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 395 (2006) (Roberts, C.J., concurring).

47 *Green v. French*, 10 F. Cas. 1107, 1109 (C.C.D.N.J. 1879) (No. 5757). Just as with the *eBay* four-factor test for final injunctions, the formal four-factor test for a preliminary injunction is a modern test and not found in historical cases. See, e.g., *Earth Closet Co. v. Fenner*, 8 F. Cas. 261 (C.C.D.R.I. 1871) (No. 4249) (denying a preliminary injunction after assessing only whether title is valid and whether plaintiffs had proven immediate need to avert irreparable harm); *Doughty v. West*, 7 F. Cas. 969, 971 (S.D.N.Y. 1865) (No. 4029) (stating as requirements for issuing a preliminary injunction whether there is a presumption of validity through exclusive public use of the patent, a judgment at a law had been obtained, and a hearing in equity had been held); *Sargent v. Seagrave*, 21 F. Cas. 505 (C.C.D.R.I. 1855) (No. 12,365) (issuing preliminary injunction after only assessing validity of patent and whether defendants were infringing it).

Such statements reveal that courts sometimes did speak starkly about securing a property right by an injunction.⁴⁸ Judicial opinions declaring “no discretion” in issuing an injunction could confuse lawyers or judges today about the nature of this equitable remedy—whether it was a presumptive or automatic remedy. In fact, by the mid-nineteenth century, it was common for courts to refer to injunctions as the “usual decree” for a plaintiff who established valid title and ongoing or willful infringement of the patent.⁴⁹ Another court stated in 1866 that “[a]s a general rule, if the plaintiff has made out a clear title, and the question of infringement presents no difficulty, an injunction will be granted.”⁵⁰ Strong judicial rhetoric notwithstanding, the doctrine was clear that injunctions issued in equity only as a presumptive remedy for ongoing or willful infringement of a valid patent.⁵¹

Although the substance of the four-factor *eBay* test reflects equitable inquiries in issuing injunctions, this multifactor test for issuing injunctions was new. The Court sowed confusion in claiming it was applying a well-established, historical legal test.⁵² Since its four-factor test was a new legal doctrine for issuing injunctions, lower courts seeking to apply it could not find controlling legal precedent for their decisions after 2006. This likely was a contributing factor in the significant reduction after *eBay* in patent owners receiving an injunction as a presumptive remedy to redress ongoing or willful infringement of their property rights.

C. *eBay Changed Judicial Practice in Issuing Injunctions for Patent Infringement*

Within a few years after *eBay*, courts began altering their practice in generally issuing injunctions on a finding of ongoing or willful infringement of a valid patent. Perhaps lacking controlling legal precedent in guiding their decisions and lacking any guidance from the very brief *eBay* majority opinion itself that runs only several pages in length,⁵³ lower courts have construed the

48 See, e.g., *Hodge*, 12 F. Cas. at 278 (“[T]he rule, as established by this court is, that a plaintiff has a right to protection by injunction, although great injury may thereby be caused to the infringer.”).

49 See, e.g., *Fischer v. Wilson*, 9 F. Cas. 103, 107 (C.C.S.D.N.Y. 1879) (No. 4812); *Howes v. McNeal*, 12 F. Cas. 715, 724 (C.C.N.D.N.Y. 1878) (No. 6789); *Henderson v. Cleveland Coop. Stove Co.*, 11 F. Cas. 1079, 1083 (C.C.N.D. Ohio 1877) (No. 6351); *N.Y. Rubber Co. v. Chaskel*, 18 F. Cas. 159, 159 (C.C.S.D.N.Y. 1876) (No. 10,215); *Hussey v. Bradley*, 12 F. Cas. 1053, 1059 (C.C.N.D.N.Y. 1863) (No. 6946).

50 *Potter v. Whitney*, 19 F. Cas. 1191, 1191 (C.C.D. Mass. 1866) (No. 11,341).

51 See, e.g., *Hussey v. Whitely*, 12 F. Cas. 1067, 1071 (C.C.S.D. Ohio 1860) (No. 6950) (“The authorities are numerous to support the position, that when such grounds of presumption exist in favor of the novelty of an invention covered by a patent, courts will not refuse an injunction, or, if granted, will not dissolve it unless the patent is impeached by the most conclusive evidence.”).

52 See *Smith*, *supra* note 15, at 1081 (“[T]he four-part test of *eBay* is a mistake in the making. To begin with, the supposedly ‘well-established’ four-factor test is anything but, and is actually based on the test for preliminary relief (with a doubling up of the first factor).” (footnote omitted)).

53 Gergen, Golden, and Smith call it “brusque.” Gergen et al., *supra* note 12, at 204.

eBay test as requiring a change in the actual legal doctrine on injunctions. Thus, for instance, the Federal Circuit believed that *eBay* required it to abrogate any presumptions in injunction analyses.⁵⁴

This shift in the legal analysis corresponded with another equally important legal and policy change in the application of the *eBay* test: lower courts began citing Justice Kennedy’s policy-laden concurrence in *eBay* rather than Justice Thomas’s majority opinion.⁵⁵ In *eBay*, Justice Kennedy argued separately that a new “licensing” business model had arisen in the innovation industries, as opposed to patent owners manufacturing patented inventions.⁵⁶ He argued that injunctions gave these licensors, especially when patents covered only a component of a commercial product, “undue leverage” to “charge exorbitant fees.”⁵⁷

