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Active Promotion of Useful Arts: Considering the Government's Role in Patent Enforcement

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COMMENTS

ACTIVE PROMOTION OF USEFUL ARTS: CONSIDERING THE GOVERNMENT'S ROLE IN PATENT ENFORCEMENT

by Brian Harris*

Table of Contents

I.	Introduction	24
II.	A Comparison of Patent and Non-Patent IP	
	Remedies	24
	A. <i>Patents</i>	24:
	1. Civil Remedies for Infringement	24:
	2. Patent-Related Crimes	24
	3. New State Laws: Bad-Faith Assertion of Patent	
	Rights	24
	B. Trademark Infringement	24
	C. Copyright Infringement	249
	D. Trade-Secret Misappropriation	25
III.	Proposed Small-Claims Proceedings	25
IV.	A Proposal for State Action Against Patent	
	Infringers	25
	A. Shortcomings of the Current Civil-Enforcement	
	System	25
	B. Recent Changes in Patent Law and Their Effects on	~~
	Small Entities	25
	C. Patents as Contracts and Leases	25
	D. Criticisms of Proposals to Criminalize Patent	25
	Infringement	25
	1. Complexity of Infringement Analysis	25
T 7	2. Questions Surrounding Patent Quality	25
V.	Conclusion	25

I. Introduction

The U.S. Constitution grants Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." To this end, Congress created the copyright system "[t]o promote the Progress of Science" and the patent system for pro-

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^{1.} U.S. Const. art. I, § 8, cl. 8.

^{2.} Golan v. Holder, 132 S. Ct. 873, 884 (2012) (alteration in original).

moting the progress of useful arts.³ The American patent system can be thought of as a vehicle for converting an intangible idea into a form of property.

Since the beginning of the American patent system, social benefit has been a key component of the decision to grant a patent.⁴ Some view patent rights as a form of monopoly, termed a "patent monopoly." Because early Americans had strong anti-monopoly sentiments, their decision to institute a system that would allow for a patent monopoly demonstrates a recognition of the importance of furthering collective knowledge.⁶

However, a patent can be essentially worthless if its owner is unable to enforce it. While a patent confers the right to exclude others from making, using, or selling whatever the patent claims, this right has been restated by some to actually be more akin to "a right to try to exclude" others. One reason is that the right to exclude can only be exercised on the condition that the patent owner also has the financial means to exclude. There is no criminal penalty for patent infringement. Instead, patent infringement is strictly a civil matter and patent owners are responsible for the costs associated with enforcement. Thus, if a patent owner is unable to afford the cost of litigation, the right to exclude might as well not exist.

There are many situations where a patent owner may be unable to afford the cost of litigation. One involves the small-business or independent inventor. These inventors often lack the financial resources to absorb the high costs involved in a patent-infringement lawsuit. ¹³ Even though a patent owner may eventually prevail and collect damages, the owner must be able to afford the costs involved in getting to that point. This gives an infringer who recognizes the patent owner's lack of financial resources or who can better afford to absorb the cost of litigation a distinct advantage.

- 3. 60 Am. Jur. 2D Patents § 1 (2014).
- 4. Graham v. John Deere Co., 383 U.S. 1, 6 (1966).
- 5. See id. at 6-9.
- 6. See id. at 7-8.

- 8. See id.
- 9. Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. Econ. Persp. 75, 95 (2005).
 - 10. See infra Section IV.A.
 - 11. See Dowling v. United States, 473 U.S. 207, 227 (1985).
 - 12. See id. at 227 n.19; 35 U.S.C. § 281 (2012).
- 13. See infra Section IV.A (discussing typical costs of patent-infringement litigation).

^{7.} See Todd Hixon, For Most Small Companies Patents Are Just About Worthless, Forbes: Entrepreneurs (Oct. 4, 2013, 12:57 AM), http://www.forbes.com/sites/toddhixon/2013/10/04/for-most-small-companies-patents-are-just-about-worthless [https://web.archive.org/web/20160310060002/http://www.forbes.com/sites/toddhixon/2013/10/04/for-most-small-companies-patents-are-just-about-worthless/#75c498fd1b33].

Some argue patent holders can simply shift the cost of litigation to attorneys by accepting contingency-based representation.¹⁴ However, this merely creates other potential problems. In a typical contingencyfee arrangement, the plaintiff agrees to allow the attorney to collect a percentage of the damages awarded in exchange for representation.¹⁵ Consequently, the attorney will typically evaluate whether to accept the case based on the likelihood of success and the amount of potential damages. Because of this, it can be difficult for a patent owner to secure contingency-based representation in cases where damages are relatively small and in cases where the outcome is difficult to predict. For example, if damages have only begun to accrue and the patent holder wishes to seek an injunction, a contingency-fee arrangement may not be practical. And, while the threat of an injunction may provide some leverage for the patent holder, a contingency-fee attorney may be unable to recover costs if the patent holder is only granted injunctive relief.

This raises a question: is a patent always the best option for an inventor who cannot afford the cost of patent litigation? Some inventions can be protected under trade-secret laws,16 and many tradesecret laws provide for criminal enforcement.¹⁷ In other words, the evolution of intellectual-property law has created a system where an inventor has criminal remedies available for protection of an invention only while the invention is considered a trade secret. Every patented invention "starts out as a trade secret," but when a patent application is published, the inventor loses the secrecy necessary to maintain it as a trade secret. 18 The inventor may be motivated to obtain a patent in order to enjoy the right to exclude others "from making, using, selling, or offering to sell the patented invention." But the right to exclude is not realized if the inventor is unable to afford patent litigation. If the inventor had kept the invention a secret, then it could be protected under trade-secret law and the inventor might be able to stop another party from using it through federal criminal remedies.²⁰ However, since the inventor opted to patent the invention, criminal penalties are no longer available. Therefore, an inventor

^{14.} E.g., David L. Schwartz, *The Rise of Contingent Fee Representation in Patent Litigation*, 64 Ala. L. Rev. 335, 343–44 (2012); William R. Towns, *U.S. Contingency Fees – A Level Playing Field?*, WIPO, Feb. 2010, at 3, http://www.wipo.int/export/sites/www/wipo_magazine/en/pdf/2010/wipo_pub_121_2010_01.pdf [https://perma.cc/8TKE-N8LC] (examining the impact of contingency-fee patent representation).

