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## Pay the Troll Toll: The Patent Troll Model Is Fundamentally at Odds with the Patent System's Goal of Innovation and Competition

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# **PAY THE TROLL TOLL: THE PATENT TROLL MODEL IS FUNDAMENTALLY AT ODDS WITH THE PATENT SYSTEM'S GOALS OF INNOVATION AND COMPETITION**

*Grace Heinecke\**

“Patents are supposed to protect intellectual property and spur innovation, and once upon a time in America they did. But like everything else the legal system touches nowadays, U.S. patent law has been hijacked so that it now operates nearly in reverse, deterring research and penalizing innovation.”<sup>1</sup>

*Patent litigation has multiplied sixfold since the 1980s, with the last few years seeing an unprecedented number of patent lawsuits. When an inventor receives a patent, the U.S. Constitution grants him a monopoly for a limited number of years to reward him for his investment of time and resources and to incentivize him to continue innovating, which ultimately benefits society. However, the emergence of a litigious character, deemed the “patent troll,” has led to the patent system’s hindrance of innovation, a result that is at odds with the primary goal of patent law. Patent trolls exploit weaknesses in the patent system in a number of manners: they assert overly broad patents to force companies into financial settlements because these companies cannot afford the cost of litigation; they deter innovative companies from investing in research and development through the threat of litigation; and they do not practice the patents they hold, thus contributing no innovation in the advancement of technology and immunizing themselves from countersuit. In addition, trolls exhibit anticompetitive behavior, a trend that has caught the eye of the Federal Trade Commission. This Note provides a survey of the modern patent landscape, addressing certain areas of the patent system that patent trolls are able to use to their advantage. This Note then advocates that the Federal Trade Commission play a more integral role in curbing anticompetitive troll behavior and proposes several methods of patent reform.*

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\* J.D. Candidate, 2016, Fordham University School of Law; B.A., 2009, University of Pennsylvania. I would like to thank my parents and uncle for their continuous love and support.

1. Editorial, *Patently Absurd*, WALL STREET J. (Mar. 1, 2006, 12:01 AM), <http://online.wsj.com/articles/SB114117826666886050> [<http://perma.cc/UDR3-M6Y9>].

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## INTRODUCTION

The patent system in the United States is fundamentally flawed and requires comprehensive reform.<sup>2</sup> In the past decade, the United States has seen the rise of a bully in the patent system: the patent troll. Patent trolls exploit many weaknesses in the system, including the Patent and Trademark Office's (USPTO) inundation of patent applications, overly broad patents, and procedural advantages for plaintiffs in lawsuits, among others.<sup>3</sup> Trolls use these weaknesses to extract licensing fees through the threat of litigation.<sup>4</sup> Troll behavior has harmed innovation, which directly conflicts with the patent system's goal of fostering innovation.<sup>5</sup>

Peter Detkin, then in-house counsel for Intel, coined the term "patent troll" in the late 1990s.<sup>6</sup> Many use the term "patent-assertion entity" (PAE) instead of "patent troll,"<sup>7</sup> but the two are synonymous and used interchangeably.<sup>8</sup> According to a recent White House report, trolls "focus on aggressive litigation," using such tactics as "threatening to sue thousands of companies at once, without specific evidence of infringement against any of them; creating shell companies that make it difficult for defendants to know who is suing them; and asserting that their patents cover inventions not imagined at the time they were granted."<sup>9</sup>

Patent lawsuits have multiplied sixfold since the 1980s.<sup>10</sup> Trolls file about 62 percent of all new patent infringement lawsuits,<sup>11</sup> even though trolls lose 92 percent of the time when their suits reach a judgment on the

2. See, e.g., H.R. REP. NO. 114-235, at 27 (2015) ("The inefficiencies and inequities currently afflicting the Nation's patent-enforcement system are a problem that calls for this Committee's attention.").

3. See *infra* Part II.B.2 for a discussion of weaknesses in the patent system that trolls exploit.

4. See *infra* Part II.A for a discussion of common patent-troll behavior.

5. See *infra* Part II.B.3.a for an overview of several recent studies that evaluate trolls' impact on innovation.

6. See *When Patents Attack!*, THIS AM. LIFE (July 22, 2011), <http://www.thisamericanlife.org/radio-archives/episode/441/transcript> [<http://perma.cc/3GKD-6ZHZ>]. After spending years fighting off patent trolls at Intel, Detkin now aggressively supports the role of patent trolls. *Id.* See *infra* Part II.A for a discussion of Intellectual Ventures, a company Detkin cofounded in 2000, which many now consider to be one of the foremost patent trolls today; see also *infra* Part II.C for an overview of patent-troll supporters and their response to the growing criticism of troll tactics.