In the patent policy debates, Justice Kennedy’s concern is known as “patent holdup” theory. It arises from a profound misunderstanding of the nature and role of injunctions as a remedy for patent infringement. Many view injunctions as a blunt legal tool exploited by patent owners with threats of litigation or actual lawsuits to either shut down competitors and charge monopoly prices or extort high royalties in licensing agreements.⁵⁸ The argument—framed at a high level of generality or within an economic model⁵⁹—is that “patent holdup” via a threat or issuance of an injunction results in unreasonably higher royalties for a licensor or higher prices generally through less competition for a manufacturer—harming the public, reducing innovation, or both.⁶⁰ Subsequent scholarship has rigorously ana-

54 See Gómez-Arostegui & Bottomley, *supra* note 24 (manuscript at 10–11) (discussing how the Federal Circuit “discarded its rebuttable presumptions” in injunction analyses in *Robert Bosch LLC v. Pylon Manufacturing Corp.*, 659 F.3d 1142 (Fed. Cir. 2011)).

55 See Holte, *supra* note 14, at 721–22, 726 (identifying a shift in court citations to *eBay* from the majority opinion to Justice Kennedy’s concurrence).

56 *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396–97 (2006) (Kennedy, J., concurring).

57 *Id.*

58 See, e.g., *id.* (criticizing patent licensors as using the threat of an injunction in litigation to “charge exorbitant fees”); BARNETT, *supra* note 4, at xii (“Prevailing scholarly approaches to IP and innovation law and policy generally focus on the use of IP rights to block imitators through litigation and then extract a supracompetitive premium in the market.”).

59 See Alexander Galetovic & Stephen Haber, *The Fallacies of Patent-Holdup Theory*, 13 J. COMPETITION L. & ECON. 1, 9–10 (2017) (providing extensive literature review of efforts to test “patent holdup” theories and models, and observing that “there is no positive evidence in support of its core predictions”); Mossoff & Claey, *supra* note 7 (manuscript at S17) (“In almost all assessments of equitable relief in patent cases, there are few data on the actual comparative costs and benefits either to the parties or to society.”); cf. Richard A. Epstein, *A Clear View of The Cathedral: The Dominance of Property Rules*, 106 YALE L.J. 2091, 2095 (1997) (noting that in the property rule/liability rule framework, “the claims here are implicitly empirical but not capable of precise justification” and “the choice between property rules and liability rules is often decided at a very high level of theoretical abstraction”).

60 See, e.g., *eBay*, 547 U.S. at 397 (Kennedy, J., concurring) (asserting that “an injunction may not serve the public interest” in a patent holdup scenario); Mark A. Lemley &

lyzed and tested “patent holdup” theory for over a decade and failed to find any empirical support for its predictions.⁶¹ Nonetheless, “patent holdup” became conventional wisdom in academic scholarship, in courts, and in regulatory agencies.⁶²

Justice Kennedy was wrong that patent licensing is a new business model leading to a new legal and commercial practice of “patent holdup.”⁶³ His concurrence simply compounded the legal and historical inaccuracies already found in the majority opinion in *eBay*. Thus, as Justice Kennedy’s concurring opinion came to represent *eBay* in the minds of legal decisionmakers and commentators, it fed a widespread apprehension within courts and regulatory agencies that patent licensing is hampering both innovation and commercial activities in the economy.⁶⁴

Any court issuing an equitable remedy rightly hews closely to the classic principle, “first, do no harm.”⁶⁵ Lacking controlling legal precedent and

Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2044–45 (2007) (“Our model suggests that holdup problems in patent cases can be quite significant . . . [and thus] reforms [in limiting injunctions] will help to rebalance the patent system and ensure that it enhances rather than impedes innovation.”); Fiona Scott Morton & Carl Shapiro, *Patent Assertions: Are We Any Closer to Aligning Reward to Contribution?*, 16 INNOVATION POL’Y & ECONOMY 89, 124 (2016) (“Failure to prevent patent holdup relating to tomorrow’s information technology and communications standards is likely to cause significant social welfare loss in the years ahead.”).

61 See, e.g., Jonathan M. Barnett, *Has the Academy Led Patent Law Astray?*, 32 BERKELEY TECH. L.J. 1313, 1338–61 (2017) (detailing empirical, legal, and theoretical problems with “patent holdup” and related concepts); Galetovic & Haber, *supra* note 59, at 1 (describing and critiquing the “patent holdup” theory on theoretical and empirical grounds); Ron D. Katznelson & John Howells, *The Myth of the Early Aviation Patent Hold-Up—How a US Government Monopsony Commandeered Pioneer Airplane Patents*, 24 INDUS. & CORP. CHANGE 1, 1 (2014) (analyzing and critiquing oft-cited historical story of “patent holdup”); Letter from Judges, Former Judges and Government Officials, Legal Academics, and Economists to Makan Delrahim, Assistant Att’y Gen., Dep’t of Just. Antitrust Div. 1 (Feb. 13, 2018) (<https://cpip.gmu.edu/wp-content/uploads/sites/31/2018/02/Letter-to-DOJ-Supporting-Evidence-Based-Approach-to-Antitrust-Enforcement-of-IP.pdf>) (“It bears emphasizing that no empirical study has demonstrated that a patent-owner’s request for injunctive relief after a finding of a defendant’s infringement of its property rights has ever resulted either in consumer harm or in slowing down the pace of technological innovation.”).

62 See, e.g., Barnett, *supra* note 61, at 1321–38 (describing widespread adoption of “patent holdup” and related concepts of “royalty stacking” and “thickets” by legal decisionmakers and scholars); Epstein et al., *supra* note 15, at 13–14 (identifying and critiquing agency “rules set by academic theory rather than set by consensus of actual industry participants (as are existing SSO rules) or by statute and common-law evolution guided by a multitude of real-world fact situations (as are existing rules governing damages and injunctive relief”).