^{15.} Towns, supra note 14, at 3.

^{16.} See Bryan J. Massey, Reasonable Royalties for 18-Month Patent Publication Infringement: An Unreasonable Remedy for Small Businesses, 8 J. Small & Emerging Bus. L. 87, 89 (2004).

^{17. 50} Am. Jur. 2D Larceny § 68 (2006); see also infra Section II.D.

^{18.} R. Mark Halligan, *Trade Secrets v. Patents: The New Calculus*, LANDSLIDE, July/Aug. 2010, at 10, 11.

^{19.} *Id*.

^{20.} See infra Section II.D (discussing trade-secret enforcement and remedies).

loses the option of criminal remedies in exchange for sharing the invention with the public. Because of this, to the extent the exclusive rights that come with an issued patent are treated as somewhat equivalent to (albeit more extensive than) the exclusive nature of some trade-secret rights, the exchange of a trade secret for a patent results in a net loss: the inventor exchanges one set of exclusive rights for another, but loses criminal remedies to enforce such rights.

While there is no authority for a state to pursue a patent *infringer*, some states will pursue a patent *owner* for improper enforcement of patent rights.²¹ Over the past few years, several states have enacted legislation allowing the state attorney general to step in as *parens patriae* to pursue an entity in civil court that is believed to be enforcing patents in bad faith.²² In the interest of protecting commerce, these states act as protectors of those believing to have been wrongfully accused of infringing patents. In fact, in one state, there is a criminal penalty for bad-faith patent enforcement.²³ But again, the converse is false—there is currently no state action to *assist* a patent owner; there is only state action to *penalize* a patent owner.

Patents stand alone in intellectual property in that there is currently no parens patriae civil action or criminal action that can be brought by state or federal government to stop a party from infringing a patent. This Comment proposes closing this current gap in potential state action against those who disregard the intellectual-property rights of others. There may have been a time when civil litigation was viewed as an inclusive remedy that was equally available to all patent holders. But today, the cost and complexity of patent litigation has pushed it out of the reach of the many patent owners who cannot realistically utilize it as an option. Criminal remedies are prevalent across the spectrum of intellectual property and should be available to patent owners in at least some situations. Some argue that as a society, we would not benefit from filling our jails with accidental infringers or parties who unknowingly stumble into an infringing act.²⁴ However, where a party willfully infringes patent rights, particularly with the knowledge that the patent owner is unlikely to be in a position to enforce those rights in civil court, there should be some alternative remedy for the patent owner to stop the infringing acts and thereby realize the exclusive rights promised upon issuance of the patent.

For comparison's sake, Part II offers a summary of emerging state laws that allow states to take action against patent holders for badfaith patent enforcement, as well as remedies available in other areas

^{21.} See infra Section II.A.3 (discussing new state laws against bad-faith assertion of patent rights).

^{22.} See infra Section II.A.3.

^{23.} Ala. Code §§ 8-12A-2, 8-12A-5 (LexisNexis 2002 & Supp. 2015).

^{24.} See, e.g., Irina D. Manta, The Puzzle of Criminal Sanctions for Intellectual Property Infringement, 24 Harv. J.L. & Tech. 469, 500-01, 501 n.211 (2011).

of intellectual-property law. Part III examines proposed small-claims courts for patent enforcement. Part IV evaluates other considerations related to the current American patent system and concludes that these considerations weigh in favor of government assistance in some instances of infringement. It also considers the other side of the argument by examining criticisms of proposals to criminalize patent infringement. Finally, Part V offers a brief conclusion.

A COMPARISON OF PATENT AND NON-PATENT IP REMEDIES

Patents are unique in that they are the only form of intellectual property for which there is no form of criminal punishment for infringement.²⁵ Notably, since there is a criminal penalty for misappropriation of a trade secret, ²⁶ filing a patent application may effectively mean giving up the ability to seek government assistance in prosecuting those who misuse your intellectual property because of the current do-it-yourself enforcement scheme of the American patent system.

A. Patents

Civil Remedies for Infringement

A patent owner has the right to exclude others "from making, using, selling, or offering to sell the patented invention."²⁷ If a patent owner believes that another party is infringing that right, the patent owner is entitled to file a civil lawsuit in federal court.²⁸ The remedies patent owners can seek include monetary damages, injunctions, attorney's fees, and expenses.²⁹ Among these, damages and injunctive relief are the two primary remedies for patent infringement. 30 When a court finds a defendant liable for infringement, the plaintiff patent holder is entitled to "damages as a matter of right" 31—generally in an amount equivalent to a reasonable royalty.³² In determining whether to grant a permanent injunction, the court will apply a four-factor test set forth by the Supreme Court in eBay Inc. v. MercExchange, L. L. C. under which the patent holder must show:

^{25.} See Manta, supra note 24, at 469; J. Michael Chamblee, Annotation, Validity, Construction, and Application of Title I of Economic Espionage Act of 1996 (18 U.S.C.A. §§ 1831 et seq.), 177 A.L.R. Fed. 609, 609 (2002) (explaining the "national scheme" protecting trade-secret intellectual property). 26. 18 U.S.C. § 1832 (2012).

^{27.} Halligan, *supra* note 18, at 11 (citing 35 U.S.C. § 271). 28. *See* 35 U.S.C. § 281 (2012).

^{29.} Mitchell A. Silk, Legal Efforts of the United States and the Republic of China on Taiwan at Controlling the Transnational Flow of Commercial Counterfeit Goods, 5 CHINESE TAIWAN Y.B. INT'L L. & AFF. 90, 103 (1985).

^{30.} Paul M. Janicke, Implementing the "Adequate Remedy at Law" for Ongoing Patent Infringement After eBay v. MercExchange, 51 IDEA: INTELL. PROP. L. REV. 163, 165 (2011) (citing 35 U.S.C. §§ 283–84 (2006)).