7. The White House, for example, uses the term PAE. See *generally* EXEC. OFFICE OF THE PRESIDENT, PATENT ASSERTION AND U.S. INNOVATION (2013), [http://www.whitehouse.gov/sites/default/files/docs/patent\\_report.pdf](http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf) [<http://perma.cc/9D7G-38FB>]. Jon Leibowitz, the former chairman of the Federal Trade Commission (FTC), also opted to use the term "PAE" in a 2012 workshop hosted by the FTC and the Department of Justice (DOJ). FTC & U.S. DEP'T OF JUSTICE, PATENT ASSERTION ENTITIES ACTIVITIES WORKSHOP 3-4 (2012), <http://www.ftc.gov/news-events/events-calendar/2012/12/patent-assertion-entity-activities-workshop> [<http://perma.cc/6EK7-F8W8>].

8. This Note primarily uses the term "patent troll" for consistency and clarity, but the use of "patent troll" conveys the same idea as others' use of "PAE."

9. EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 1.

10. James Bessen, *The Evidence Is in: Patent Trolls Do Hurt Innovation*, HARV. BUS. REV. (Nov. 2014), <https://hbr.org/2014/07/the-evidence-is-in-patent-trolls-do-hurt-innovation/> [<https://perma.cc/VYL3-RP4M>].

11. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 5.

merits.<sup>12</sup> Recent studies also indicate that patent trolls impose huge costs on defendant firms.<sup>13</sup> Each year, defendants facing patent litigation spend nearly \$30 billion in direct out-of-pocket costs.<sup>14</sup> It is further estimated that patent litigation costs more than \$60 billion in wealth per year due to foregone innovation and product development.<sup>15</sup>

Every branch of the government—the President,<sup>16</sup> Congress,<sup>17</sup> and the U.S. Supreme Court<sup>18</sup>—is now paying close attention to the patent-litigation explosion and the ways that trolls exploit weaknesses in the patent system. Lawmakers must attempt to resolve the inherent tension between curbing the abuses of patent trolls while allowing legitimate owners to protect their patents. The best remedy, therefore, will not jeopardize the protections already in place for innovators. To address the trolling problem in a way that protects both inventors and the public good, it is imperative that lawmakers continue to foster innovation and competition through the patent system.

Part I of this Note describes the origins of patent law, the system's filing requirements, and patent law's policy goals. Part I then surveys recent trends in the patent system, including legislation and recent Supreme Court cases affecting the modern patent landscape. Part I also addresses the Innovation Act of 2015 and the Protecting American Talent and Entrepreneurship Act of 2015 (PATENT Act), the most recently proposed major pieces of patent legislation. Part II introduces the reader to patent trolls and analyzes their behavior and common litigation techniques. This part also summarizes several recent academic studies of trolls' impact on innovation. Part II then discusses the anticompetitive nature of patent trolls, beginning with a general discussion of competition law and how it interacts with patent law, followed by an analysis of the Federal Trade Commission's (FTC) interest in patent trolls. Part III explores several other conventional steps to remedy parts of the patent system that trolls exploit. This part also proposes more hands-on involvement by the FTC and the stricter use of antitrust law to better police those taking advantage of the current patent system.

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12. See FTC & U.S. DEP'T OF JUSTICE, *supra* note 7, at 5.

13. In early 2014, one firm even began offering insurance plans so companies could better protect themselves from trolls. See Joe Mullin, *Startups Can Now Buy Insurance Against Threat of Patent Trolls*, ARS TECHNICA (Nov. 11, 2014, 4:00 PM), <http://arstechnica.com/tech-policy/2014/11/startups-can-now-buy-insurance-against-threat-of-patent-trolls/> [<http://perma.cc/39YJ-C287>].

14. See Bessen, *supra* note 10.

15. *Id.*

16. See generally EXEC. OFFICE OF THE PRESIDENT, *supra* note 7.

17. See *infra* Part I.C.1 (discussing patent-reform legislation).

18. In its most recent Term (2013–2014), the Supreme Court granted certiorari to six cases raising patent issues. See PRICEWATERHOUSECOOPERS, 2014 PATENT LITIGATION STUDY 2 (2014), [http://www.pwc.com/en\\_US/us/forensic-services/publications/assets/2014-patent-litigation-study.pdf](http://www.pwc.com/en_US/us/forensic-services/publications/assets/2014-patent-litigation-study.pdf) [<http://perma.cc/QK4U-LCTP>]. For a discussion of notable rulings from that Term, see *infra* Part I.C.2.b–c.

## I. AN OVERVIEW OF THE PATENT SYSTEM

Part I.A discusses the constitutional origins of patent law and the statutory requirements for filing a patent. This part also surveys the policy goals of patent law and discusses why patents continue to play a vital role in modern technological advancement. Part I.B explores the modern patent landscape, describing legislation and important Supreme Court rulings.