63 See, e.g., B. Zorina Khan, *Trolls and Other Patent Inventions: Economic History and the Patent Controversy in the Twenty-First Century*, 21 GEO. MASON L. REV. 825, 826 (2014); Naomi R. Lamoreaux, Kenneth L. Sokoloff & Dhanoos Sutthiphisal, *Patent Alchemy: The Market for Technology in US History*, 87 BUS. HIST. REV. 3, 4 (2013); Mossoff, *supra* note 3, at 960.

64 See *supra* note 15 and accompanying text (reviewing scholarship discussing court and agency decisions that implemented “patent holdup” theory).

65 See Richard A. Epstein, *Intellectual Property: Old Boundaries and New Frontiers*, 76 IND.

presented with policy arguments from litigants, academics, and advocacy organizations about “patent holdup,” courts became wary of issuing injunctions.⁶⁶ The inexorable result was a substantial reduction in injunctions issuing to stop ongoing patent infringement.⁶⁷ One study found that courts are increasingly denying injunctions requested by patent owners who manufacture their products or services,⁶⁸ a legal result supported by some academics who argue that “patent holdup” can be committed as much by manufacturers as by licensors.⁶⁹ Thus, patent owners are forced into compulsory licensing schemes in which they receive a court-ordered “reasonable royalty” as the sole remedy for the ongoing infringement of their patents.⁷⁰

II. INJUNCTIONS AS A PRESUMPTIVE REMEDY FOR PATENT INFRINGEMENT

Feeding the misplaced arguments about “patent holdup” is a widespread misunderstanding about the function of injunctions in securing property rights and as a driver of economic activity in the U.S. innovation economy. Although some companies internalize research and development, manufacturing, and commercializing products and services in their business models, many companies do not do this. Businesspersons regularly create innovative

L.J. 803, 827 (2001) (“In law, as in medicine, we should still remember that the basic principle is, *primum, non nocere*: first, do no harm.”).

66 See *Nichia Corp. v. Everlight Ams., Inc.*, 855 F.3d 1328, 1331, 1341–44 (Fed. Cir. 2017) (affirming denial of an injunction given that plaintiff’s patent licensing business model establishes that monetary damages are adequate); *Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1372–73 (Fed. Cir. 2013) (“We see no problem with the district court’s decision, in determining whether an injunction would disserve the public interest, to consider the scope of Apple’s requested injunction relative to the scope of the patented features and the prospect that an injunction would have the effect of depriving the public of access to a large number of non-infringing features.”); *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1337–41, 1343 (Fed. Cir. 2012) (vacating grant of an injunction given that damages in the form of a court-ordered reasonable royalty rate is deemed to be a sufficient remedy for the infringement); *cf. WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1343 (Fed. Cir. 2016) (“The district court’s decision is based on its reasoning that having more manufacturers of a lifesaving good in the market is better for the public interest. But this reasoning . . . would create a categorical rule denying permanent injunctions for life-saving goods, such as many patented pharmaceutical products.”).

67 See generally Gupta & Kesan, *supra* note 14.

68 *Id.* at 25–26.

69 See Sichelman, *supra* note 7, at 523 (observing that “[Lemley & Shapiro’s ‘patent holdup’] arguments against issuing injunctions to NPEs are often just as applicable to practicing entities”).

70 See *ActiveVideo Networks*, 694 F.3d at 1341 (“We vacate the grant of a permanent injunction in this case and remand for the district court to consider an appropriate ongoing royalty rate for future infringement by Verizon.”); *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1316 (Fed. Cir. 2007) (affirming court-ordered payment of ongoing reasonable royalty in lieu of issuing an injunction under the *eBay* test). But see H. Tomás Gómez-Arostegui, *Prospective Compensation in Lieu of a Final Injunction in Patent and Copyright Cases*, 78 *FORDHAM L. REV.* 1661, 1699–1707 (2010) (detailing substantial historical caselaw stating that courts do not have authority in equity to order “reasonable royalty” payments in lieu of issuing injunctions as a prospective remedy).

economic arrangements to efficiently produce new products and services, such as creating disaggregated supply chains among different companies distributed throughout the global economy, franchise business models formed around licenses of a portfolio of intellectual property rights, portfolio licensing of patents, and patent pools, among many others.⁷¹ The ability of inventors, businesspersons, and ultimately consumers to reap the benefits of these innovative markets is dependent on the ability of patent owners and businesspersons to create and sell their property in the marketplace. This Part explains how injunctions facilitate these commercial practices for all property owners, whether landowners or patent owners.

A. *Injunctions as Remedies for Trespasses of Property Rights Generally*

Property rights are a legal platform for commercial activity in the production and exchange of products and services in growing economies and flourishing societies.⁷² This well-established economic principle is applicable to all property rights, including intellectual property rights such as patents.⁷³ Property rights in all assets, including patents, foster commercial activities in innovation markets, as market participants engage in specialization and division of labor in maximizing value creation all along the production and distribution value chain.⁷⁴ This key economic insight was first formulated by Adam Smith in 1776 in *The Wealth of Nations*.⁷⁵

Property rights can achieve this economic function only when property owners have reliable and effective control over their property. If anyone can

71 See BARNETT, *supra* note 4, at 115–36 (detailing examples of commercial innovation on the basis of patent rights). See generally Jonathan M. Barnett, *From Patent Thickets to Patent Networks: The Legal Infrastructure of the Digital Economy*, 55 JURIMETRICS 1 (2014); Jonathan M. Barnett, *Intellectual Property as a Law of Organization*, 84 S. CAL. L. REV. 785 (2011).