^{31.} *Id*.

^{32.} See id. at 169.

(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.³³

Thus, a patent holder does not necessarily have the ability to stop an infringing party. If the court finds that the plaintiff is unable to sufficiently establish the equity of a permanent injunction, then the infringing party may be allowed to continue to infringe the patent and pay an ongoing reasonable royalty.

2. Patent-Related Crimes

Patent law is not completely devoid of criminal remedies. Interestingly, existing patent-related crimes punish only patent *owners* (or feigned patent owners).³⁴ These crimes include false marking,³⁵ unlicensed filing of foreign patent applications,³⁶ forging or counterfeiting patents,³⁷ and most recently—in one state—bad-faith assertion of patent infringement,³⁸ which will be discussed in the next Subsection. False marking occurs in situations such as where a manufacturer attempts to deceive the public by inaccurately marking a product with a patent number or with a "patent pending" designation and is punishable by fines.³⁹ Unlicensed foreign filing occurs when an applicant seeks a patent in a foreign country without first getting authorization to do so from the Commissioner of Patents and is punishable by fines and imprisonment.⁴⁰ Patent forgery involves forging or counterfeiting a patent or presenting a forged or counterfeit patent as if it were genuine; it is also punishable by imprisonment.⁴¹

3. New State Laws: Bad-Faith Assertion of Patent Rights

As of June 27, 2016, thirty-one states had enacted laws aimed at imposing civil and criminal penalties on patent owners who improperly assert infringement.⁴² Specifically, these laws are directed at badfaith assertion of patent rights, and represent a novel avenue for accused infringers. The laws also create an additional concern for patent

^{33.} eBay Inc. v. MercExchange, L. L. C., 547 U.S. 388, 391 (2006).

^{34.} See, e.g., 35 U.S.C. §§ 181, 184, 186, 292 (2012).

^{35.} Id. § 292.

^{36.} Id. §§ 184, 186.

^{37. 18} U.S.C. § 497 (2012).

^{38.} Ala. Code §§ 8-12A-2, 8-12A-5 (LexisNexis 2002 & Supp. 2015).

^{39. 35} U.S.C. § 292 (2012).

^{40.} *Id.* §§ 181, 184, 186.

^{41. 18} U.S.C. § 497 (2012).

^{42.} Patent Progress's Guide to State Patent Legislation, PATENT PROGRESS (June 27, 2016), http://www.patentprogress.org/patent-progress-legislation-guides/patent-progresss-guide-state-patent-legislation/ [https://perma.cc/YYE4-SLLT].

owners to be aware of—a misstep down the road of patent enforcement could land an owner in a net of civil or criminal penalties. Vermont passed the first of these laws, 43 which have been characterized as anti-patent "troll" laws. 44 Alabama has even made bad-faith assertion a crime.45

The Vermont model provides several factors for courts to consider when determining whether patent infringement has been asserted in "bad faith." 46 Some of these factors are related to the content and timing of a patent owner's demand letter.⁴⁷ For example, prior to sending a demand letter, the patent owner should "conduct an analysis comparing the claims in the patent to the target's products, services, and technology [that identifies] specific areas in which the products, services, and technology are covered by the claims in the patent."48 Then, the demand letter should include "the patent number," "the name and address of the patent owner or owners," and "factual allegations concerning the specific areas in which the target's products, services, and technology infringe the patent or are covered by the claims in the patent."49 If the letter includes a demand for "payment of a license fee," it should provide for a reasonable period of time for the payment to be made. 50 Other factors include whether the license fee demanded is reasonable, whether the assertion of patent infringement lacks merit or is deceptive, and whether past attempts to make similar claims were found by a court to be meritless.⁵¹

If a patent owner files a lawsuit alleging infringement, the accused infringer can ask the court to consider whether the assertion of patent infringement was made in bad faith.⁵² If the accused can establish a reasonable likelihood that patent infringement was asserted in bad faith, the court can order the patent owner to "post a bond in an amount equal to a good faith estimate of the target's costs to litigate the claim, 53 as well as amounts that a court is likely to award the alleged infringer for equitable relief, damages, attorney's fees and other costs, and exemplary damages.⁵⁴

^{43.} Vt. Stat. Ann. tit. 9, §§ 4195–99 (2014)

^{44.} CSG Comm. on Suggested State Legislation, Bad Faith Assertions of Patent Infringement, CSG: COUNCIL St. Gov'ts (Dec. 10, 2014, 4:10 PM), http://knowledge center.csg.org/kc/content/bad-faith-assertions-patent-infringement [https://perma.cc/A 8VA-U3CM].

^{45.} Ala. Code §§ 8-12A-2, 8-12A-5 (LexisNexis 2002 & Supp. 2015).

^{46.} Tit. 9, § 4197(b).

^{47.} Id.

^{48.} *Id.* § 4197(b)(2).

^{49.} Id. § 4197(b)(1).

^{50.} Id. § 4197(b)(4).

^{51.} *Id.* § 4197(b)(5)–(8).

^{52.} Id. § 4199(b).

^{53.} Id. § 4198.

^{54.} Id. §§ 4198, 4199(b).

The Vermont statute includes several findings to help explain the policy behind the statute and the reasons for its enactment. Among these findings is an explanation of the importance of patents in encouraging innovation in the state⁵⁵ and, notably, the expense and complexity of patent litigation:

Patent litigation can be technical, complex, and expensive. The expense of patent litigation, which may cost hundreds of thousands of dollars or more, can be a significant burden on small- and medium-size companies. Vermont wishes to help its businesses avoid these costs by encouraging the most efficient resolution of patent infringement claims without conflicting with federal law.⁵⁶

But of course the expense of patent litigation weighs equally on the patent owner. Thus, while it is probably worthwhile to pass legislation that will help curb bad-faith *assertion* of patent infringement, if patents are "essential to encouraging innovation," 57 it should be equally critical for government entities to provide enforcement assistance against bad-faith *infringement* of patent rights. However, the current state of patent law is such that the government may help accused patent infringers, but not patent owners.

B. Trademark Infringement

Contrast patent law with trademark law, where criminal remedies now exist for some forms of infringement.⁵⁸ The Lanham Act, passed in 1946, provided federal trademark protection for the first time⁵⁹ by allowing civil remedies for infringement.⁶⁰ But by 1984 the shortcomings of the available civil remedies for those trying to enforce their trademark rights had become several-fold:

First, the discretionary nature of the remedies enumerated do not lend to judicial employment of these remedies as an effective weapon in the offensive against commercial counterfeiting. Second, the demands of public interest may in some cases act as a mitigating circumstance in calculating equitable relief. Third, infringement victims bear onerous burdens in Lanham Act actions. The victim must locate the counterfeiter himself and establish without judicial assistance his case in court. This trouble is compounded when the counterfeiter is based abroad. Fourth, as a practical matter, the civil remedies provided for in the Lanham Act carry little deterrent effect in the eyes of the commercial counterfeiters. That is, the counterfeiter, who is already acting in gross violation of the law, will merely write off an injunction as an operating cost and start busi-

^{55.} Id. § 4195(a)(2).

^{56.} *Id.* § 4195(a)(4).

^{57.} E.g., IDAHO CODE § 48-1701(b) (2014).

^{58.} See, e.g., Lara Kasten & Jenna Przybylski, Intellectual Property Crimes, 51 Am. Crim. L. Rev. 1377, 1395 (2014).

^{59.} See id.

^{60.} Silk, supra note 29, at 100.

ness under a new name. Fifth, the plaintiff also bears the burden of proving damages. Yet counterfeiters have been notorious for understating, or destroying the relevant records, if any were kept. Last, the Lanham Act metes out no criminal sanctions to deter the counterfeiter.61

Interestingly, even then it was acknowledged that "[t]he inadequacy of granting equitable relief[] and awarding damages where [the] plaintiff bears the primary burden" applied equally to patent law.62

Because of this, in 1984, the Trademark Counterfeiting Act ("TCA") was enacted as a supplement to the Lanham Act, providing criminal penalties for the "intentional trafficking of counterfeit goods or services."63 This new criminal remedy was heralded as a significant advancement towards curbing trademark counterfeiting.⁶⁴ Notably, the TCA made trafficking counterfeit goods a criminal offense regardless of "whether or not those goods or services are known to be counterfeit."65 It also provides that counterfeiting is not limited to identical marks, but includes "a false mark that closely resembles a registered trademark," meaning that a criminal proceeding may include an infringement analysis.66

C. Copyright Infringement

For the first hundred years of copyright law, only civil remedies were available for infringement.⁶⁷ Criminal penalties were introduced in 1897 with the Musical Public Performance Right Act, which made certain willful infringements a misdemeanor punishable by "imprisonment for up to one year."68 Since then, copyright law has continued to evolve to describe a myriad of infringing activities and provide for corresponding criminal penalties, including classifying certain infringements as felonies.⁶⁹ For example, willful copyright infringement is punishable by up to ten years in prison if it is:

- (A) "for . . . commercial advantage or private financial gain";
- (B) for "reproduction or distribution" of works having "a total retail value of more than \$1,000"; or
- (C) for making works "available on a computer network accessible to members of the public" if the work is "being prepared for com-

^{61.} Id. at 100-01 (footnotes omitted).

^{62.} Id. at 103.

^{63.} Kasten & Przybylski, supra note 58, at 1395.

^{64.} E.g., Silk, supra note 29, at 104-05.

^{65.} Kasten & Przybylski, supra note 58, at 1395.

^{66.} Id. at 1394.

^{67.} Eldar Haber, The Criminal Copyright Gap, 18 STAN. TECH. L. REV. 247, 250 (2015).

^{68.} Id. at 251-52.

^{69.} Id. at 267.

mercial distribution" and the infringer "knew or should have known that the work was intended for commercial distribution."⁷⁰

D. Trade-Secret Misappropriation

A number of state and federal statutes make misappropriation of trade secrets a criminal offense.⁷¹ Many of these statutes treat it like theft where the trade secret is shown to have value, as does much of common law.⁷² Federally, the Economic Espionage Act of 1996 imposes criminal and civil penalties for various means of intentionally or knowingly misappropriating a trade secret or attempting or conspiring to do so.⁷³ Criminal penalties include fines of up to \$5 million, imprisonment for up to ten years, or both.⁷⁴

III. PROPOSED SMALL-CLAIMS PROCEEDINGS

The lack of criminal prosecution for patent infringement combined with the high cost of civil enforcement has left many patent owners with patents they cannot enforce.⁷⁵

One proposed option for enabling patent owners to enforce their patents in a cost-effective manner is a form of small-claims court for patents. The United States Patent and Trademark Office ("USPTO") announced a few years ago that it was seeking comments on "whether the United States should develop a small claims proceeding for patent enforcement." However, such proceedings have yet to be realized.

IV. A Proposal for State Action Against Patent Infringers

Since criminal remedies exist to protect most forms of intellectual-property rights, there is ample precedent to suggest that society has an interest in collectively contributing to the enforcement of intellectual-property rights through criminal-enforcement channels. There are several reasons why there should also be criminal remedies or, at the least, *parens patriae* civil actions for patent infringement. As will be discussed *infra* in Section A, the currently offered civil remedies for patent infringement have become inadequate due to the complexity and expense of litigation. As such, these remedies as a lone means of

^{70. 17} U.S.C. § 506(a) (2012); 18 U.S.C. § 2319 (2012).

^{71. 50} Am. Jur. 2D *Larceny* § 68 (2006).

^{72.} See id.

^{73. 18} U.S.C. § 1832.

^{74.} Id.

^{75.} See Manta, supra note 24, at 493–94 (2011).

^{76.} Robert P. Greenspoon, Is the United States Finally Ready for a Patent Small Claims Court?, 10 MINN. J.L. Sci. & Tech. 549, 549 (2009).