72 See Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 355 (1967) (observing that “an owner of a private right to use land acts as a broker” in facilitating efficient uses of the land); Stephen Haber, *Patents and the Wealth of Nations*, 23 GEO. MASON L. REV. 811, 811 (2016) (“There is abundant evidence from economics and history that the world’s wealthy countries grew rich because they had well-developed systems of private property. Clearly defined and impartially enforced property rights were crucial to economic development . . .”).

73 See, e.g., HERNANDO DE SOTO, *THE MYSTERY OF CAPITAL: WHY CAPITALISM TRIUMPHS IN THE WEST AND FAILS EVERYWHERE ELSE* 83 (2000) (“[P]eople who could not operate within the law also could not hold property efficiently or enforce contracts through the courts Being unable to raise money for investment, they could not achieve economies of scale or protect their innovations through royalties and patents.”).

74 See Jonathan M. Barnett, *Patent Tigers: The New Geography of Global Innovation*, 2 CRITERION: J. ON INNOVATION 429, 429 (2017) (identifying how some countries have used patents to leverage upstream technological inputs in disaggregated global supply chains as a way to promote economic growth relative to more developed countries); Jonathan M. Barnett, *Patent Tigers’ and Global Innovation*, REGULATION, Winter 2019–2020, at 14, 14 (same).

75 See Mossoff, *supra* note 3, at 971 & n.66 (identifying nineteenth-century patent licensing practices as exemplifying Adam Smith’s insight about the benefits of the division of labor and specialization in the *Wealth of Nations*).

violate a property right by trespassing, and the only consequence they suffer is that they must pay the property owner some form of monetary compensation set by a government official following a legal or regulatory process, then property owners can no longer determine how best to use their property in the marketplace. Contracts are replaced by “efficient infringement” in which putative licensees can exploit costly judicial or regulatory processes to depress licensing rates, which reduces the willingness of innovators to create new inventions and invest in new commercial mechanisms for deploying these inventions in the marketplace.⁷⁶

This is the legal and economic function of injunctions. Continuing wrongs—ongoing violations of property rights—harm owners (and ultimately society) in ways that are not compensable merely by an award of damages for the trespass. When a trespasser wantonly crosses a farmer’s field, the harm to the landowner is not fungible with the one dollar in compensatory damages for the trodden grass.⁷⁷ The value to the farmer of the private property is not one dollar. If the trespasser wished to access and use the land, this person should have negotiated with the farmer and paid the market price of this access right based on what he was willing to pay and what the farmer was willing to accept, assuming they could agree on an amount that was mutually acceptable. The injunction secures this capacity of the farmer to require this negotiation by the would-be trespasser.

This economic principle—injunctions facilitate market transactions by securing a property owner’s right to decide how she will use her assets and sell her products and services in the marketplace—is well recognized by courts in tangible property cases. In *Continental Airlines v. Intra Brokers*,⁷⁸ for example, Continental successfully enjoined Intra Brokers’ unauthorized resale of Continental’s discount airfare coupons, which Continental expressly prohibited in the coupons.⁷⁹ In appealing the injunction, Intra Brokers argued that, even if it was liable for its resale of the coupons, the value of the coupons was easily measured by the face value of each coupon; thus, Intra Brokers concluded that Continental failed to prove that it suffered an irreparable injury that could not be remedied by a legal remedy (damages). The Ninth Circuit decisively rejected Intra Brokers’ argument, stating that “Continental was entitled to control whether its coupons were transferred.”⁸⁰ The court held that Continental had proven irreparable injury because the

76 See Mossoff, *supra* note 6, at 939–40 (describing efficient infringement and how it devalues patents as a commercial asset class); see also Auer et al., *supra* note 7, at 160–64 (identifying role of injunctions in commercial transactions and how weakening patents devalues patents); Epstein & Noroozi, *supra* note 15, at 1418–19 (identifying how a “misallocation of rights” without injunctive relief for SEPs results in lower royalty rates).

77 See, e.g., *Jacque v. Steenberg Homes*, 563 N.W.2d 154, 163–65 (Wis. 1997) (upholding \$100,000 punitive damages award on the basis of a \$1 compensatory damages award for a willful trespass given the personal and societal values undermined by intentional trespasses of private property).

78 *Cont’l Airlines, Inc. v. Intra Brokers, Inc.*, 24 F.3d 1099 (9th Cir. 1994).

79 *Id.* at 1100, 1105.

80 *Id.* at 1104–05.

harm to Continental was to its power, not its purse. [Regardless w]hether Continental is right or wrong about the effect of coupon brokering on its profits . . . it is entitled to make its own decisions about whether to give out discount coupons, and whether to make them transferrable or nontransferable. *Neither Intra nor the courts are entitled to substitute their business judgment for Continental's . . .*⁸¹