^{77.} Request for Comments on a Patent Small Claims Proceeding in the United States, 77 Fed. Reg. at 74,830.

patent protection for all patent holders fail to effectively provide for the exclusive rights the government is obligated to provide under the Constitution. This has been aggravated by recent changes in patent law that will be discussed in Section B and have shifted leverage and bargaining power away from the patent holder. Some of these changes were aimed at curbing patent abuse by non-practicing entities, but the side effects have increased the complexity, and potentially the expense, of patent litigation. As will be discussed in Section C, some argue that a patent can be viewed as a contract between the government and an inventor. This view can be extended to argue that the contract is likewise between society and the inventor and, as such, society has a contractual obligation to contribute to providing for the exclusive rights offered with a patent.

In Section D, some of the criticisms of criminalizing patent infringement are addressed, including arguments that infringement analysis is too complex for law enforcement and that patent quality is too poor for infringement to be a crime. Another issue is the cost of criminal enforcement. No known comprehensive research has been done in recent years to study the financial impact of introducing government enforcement of patent rights. However, if it is assumed to be a great expense, then it is reasonable to explore ways to fund criminal enforcement of patents—or civil enforcement by government. One option would be to introduce a system where the enforcing party, be it the patent holder or the government, will receive any monetary damages. In other words, if a patent holder opts to enforce a patent, then the patent holder would stand to receive any monetary damages. If the patent holder opts instead to seek enforcement by the government, then the government would receive the monetary damages. In the latter case, the patent holder would still benefit for two reasons: (1) there would be an added incentive for competitors to respect patent rights even when the patent holder is a small entity; and (2) it would be more difficult for an infringer to undercut the patent holder on prices because the infringing entity would need to build the cost of royalties into the cost of its products.

A. Shortcomings of the Current Civil-Enforcement System

When a patent owner discovers an instance of infringement, the owner can file a civil lawsuit in a federal district court⁷⁸ to try to stop it.⁷⁹ What then follows is a complex and costly process of federal procedure and technical patent issues that even many patent lawyers would rather avoid.⁸⁰

^{78. 28} U.S.C. § 1338(a) (2012).

^{79.} See 35 U.S.C. § 281 (2012).

^{80.} Randy Berholtz et al., *Improving Patent Adjudication: An Updated and Revised Survey of Practitioners' Experience and Opinions*, 32 T. Jefferson L. Rev. 223, 227 (2010).

The decision to bring a lawsuit can be difficult even where there is clear infringement because of this prohibitive cost. In fact, the decision to contact the infringer at all can be a difficult one. Even if the patent owner would prefer to avoid litigation and instead offer a patent license to the infringing party, the act of contacting the infringing party to offer the license could land the owner in federal court if the infringing party decides to use the contact as the basis for a declaratory-judgment action.⁸¹

Another important consideration patent owners face when weighing whether to pursue an infringer is whether the available remedies would even be effective after the time and cost of litigation. For example, it can be difficult or impossible for patent owners to prove and collect damages, especially in more egregious cases where infringing parties may not have kept adequate records or may have destroyed or falsified records.⁸² Collecting damages can also be complicated if an infringing entity enters bankruptcy, potentially leaving the patent owner unable to collect monetary damages.⁸³ This problem is prevalent enough that courts have recognized a defendant filing bankruptcy as a factor weighing in favor of granting a plaintiff patent holder injunctive relief.⁸⁴ But in some cases, a patent owner may be able to get an injunction against an infringer only to have the infringing party shift the infringement to a different entity by terminating one company and then simply starting another and continuing operations.⁸⁵ Because of this, it is easy to see how patent litigation has the potential to become a whack-a-mole problem. A patent holder could choose to expend large sums of money to pursue an infringer and be awarded monetary damages or even injunctive relief only to be unable to collect any of the damages and, additionally, for the injunction to be circumvented through new or different entities.

Other criticisms of the civil patent-litigation system include lost opportunities, unfair advantages, prolonged proceedings, and costs. Rost opportunities result from the lengthiness of the proceedings and the problem of trying to enforce or market a patent that is otherwise tied up in litigation. Unfair advantages relate to the possibility for parties to stall and drag out litigation, thereby imposing economic burdens on the opposing party. For example, an accused infringer could

^{81.} Kristin Johnson Doyle, Patent Demand Letters: Avoiding Declaratory Judgment Jurisdiction, Intell. Prop. Today (Jan. 2010).

^{82.} See Silk, supra note 29, at 100-01.

^{83.} See Retractable Techs., Inc. v. Occupational & Med. Innovations, Ltd., No. 6:08 CV 120, 2010 WL 3199624, at *5 (E.D. Tex. Aug. 11, 2010).

^{84.} See, e.g., id. at *5-6.

^{85.} Silk, *supra* note 29, at 101.

^{86.} Steven J. Elleman, Note, *Problems in Patent Litigation: Mandatory Mediation May Provide Settlements and Solutions*, 12 Ohio St. J. on Disp. Resol. 759, 761–64 (1997).

^{87.} Id. at 761–62.

^{88.} Id. at 763.

stall litigation through motion and discovery practice, not only increasing the amount of time the patent's validity is open to speculation but also increasing costs for the patent owner.⁸⁹

Costs are more self-descriptive and are why the civil court system has become an unrealistic option for many patent owners. Patent-litigation costs include "[f]ees for discovery, experts, court costs and attorney fees[, which] can put an immense financial strain on parties to a patent litigation action." Among these expenses, discovery and expert fees are particularly high due to the technical complexity that is often involved. 91

But just how expensive is patent litigation? The American Intellectual Property Law Association ("AIPLA") reports that in 2015 the mean cost of patent litigation through trial where less than \$1 million was at risk was a staggering \$873,000.92 In some jurisdictions, the mean cost even exceeded the \$1 million at risk.93 Even if litigation is settled at the end of discovery, the cost is still largely prohibitive—in 2015, the mean cost through the end of discovery in these cases was \$442,000.94 Unsurprisingly, as the amount of damages alleged increases, the cost of patent litigation tends to increase as well.95

The data collected and reported in the AIPLA Report shows that even relatively "small-time" patent litigation can mean "big-time" legal budgets. For many small businesses and individual inventors, the potential costs make it completely infeasible.