In *Pardee v. Camden Lumber Co.*, the West Virginia Supreme Court similarly held that a trespasser who cut down the trees of a landowner could not simply elect to pay the landowner damages representing the fair market value of the trees.⁸² As in *Continental Airlines*, the defendant in *Pardee* argued that it was possible to precisely measure the monetary value of the trees and to pay this amount in damages to the plaintiff landowner. The *Pardee* court soundly rejected this argument, observing that this *economic fact* was insufficient to remedy the *legal injury* suffered by the landowner.⁸³ The property owner's harm was to its power of dominion, not merely to its purse. The court recognized that the fundamental policy function for "all forms of property either real or personal" is that courts "guarantee to the owner of property the right, not only to possession thereof and dominion over it, but also its immunity from injury."⁸⁴ The court further recognized that real estate is truly unique because "no two pieces of land are alike in all respects," and thus courts cannot assume as a default rule that fair market value (damages) is fungible with the full value of the real estate to its owner.⁸⁵

In securing control rights over property, courts protect fully not only the commercial decisions that make possible private-ordering decisions in business models and market exchanges, but they also secure the liberty interest in how people may choose to live their lives,⁸⁶ to secure their privacy rights,⁸⁷ and to create their own business models and develop corporate goodwill with a reputation as innovative companies.⁸⁸ As the Wisconsin Supreme Court recognized in another famous trespass case: "[T]he actual harm is not in the damage done to the land . . . but in the loss of the individual's right to exclude others from his or her property."⁸⁹

81 *Id.* at 1105 (emphasis added).

82 73 S.E. 82, 85 (W. Va. 1911).

83 *See id.* at 84–85.

84 *Id.* at 84.

85 *Id.*

86 *See generally* Mossoff & Claey's, *supra* note 7 (explaining natural rights justification for injunctive remedies for patent owners on the basis of an ethical theory that promotes human flourishing).

87 *See* *Jacque v. Steenberg Homes, Inc.*, 563 N.W.2d 154, 159 (Wis. 1997) (identifying privacy interests as nonfungible interests secured by real property).

88 *See* *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1344 (Fed. Cir. 2013) (identifying many different types of losses resulting from patent infringement that are often difficult to quantify, such as the patent owner's lost sales, erosion in its reputation, and loss of its brand distinction).

89 *Jacque*, 563 N.W.2d at 159.

B. *Injunctions as a Presumptive Remedy for Patent Infringement*

Historically, courts applied these same principles in securing exclusive control rights in property rights in inventions.⁹⁰ As with property rights in tangible goods, property rights in inventions serve as a platform in facilitating the creation of innovative patent licensing arrangements and other commercial institutions, such as patent pools, franchise business models, and standard development organizations.⁹¹ Just as a presumptive right to an injunction to prevent ongoing or willful trespasses secures to a farmer the exclusive control over the use of his land and how to sell the fruits of his labors, “injunctive relief supplies the legal bedrock on which patent licensing negotiations take place.”⁹² It was not rhetoric when early American courts wrote that “[a]n inventor holds a property in his invention by as good a title as the farmer holds his farm and flock.”⁹³ In legal doctrine, Congress and courts secured the same rights for patent owners as they secured for landowners, such as the right to freely sell or license a patent.⁹⁴ They also applied to patents the same remedial doctrines securing patents against ongoing or willful trespasses of a patent.⁹⁵

Even more important, this legal platform of licensing rights and presumptive injunctive remedies provided the basis for specialization and division of labor via market transactions. This made possible value creation by

90 See, e.g., *Cook v. Ernest*, 6 F. Cas. 385, 391 (C.C.D. La. 1872) (No. 3155) (“If the rights of property so invaded were rights to land or other tangible estate, no court would hesitate for a moment to restrain the wrong-doer by injunction. The property in a patent is just as much under the protection of the law as property in land. The owner has the same right to invoke the protection of the courts, and when he has made good his claim to his patent, and shown an infringement of it, it is the duty of the courts to give him the same relief meted out to suitors in other cases.”).

91 See *supra* notes 3–4 and accompanying text. See also BARNETT, *supra* note 4, at xiv (“[S]ecure IP rights provide the necessary property-rights foundation for forming secondary markets in intellectual assets divorced from any particular product or service, which in turn facilitates disaggregated supply chains in which upstream R&D-specialist entities broadly disseminate technology inputs to a large pool of intermediate users.”); Smith, *supra* note 15, at 1059 (“Property thus provides a platform for coordinating transactions used to develop technology standards.”).

92 Barnett, *supra* note 61, at 1362.

93 *Hovey v. Henry*, 12 F. Cas. 603, 604 (C.C.D. Mass. 1846) (No. 6742); *Davoll v. Brown*, 7 F. Cas. 197, 199 (C.C.D. Mass. 1845) (No. 3662) (“[A] liberal construction is to be given to a patent, and inventors sustained, if practicable, . . . [as] only in this way can we protect intellectual property, the labors of the mind, productions and interests as much a man’s own, and as much the fruit of his honest industry, as the wheat he cultivates, or the flocks he rears.”); see also *supra* note 18 (identifying caselaw and scholarship).

94 See Adam Mossoff, *A Simple Conveyance Rule for Complex Innovation*, 44 TULSA L. REV. 707, 712–18 (2009) (detailing how early American courts extended to patents the common law doctrines of “licenses” and “assignments” from real property).