B. Recent Changes in Patent Law and Their Effects on Small Entities

There have been significant changes to patent law over the last several years that will arguably make it more difficult for patent owners to enforce their rights. These changes include legislation in response to an outcry for government action to curb so-called "patent-trolling" activities, which usually involve litigation initiated by so-called "non-practicing entities." One of the chief complaints raised in the demand for government intervention involves the expense in defending

^{89.} See id.

^{90.} Id. at 762.

^{91.} Id. at 763.

^{92.} Am. Intell. Prop. Law Ass'n, Report of the Economic Survey 2015 I-105 (2015).

^{93.} See id. (For patent litigation with less than \$1 million in damages alleged, the mean cost for the New York City area was \$1,259,000; the mean cost for the Philadelphia area was \$1,475,000; the mean cost for the San Francisco area was \$1,379,000; and the mean cost for central United States areas outside of Chicago and Minneapolis/St. Paul was \$1,050,000.).

^{94.} *Id*.

^{95.} Id. at I-106 to -108.

^{96.} See Ian Polonsky, Note, You Can't Go Home Again: The Righthaven Cases and Copyright Trolling on the Internet, 36 Colum. J.L. & Arts 71, 73–74 (2012).

a lawsuit against patent trolls,⁹⁷ which has led to recent developments that may harm patent enforcement. For example, a new federal law commonly referred to as the Leahy-Smith America Invents Act ("AIA") was passed in 2011 that includes provisions that limit the ability of a plaintiff to join multiple defendants in a single patent lawsuit.⁹⁸ While this provision may have been in part aimed at curbing mass patent litigation by non-practicing entities,⁹⁹ it also makes it difficult for any patent holder to pursue multiple small infringers in a single lawsuit—something that would make enforcement more economically feasible.

The AIA also introduced inter partes review ("IPR"). ¹⁰⁰ An IPR is a trial proceeding conducted by the Patent Trial and Appeal Board ("PTAB") at the USPTO and is intended to remedy the problem of low patent quality. ¹⁰¹ IPR provides an avenue for an accused infringer (or any other third party) to challenge the validity of an issued patent. ¹⁰² The types of challenges to validity that can be raised are limited to novelty ¹⁰³ and obviousness ¹⁰⁴ arguments based on prior patents and printed publications. ¹⁰⁵ Still, in the short time IPRs have been in place, the PTAB has already earned a reputation as a patent "death squad," stemming from the high percentage of patents in which the PTAB has found at least some, if not all, of the issued claims invalid. ¹⁰⁶

The vast majority of IPR proceedings are related to co-pending patent-infringement suits. Overall, most requests to stay litigation pending the outcome of a related IPR proceeding are granted, although this varies greatly from one district to another. An IPR pro-

^{97.} See id. at 73.

^{98.} Leahy-Smith America Invents Act, 35 U.S.C. § 299 (2012); see Polonsky, supra note 96, at 74, 74 n.19.

^{99.} See Polonsky, supra note 96, at 74, 74 n.19.

^{100. 35} U.S.C. §§ 311–19; Daniel Golub, *IPRs Complicate the Litigation Funding Landscape for Patent Owners*, LANDSLIDE, Sept./Oct. 2015, at 20, 21.

^{101.} Golub, supra note 100, at 21-22.

^{102.} Id. at 22.

^{103.} See 35 U.S.C. § 102 (requiring novelty—that is, an invention must be something new and not already patented or publicly available).

^{104.} See id. § 103 (requiring a claimed invention be more than an obvious variation of "prior art").

^{105.} *Id.* § 311(b).

^{106.} Ryan Davis, *PTAB's 'Death Squad' Label Not Totally Off-Base, Chief Says*, Law360 (Aug. 14, 2014, 5:47 PM), http://www.law360.com/articles/567550/ptab-s-death-squad-label-not-totally-off-base-chief-says [https://perma.cc/NTE7-8GBM].

^{107.} Matt Cutler, *3 Years Of IPR: A Look at The Stats*, Law360 (Oct. 9, 2015, 3:59 PM), http://www.law360.com/articles/699867/3-years-of-ipr-a-look-at-the-stats [https://perma.cc/B64U-EPB6].

^{108.} *Id.* (showing the highest and lowest "win rates"—from 100% in the District of Maryland and the District of Utah, to 23% in the Eastern District of Texas and 11% in the Eastern District of Wisconsin).

ceeding can last up to eighteen months, 109 meaning that a defendant in a patent-litigation suit could initiate an IPR proceeding, likely get the patent litigation stayed (depending on the district) for up to eighteen months while the IPR proceeding is ongoing, and end up with at least some claims invalidated in the IPR. This adds significant leverage to an accused infringer's negotiating power.

Other changes to patent law that have arguably swung leverage in patent cases from the patent holder to the accused infringer include the Supreme Court's decisions in *Alice Corp. v. CLS Bank International* ¹¹⁰ and *eBay Inc. v. MercExchange*, ¹¹¹ which were decided in 2014 and 2006, respectively.

In Alice, the Supreme Court addressed the question of whether certain software-related claims set forth patentable subject matter under 35 U.S.C. § 101.112 The Court ruled that claims directed to an abstract idea implemented using a generic computer do not amount to patentable subject matter. ¹¹³ The *Alice* decision has been viewed by many as a death knell for software and business-method patents, and many such patents have subsequently been ruled invalid. 114 Not only does the Alice rule call into question the validity of many software and business-method patents, but it also provides an avenue for quick decisions on validity in patent cases. Because subject-matter validity under § 101 is a question of law, many judges are now considering questions of validity of software and business-method patents in Rule 12 motions early in the litigation process. 115 As a result, an accused infringer may be able to get a patent case dismissed on a Rule 12(b)(6) motion based on invalidity under § 101 before Markman hearings, 116 discovery, and other major litigation expenses. Therefore, the threat of expensive litigation is diminished in cases where patentability under § 101 appears to be an issue, shifting even more leverage from a patent holder to an accused infringer.

Then consider eBay. Before eBay, the threat of patent litigation meant not only the expense of a patent trial but also the strong possibility of a temporary or permanent injunction. 117 This was because,

^{109. 37} C.F.R. § 42.100(c) (2014) (requiring that an IPR proceeding normally last no longer than one year, but allowing a six-month extension for "good cause").