95 See Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*, *supra* note 18, at 993 (detailing how early courts recognized patent infringement as a form of trespass); see also MacLeod, *supra* note 10, at 725–80 (detailing the conceptual structure of patent infringement doctrine as a private law doctrine like trespass).

undercapitalized innovators, such as independent inventors, and, in today's innovation economy, startups, universities, and research companies. These individuals and firms do not have the labor and capital necessary to establish their own manufacturing facilities, but they can license their patent rights and contract with other companies and entities who do have these capabilities to achieve efficiencies in the marketplace in producing and distributing new products and services to consumers. Economists recognize this economic consequence of the historically unique American approach in securing patents as property rights.⁹⁶

Although the Patent Acts of 1790 and 1793 did not provide specific equity jurisdiction in patent infringement cases, federal courts still issued injunctions in exercising their general equity jurisdiction in lawsuits between citizens of different states.⁹⁷ Congress amended the patent statutes in 1819 and specifically provided for an injunctive remedy for patent infringement.⁹⁸ This made sense, as patent infringement was rarely a one-off wrongful act,

96 See, e.g., KHAN, *supra* note 4, at 9–10 (“[P]atents and . . . intellectual property rights facilitated market exchange, a process that assigned value, helped to mobilize capital, and improved the allocation of resources. . . . Extensive markets in patent rights allowed inventors to extract returns from their activities through licensing and assigning or selling their rights.”); Lamoreaux et al., *supra* note 63, at 4 (identifying economic activities prompted by U.S. patents).

97 See *Nevins v. Johnson*, 18 F. Cas. 28, 29 (C.C.S.D.N.Y. 1853) (No. 10,136) (discussing equitable jurisdiction in patent cases as far back as 1811 and observing that the 1819 legislation was enacted only “to remove doubts as to the authority of the courts of the United States to employ that process in patent cases to the same extent it is used in courts of general jurisdiction”); *Sullivan v. Redfield*, 23 F. Cas. 357, 360 (C.C.D.N.Y. 1825) (No. 13,597) (“This act [of 1819] does not enlarge or alter the powers of the court over the subject matter of the bill or the cause of action. It only extends its jurisdiction to parties not before falling within it. Before this act it had been held, that a citizen of one state could not obtain an injunction in the circuit court for a violation of a patent right against a citizen of the same state, as no act of congress authorized such suit. This act removed that objection, and gave the jurisdiction, although the parties were citizens of the same state. But in the exercise of the jurisdiction in all cases of granting injunctions to prevent the violation of patent rights, the court is to proceed according to the course and principles of courts of equity in such cases.” (citation omitted)); *Whitney v. Carter*, 29 F. Cas. 1070, 1071 (C.C.D. Ga. 1810) (No. 17,583) (“[T]he plaintiff’s counsel cited . . . the opinion of the court, delivered by Judge Johnson, in December term, 1807, in the case of *Whitney and others v. Fort*, upon a bill of injunction.” (footnote omitted)); *Morse v. Reed*, 17 F. Cas. 873, 873 (C.C.D.N.Y. 1796) (No. 9860) (reporting no opinion, but stating in headnote that “[i]n a suit . . . for infringement of patent, the circuit court will also grant a perpetual injunction” under the 1793 Patent Act). *Morse* is apparently mistakenly listed as a patent case, as it was a copyright case. See James Ryan, *A Short History of Patent Remedies*, 6 *CYBARIS* 150, 160 (2015).

98 See Patent Act of 1819, Pub. L. No. 15-19, 3 Stat. 481, 481–82. After 1819, federal courts continued to invoke general equity jurisdiction in patent cases. See, e.g., *Potter v. Dixon*, 19 F. Cas. 1145, 1146 (C.C.S.D.N.Y. 1863) (No. 11,325) (“It has been frequently decided that the power conferred on the United States circuit court to entertain bills in equity in controversies arising under the patent act, is a general equity power, and carries with it all the incidents belonging to that species of jurisdiction.”); *Sullivan*, 23 F. Cas. at 360 (observing that, even after the 1819 legislation, “in the exercise of the jurisdiction in

comprising typically ongoing manufacture, use, and commercial sale of infringing products or processes. The classic jurisdictional justifications for an equity court to interject itself into a legal dispute and issue an injunction—preventing multiplicity of lawsuits, redressing ongoing wrongs that are undeterred by legal remedies, etc.—applied in spades to patent infringement cases.⁹⁹ As a result, nineteenth-century courts quickly developed doctrines, based in part on the same preexisting presumptions for issuing equitable remedies in securing other property rights, permitting injunctions to issue without the patent owner first receiving an express decision at law.¹⁰⁰

all cases of granting injunctions to prevent the violation of patent rights, the court is to proceed according to the course and principles of courts of equity in such cases”).

99 See, e.g., *M’Millin v. Barclay*, 16 F. Cas. 302, 303–04 (C.C.W.D. Pa. 1871) (No. 8902) (“The principle . . . upon which courts of equity have jurisdiction in patent cases, and upon which injunctions are granted in them, is not that there is no legal remedy, but that the law does not furnish a complete remedy to those whose property is invaded; for, if each infringement of the patent were to be made a distinct cause of action, the remedy would be worse than the evil. The inventor or author might be ruined by . . . perpetual litigation, without ever being able to have a final establishment of his rights.” (quoting *Motte v. Bennett*, 17 F. Cas. 909, 910–11 (C.C.D.S.C. 1849) (No. 9884)); *Sanders v. Logan*, 21 F. Cas. 321, 323 (C.C.W.D. Pa. 1861) (No. 12,295) (“There are many cases . . . where [an injunction] is the only efficient remedy to protect the patentee, and prevent continuing trespasses on his rights.”); *Motte*, 17 F. Cas. at 910–11, 916–17 (discussing broadly equitable principles for securing patents against “piracy,” including prevention of multiple lawsuits, and issuing injunction to protect a patent owner licensing its property rights).