^{110.} Alice Corp. Pty. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014). 111. eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006).

^{112.} See Alice, 134 S. Ct. at 2352.

^{114.} See, e.g., Where Do We Stand One Year After Alice?, Law360 (June 17, 2015, 8:27 PM), http://www.law360.com/articles/668773/where-do-we-stand-one-year-afteralice [https://perma.cc/9UVS-PZHU].

^{116.} A pretrial hearing in patent cases where a judge determines the meaning of key words and the scope of the claim.

^{117.} See Kirti Gupta & Jay P. Kesan, Studying the Impact of eBay on Injunctive Relief in Patent Cases 1 (July 10, 2015) (unpublished manuscript), http://ssrn.com/ abstract=2629399.

prior to eBay, there was a "general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances."118 Thus, if the asserted patent applied to key products or services offered by the accused infringer, the threat of an injunction could have been a make-or-break-the-company proposition, which provided the patent holder considerable leverage. Then the Supreme Court handed down the eBay decision, holding that instead of granting automatic injunctions in patent cases, courts should apply a longstanding four-factor test discussed previously and used in other areas of the law for determining whether a plaintiff should be granted a permanent injunction.¹¹⁹ Since the four-factor test is often difficult to satisfy in patent cases, the eBay decision led many to question whether courts would continue to grant injunctions at all in some types of patent cases. 120 As shown by a recent study of twelve years of patent cases pre- and post-eBay, there has indeed been a sizable reduction in injunctions since the decision.¹²¹ The threat of an injunction had always been tremendous leverage for the patent holder, so reducing the threat of an injunction shifts additional leverage from the patent holder to the accused infringer.

In short, the cumulative effect of IPRs, *Alice*, and *eBay* has been to shift leverage from the patent holder to the accused infringer, both by creating new, faster ways to invalidate patents (IPRs and Rule 12 motions) and by making it more difficult to stop infringement by an injunction.

C. Patents as Contracts and Leases

Many consider patent law to be analogous in many ways to contract law. 122 Under the Contract Theory of Patents, a patent is viewed as "a 'contract' between innovators and society." 123 Essentially, a temporary monopoly "is granted in exchange for [public] disclosure" of an

^{118.} eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006) (quoting MercExchange, L.L.C. v. eBay, Inc., 401 F.3d 1323, 1339 (2005)).

^{119.} *Id*.

^{120.} See Jeremy Mulder, Note, The Aftermath of eBay: Predicting When District Courts Will Grant Permanent Injunctions in Patent Cases, 22 Berkeley Tech. L.J. 67, 67, 71 (2007).

^{121.} Gupta & Kesan, *supra* note 117, at 7–10. The cited study shows that the overall percentage of patent cases where a preliminary or permanent injunction was granted has continuously dropped since *eBay*. However, the percentage of motions for injunctions that were granted has remained about the same. The authors of the study posit that these two results can be reconciled by speculating that patent holders have become more selective of cases in which they seek an injunction, doing so only when the arguments for injunction are particularly strong.

^{122.} E.g., Harold A. Borland, Comment, *The Affirmative Duty to Exercise Due Care in Willful Patent Infringement Cases: We Still Want It*, 6 Hous. Bus. & Tax L.J. 175, 191–92 (2005).

^{123.} Vincenzo Denicolò & Luigi Alberto Franzoni, *The Contract Theory of Patents*, 23 Int'l Rev. L. & Econ. 365, 366 (2004).

invention. 124 The disclosure must be sufficient for a person having skill in the art of the invention to be able to understand the invention well enough to practice it.¹²⁵ Under this theory, patents are offered to induce innovators to make their innovations public instead of keeping them private as trade secrets. 126

In contract law, "both parties must assent to make [a] contract enforceable."127 Likewise, when the U.S. Patent and Trademark Office issues a patent, the government is assenting to the grant of the temporary monopoly. In other words, the government can be viewed as contractually binding itself to ensure inventors have "the exclusive Right to their . . . Discoveries." ¹²⁸ But the Contract Theory of Patents begins to break down at the point of breach because there seems to be no room for a patentee to claim the government has breached the patent agreement by failing to provide the "exclusive use" promised and, although the government does provide a forum for civil litigation, this forum is not equally accessible to all inventors due to the forbidding expenses involved in patent litigation. 129 Also, even if inventors avail themselves of this forum, the government enjoys the benefit of the second guess: the "contract" can be dissolved if the patent is found invalid.130

By extension of this theory, patents can also be compared to leases—an inventor, as a lessee, offers public disclosure and various official fees as consideration for a temporary property right granted by the government as the lessor. "Leases look like contracts, setting forth in terms called covenants the description of the property, the length of the term, the rent, the major promises about the condition of the property, and so forth."¹³¹ A patent sets forth, in terms called "claims," the description of the property. 132 Patent rights are for a limited, fixed period of time¹³³ and are discontinued if the patent owner fails to pay periodic maintenance fees. 134 The inventor makes several promises as part of the patent-application process related to the "con-

^{125.} Id. (quoting Universal Oil Prods. Co. v. Globe Oil & Ref. Co., 322 U.S. 471, 484 (1944)).

^{126.} Id.

^{127.} Borland, supra note 122, at 191.

^{128.} U.S. Const. art. I, § 8, cl. 8.

^{129.} See supra Section IV.A (discussing typical costs of patent-infringement

^{130.} See Richdel, Inc. v. Sunspool Corp., 714 F.2d 1573, 1580 (Fed. Cir. 1983) (holding a claimed patent invalid because it would have been obvious under 35 U.S.C. § 103); Lemley & Shapiro, supra note 9.

^{131.} Thomas W. Merrill & Henry E. Smith, The Property/Contract Interface, 101 COLUM. L. REV. 773, 821 (2001).

^{132. 35} U.S.C. § 112(a)–(b) (2012).

^{133.} *Id.* § 154(a)(2).