100 Some courts followed the traditional jurisdictional requirement that legal issues, such as infringement and validity, must first be decided at law before a plaintiff filed a petition in equity. See, e.g., *Sullivan v. Redfield*, 23 F. Cas. 357, 359 (C.C.D.N.Y. 1825) (No. 13,597) (“Whether the complainant’s patent is good and valid so as ultimately to secure to him the right he claims, is not a question for decision upon the equity side of this court. That is a question which belongs to a court of law, in which the parties have a right of trial by a jury. The equity jurisdiction exercised by the court over patents for inventions is merely in aid of the common law . . .”). Other courts did not follow this rule, and courts ultimately settled on a rule providing liberal access to equity courts. See, e.g., *Hoffheins v. Brandt*, 12 F. Cas. 290, 290–91 (C.C.D. Md. 1867) (No. 6575) (“There at one time prevailed, in the circuit courts of the United States, the idea that the court, as a court of equity, would interfere in aid of a patentee only where his patent was sanctioned by general acquiescence for many years, or had been maintained at law, by the verdict of a jury, who had passed upon the novelty and utility of the invention, when called in question. But I think that the current of decisions of the last few years has been otherwise . . . [and] that the grant of jurisdiction is as full in equity as it is at law.”); *Potter v. Muller*, 19 F. Cas. 1170, 1170 (C.C.S.D. Ohio 1864) (No. 11,334) (“The rule as to granting or continuing injunctions in patent right cases is now well settled . . . They are now granted without a previous trial at law in cases where the owner of the patent shows a clear case of infringement, and has been in the possession and enjoyment of the exclusive right for a term of years without any successful impeachment of its validity. Such possession and enjoyment, aided by the presumptions arising from the patent itself, are usually regarded as sufficient to warrant an injunction to restrain infringement.”); *Sargent v. Carter*, 21 F. Cas. 495, 497 (C.C.D. Mass. 1857) (No. 12,362) (issuing a preliminary injunction on the basis of “prima facie title of the plaintiffs, founded on their exclusive possession of the thing patented”); *Blank v. Mfg. Co.*, 3 F. Cas. 685, 685 (C.C.D. Del. 1856) (No. 1532) (“[C]ourts of the United States do

The 1875 decision in *Gilbert & Barker Manufacturing Co. v. Bussing* exemplifies many of these legal, policy, and economic insights.¹⁰¹ First, the court denied the patent owner's request for a preliminary injunction,¹⁰² confirming that injunctions were only *presumptive remedies* that could be rebutted successfully by defendants. In fact, decisions concerning preliminary injunctions tend to be many of the historical cases in which defendants succeed, pleading either legitimate questions about patent validity or other concerns in equity, such as laches or the balance of hardship weighing in favor of the defendant before a full hearing of the legal dispute.¹⁰³ This was one such case, as the defendant was sued for an unauthorized noncommercial use of a patented machine that he used in his "private residence."¹⁰⁴ Given the "great inconvenience" to the defendant in the issuance of a preliminary injunction and the absence of any commercial harm to the patent owner, the court denied the plaintiff patent owner's request for a preliminary injunction.¹⁰⁵

Second, and even more important, the court in *Gilbert & Barker Manufacturing Co.* expressly affirmed that injunctions are the presumptive remedy for patent infringement—payment of court-ordered reasonable royalties does not put a patent owner in its rightful position for the wrong suffered by infringement of its valid patent. The court recognized that patent owners should not be forced into compulsory licensing through denials of a final injunction after finding a defendant liable for ongoing infringement of a valid patent. In denying the plaintiff's request for a preliminary injunction, the court bluntly stated: "I do not mean to intimate, that, on the final hearing, the complainants may not be entitled to a perpetual injunction against

not, in all cases, require a verdict at law on the title, before granting a final injunction . . ."); *Ogle v. Ege*, 18 F. Cas. 619, 620 (C.C.D. Pa. 1826) (No. 10,462) ("I take the rule to be, in cases of injunctions in patent cases, that where the bill states a clear right to the thing patented, which, together with the alleged infringement, is verified by affidavit; if he has been in possession of it by having used or sold it in part, or in the whole, the court will grant an injunction, and continue it till the hearing or further order, without sending the plaintiff to law to try his right.").

101 *Gilbert & Barker Mfg. Co. v. Bussing*, 10 F. Cas. 348 (C.C.S.D.N.Y. 1875) (No. 5416).

102 *See id.* at 349.

103 *See, e.g., Morris v. Lowell Mfg. Co.*, 17 F. Cas. 822, 823–24 (C.C.D. Mass. 1866) (No. 9833) (denying preliminary injunction given concerns raised by a "balance of the equities"); *Goodyear v. Dunbar*, 10 F. Cas. 684, 685 (C.C.D.N.J. 1860) (No. 5570) (denying preliminary injunction given legal and factual questions about whether defendant is infringing and that defendant is not a "pirate"); *Batten v. Silliman*, 2 F. Cas. 1028, 1030–31 (C.C.E.D. Pa. 1855) (No. 1106) (denying preliminary injunction given questions about validity of title in patent); *Stevens v. Felt*, 23 F. Cas. 10, 11 (S.D.N.Y. 1843) (No. 13,397) (denying preliminary injunction given questions about validity of title in patent and laches committed by plaintiff).

104 *Gilbert & Barker Mfg. Co.*, 10 F. Cas. at 349 ("The defendant is not engaged in manufacturing and selling, and does not, therefore, interfere with the business of the complainants, by competition or otherwise. . . . He has a single machine, connected with, and used for lighting, his private residence.").