^{134. 37} C.F.R. § 1.362 (2014). This requirement applies to utility patents, but no maintenance fees are required for plant and design patents. Id. § 1.362(b).

dition" of the patent, such as accuracy of inventorship¹³⁵ and disclosure of the "best mode . . . of carrying out the invention." ¹³⁶ It may be helpful to analogize and look at rights and duties that arise under property law within the context of leases and landlord-tenant rights and duties.

If a patent is analogous to a lease, the patent owner is analogous to a tenant and the government to a landlord. In most states, the lessor has an implied obligation to provide the lessee with physical possession of the property, ¹³⁷ so it could be argued that the government, as the lessor of the temporary patent rights, has an implied obligation to provide the patentee (as the lessee) with actual possession of such rights by taking action as necessary to oust those who infringe them. However, even under landlord-tenant law, this implied obligation applies only to initial possession; once the lessee is in possession, the lessee is responsible for ousting trespassers. ¹³⁸

D. Criticisms of Proposals to Criminalize Patent Infringement

1. Complexity of Infringement Analysis

One argument against criminalizing patent infringement is that the complexities of patent-infringement analysis make it impractical for criminal enforcement. This argument posits that law-enforcement personnel would not be capable of effectively identifying infringing articles. But this is easily rebutted when one considers the complexity of other crimes law-enforcement personnel are regularly asked to investigate. For example, the FBI has the Cyber Crime Division for investigating various high-tech crimes, such as attacks on computers and computer networks and "theft of intellectual property and personal information"; It also has the White-Collar Crime Division for investigating complex business-related crimes, such as various finan-

^{135. 35} U.S.C. § 115(a)-(b) (2012).

^{136.} *Id.* § 112(a).

^{137.} See 49 Am. Jur. 2D Landlord and Tenant § 392 (2006); Matthew J. Heiser, What's Good for the Goose Isn't Always Good for the Gander: The Inefficiencies of a Single Default Rule for Delivery of Possession of Leasehold Estates, 38 Colum. J.L. & Soc. Probs. 171, 174–78 (2004). There are two competing rules in the United States—the American rule and the English rule—to determine whether a landlord has a duty to provide legal possession of a leased property to the lessee, and also to provide actual possession of the leased property by being obligated to oust holdover tenants. Id. Under the American rule the lessee is responsible for ousting a holdover tenant, while under the English rule there is an implied obligation for the lessor to oust a holdover tenant. Id.

^{138.} Hannan v. Dusch, 153 S.E. 824, 825 (Va. 1930).

^{139.} See Noel Mendez, Comment, Patent Infringers, Come Out with Your Hands Up!: Should the United States Criminalize Patent Infringement?, 6 Buff. Intell. Prop. L.J. 34, 42 (2008).

^{140.} *Id.* at 44–45.

^{141.} *Cyber Crime*, FED. BUREAU INVESTIGATION, https://www.fbi.gov/about-us/investigate/cyber [https://perma.cc/MPV9-AFBY].

cial crimes.¹⁴² Given the technical expertise required for these types of investigations, there is no reason to believe patent analysis is beyond the capabilities of law-enforcement personnel.

2. Questions Surrounding Patent Quality

Critics of proposals to criminalize patent infringement have also argued that patent quality is too poor to make infringement a crime. Their argument points out that many patents are invalidated and many patent-enforcement cases are disposed of before trial, including cases where patents at issue are "revoked." To be sure, patent claims are invalidated from time to time. But should the potential for an invalid claim to a property right stand in the way of what would effectively be criminal trespassing statutes?

Because many patents have historically been found invalid, a properly crafted criminal statute should account for this possibility by presuming patents valid and making invalidity an affirmative defense, just as in civil patent cases. 147 Such a statutory construction would not be without precedent. For example, the criminal statute for trafficking in counterfeit goods or services provides that "[a]ll defenses, affirmative defenses, and limitations on remedies that would be applicable in an action under the Lanham Act shall be applicable in a prosecution under this section."148 The Lanham Act includes defenses to trademark infringement, and "[a] valid defense to a claim of [trademark] infringement is that the mark is invalid." Thus, when a party is facing criminal charges for allegedly trafficking in counterfeit goods or services, that party can assert an affirmative defense of trademark invalidity to avoid criminal prosecution for infringement of an invalid trademark. Similarly, a party should be able to assert an affirmative defense of patent invalidity to avoid criminal prosecution for infringement of an invalid patent.

V. Conclusion

Our founding fathers recognized that innovation was important enough to create an exception to the rule against monopolies. They envisioned a patent system where the sharing of innovative ideas would be motivated by the promise of exclusive rights. But since that

^{142.} White-Collar Crime, Fed. Bureau Investigation, https://www.fbi.gov/about-us/investigate/white_collar [https://perma.cc/3V64-ELTN].

^{143.} See, e.g., Mendez, supra note 139, at 45-47.

^{144.} Id. at 48.

^{145.} See id. at 45-46.

^{146.} Michael Risch, A Generation of Patent Litigation, 52 SAN DIEGO L. REV. 67, 108 (2015).

^{147.} See 35 U.S.C. § 282(a)–(b) (2012).

^{148. 18} U.S.C. § 2320(d) (2012).

^{149.} CytoSport, Inc. v. Vital Pharm., Inc., 894 F. Supp. 2d 1285, 1298 (E.D. Cal. 2012).

time, patent litigation has grown into a complex process fraught with pitfalls and guarded by a high price of admission. The U.S. Patent and Trademark Office welcomes small businesses and independent inventors with promises of reduced fees, inventor's assistance, and even a pro bono program. However, the government should be equally willing to assist these small entities once they obtain patents and find them being willfully infringed. To assist these small entities in protecting their patents from being willfully infringed, new statutes should be enacted that provide criminal penalties for patent infringement. When drafting such legislation, the complexities of patents should be taken into account by requiring a high level of culpability. The possibility of invalid patents should also be accounted for by providing affirmative defenses that are similar to those already available in civil patent suits. The result would be a more level playing field for entities of all sizes and means, which in turn would provide a greater incentive for all innovators to continue to contribute to the advancement of collective knowledge embodied by the collection of American patents.