105 *Id.*

the defendant. The complainants cannot be compelled, against their will, to permit the defendant to use their invention.”¹⁰⁶

In stressing the importance of the presumptive remedy of an injunction for ongoing infringement of a patent, *Gilbert & Barker Manufacturing Co.* was not an outlier.¹⁰⁷ Disproving again Justice Kennedy’s claim in *eBay* that licensing is a new business model, nineteenth-century courts repeatedly recognized that licensing was a sufficient commercial activity to justify an injunction to prevent ongoing or willful infringements that diminished the patent owner’s royalties in the marketplace.¹⁰⁸ As Circuit Justice McLean explained in another patent case in 1845: in “an ordinary case of infringement . . . an absolute injunction is the only adequate relief.”¹⁰⁹

In 1908, the Supreme Court recognized these and many other cases in its decision in *Continental Paper Bag Co. v. Eastern Paper Bag Co.* that all patent owners have a presumptive right to receive an injunction for ongoing “trespasses and continuing wrongs” of their property rights.¹¹⁰ The *Continental Paper Bag* Court recognized that patent owners can obtain an injunction for ongoing or willful infringements even if they were not actively using their property rights at the time of infringement.¹¹¹ This proposition was so well settled, “especially in patent cases,” that the Court observed that “a citation of cases is unnecessary” in setting forth these legal rules.¹¹²

These principles sometimes make an appearance in modern cases, at least in the increasingly uncommon decisions in which a permanent injunction is issued by a district court or a denial of an injunction is reversed on appeal. In one such case in 2013, the Court of Appeals for the Federal Circuit observed that “[e]xclusivity is closely related to the fundamental nature of patents as property rights. It is an intangible asset that is part of [the] company’s reputation.”¹¹³ Courts have also recognized that patent infringement causes innumerable harms that are very difficult to identify, quantify,

106 *Id.*

107 *See, e.g.,* *Sickels v. Mitchell*, 22 F. Cas. 74, 76 (C.C.S.D.N.Y. 1857) (No. 12,835) (“It is too much for a defendant, in a clear case, to insist upon having the privilege of using a patented invention, for the reason that he is able to pay the damages which may be awarded against him, at the end of a protracted litigation to ascertain their amount.”).

108 *See, e.g.,* *Colgate v. W. Union Tel. Co.*, 6 F. Cas. 85, 97 (C.C.S.D.N.Y. 1878) (No. 2995) (issuing injunction to individual patent licensor against corporate manufacturer); *Goodyear v. Honsinger*, 10 F. Cas. 692, 695 (C.C.N.D. Ill. 1867) (No. 5572) (“It was unfair, and is always unfair, to those who are licensed to use the particular article or method, under letters patent, to allow others to use what the licensees have thus purchased.”); *Grover & Baker Sewing Mach. Co. v. Williams*, 11 F. Cas. 83, 83–85 (D. Mass. 1860) (No. 5847) (accepting patent licensing activities as evidence of prima facie valid title given public acquiescence); *Motte v. Bennett*, 17 F. Cas. 909, 916–17 (C.C.D.S.C. 1849) (No. 9884) (issuing injunction for patent licensor).

109 *Brooks v. Stolley*, 4 F. Cas. 302, 304 (C.C.D. Ohio 1845) (No. 1962).

110 *Cont’l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 430 (1908).

111 *Id.* at 429 (stating that “it is the privilege of any owner of property to use or not use it, without question of motive”).

112 *Id.* at 430.

113 *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1345 (Fed. Cir. 2013).

and measure in a way that affords complete relief with only monetary damages. These harms include “[p]rice erosion, loss of goodwill, damage to reputation, and loss of business opportunities” in the marketplace, which the Federal Circuit rightly recognized as “all valid grounds for finding irreparable harm.”¹¹⁴

These legal, policy, and economic concerns reflect the same concerns about loss of control rights over the use of real property that have animated well-established remedies doctrines. Even if monetary damages can be measured and awarded by a court, this does not put a property owner in the position the owner would have been but for the wrong of the violation of the property rights. The ability to secure personal values and commercial decisions in the use of one’s own property is an essential foundation of both a liberal political order and a free market. This principle applies to all forms of property, whether real estate or patents.

CONCLUSION

eBay changed the law governing how courts issue injunctions for ongoing or willful infringement of a valid patent, and this has resulted in a significant change in legal practice. Historically, patents were secured, like all property rights, by a presumptive remedy of an injunction when patent owners faced ongoing or willful trespasses. *eBay* displaced this equitable doctrine with a four-factor test that has been used by courts to significantly lower the rates of injunctions issuing as a remedy for patent infringement.

Since injunctions are a backstop to all commercial negotiations, the loss of this reliable and effective legal protection has stymied the role that these property rights serve as a platform for commercial activities in the innovation economy. Patents have been devalued as an asset class, as the ability to negotiate market prices, such as licensing of patents, is replaced by court-ordered compulsory licensing, which further depresses royalty rates in commercial negotiations generally. Congress recently abrogated *eBay* in trademark law, restoring the presumptive remedy of an injunction for trademark owners aggrieved by infringement of their property rights.¹¹⁵ Congress or the Supreme Court should now do the same in patent law, restoring the reliable and effective property rights that have spurred the U.S. innovation economy for two centuries.

114 *Aria Diagnostics, Inc. v. Sequenom, Inc.*, 726 F.3d 1296, 1304 (Fed. Cir. 2013) (alteration in original) (quoting *Celsis in Vitro, Inc. v. CellzDirect, Inc.*, 664 F.3d 922, 930 (Fed. Cir. 2012)).

115 *See* Trademark Modernization Act of 2020, H.R. 133, 116th Cong. § 226 (2020).