A. *The Constitutional Origins of Patent Law  
and the System's Filing Requirements*

The protection of patents in the United States dates back to the country's Founding.<sup>19</sup> In *The Federalist Papers*, James Madison expressed support for this protection: "The right to useful inventions seems . . . to belong to the inventors. The public good fully coincides . . . with the claims of individuals."<sup>20</sup> The U.S. Constitution gives 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."<sup>21</sup> Congress exercised this power by creating the federal patent system. A patent is a temporary government grant "of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States."<sup>22</sup> While monopolies are generally not favored under U.S. law, they are granted to inventors to encourage innovation and protect creative ideas.<sup>23</sup>

In exchange for a twenty-year monopoly, the inventor must file a specification with the USPTO,<sup>24</sup> and the invention must meet several requirements. First, the specification must include a written description in terms clear enough that "any person skilled in the art" could make or use the invention relying solely upon the specification.<sup>25</sup> It must also include at least one claim that identifies the elements that the "inventor regards as the invention."<sup>26</sup> Second, the invention must fall under the umbrella of patentable subject matter, identified in the U.S. Code as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof."<sup>27</sup> Third, the specification must demonstrate the invention's utility—i.e., why it is useful.<sup>28</sup> Fourth, the

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19. The Patent and Copyright Clause of the Constitution was passed unanimously at the Constitutional Convention of 1787. See Tyler T. Ochoa & Mark Rose, *The Anti-Monopoly Origins of the Patent and Copyright Clause*, 84 J. PAT. & TRADEMARK OFF. SOC'Y 909, 922–23 (2002).

20. THE FEDERALIST NO. 43, at 307 (James Madison) (Cynthia Brantley Johnson ed., 2004).

21. U.S. CONST. art. I, § 8, cl. 8.

22. 35 U.S.C. § 154 (2012).

23. See PHILLIP AREEDA ET AL., *ANTITRUST ANALYSIS: PROBLEMS, TEXT, AND CASES* 103 (6th ed. 2004).

24. The USPTO is a federal administrative agency to which Congress has granted the power to issue patents. 35 U.S.C. § 2.

25. *Id.* § 112(a).

26. *Id.* § 112(b).

27. *Id.* § 101.

28. *Id.*

claimed invention must meet the novelty requirement: that the invention has not previously been patented, sold, or otherwise known to the public.<sup>29</sup> Finally, the invention must pass the test for nonobviousness, such that the invention would not have been obvious to “a person having ordinary skill in the art” prior to the specification’s filing date.<sup>30</sup>

### B. Patent Law’s Policy Goals

Through the grant of a temporary monopoly for patentable inventions, patent law incentivizes inventors to create innovative products,<sup>31</sup> which in turn spur economic growth and advance technology.<sup>32</sup> Thus, inventors and society are rewarded in a complementary manner: society accepts the inventor’s temporary monopoly in exchange for higher levels of innovation and, consequently, greater rates of economic growth.<sup>33</sup> Economic policies play an important role in the patent system. Because the cost of copying an invention is only a fraction of the cost of developing the invention, patent law aims to protect the original investment of time and resources.<sup>34</sup> In this way, patent law incentivizes research and development. This does not mean that no other company can use the patented material during the twenty-year period; others can use the patented technology as long as they receive a license from the patent owner.<sup>35</sup> When others build off of existing patents, this results in more innovation as other companies create new products and services.<sup>36</sup>

However, the limits of patent rights must be clearly defined. The Supreme Court has stated, “The monopoly is a property right; and like any property right, its boundaries should be clear. This clarity is essential to promote progress, because it enables efficient investment in innovation.”<sup>37</sup> By granting property rights to patent owners, the patent system allows

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29. *Id.* § 102.

30. *Id.* § 103.

31. See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480 (1974) (“The patent laws promote this progress by offering a right of exclusion for a limited period as an incentive to inventors to risk the often enormous costs in terms of time, research, and development.”).

32. See *id.* (“The productive effort thereby fostered will have a positive effect on society through the introduction of new products and processes of manufacture into the economy, and the emanations by way of increased employment and better lives for our citizens.”).

33. See HAZEL V.J. MOIR, PATENT POLICY AND INNOVATION: DO LEGAL RULES DELIVER EFFECTIVE ECONOMIC OUTCOMES? 1 (2013) (noting that “[i]f induced innovations generate new knowledge and know-how[,] this provides benefits that spill over to the community to offset the costs of the granted monopolies”).

34. *Id.* at 13 (observing that “[o]nce an innovator has developed a new art[i]fact or process, competitors are able to replicate this at very low cost, undercutting the original innovator in the market”).

35. See *infra* Part II.B.1, II.B.4.c (discussing cross-licensing).

36. See PHIL GOLDBERG, PROGRESSIVE POLICY INST., STUMPING PATENT TROLLS ON THE BRIDGE TO INNOVATION 2 (2013), [http://www.progressivepolicy.org/wp-content/uploads/2013/09/10.2013-Goldberg\\_Stumping-Patent-Trolls-On-The-Bridge-To-Innovation.pdf](http://www.progressivepolicy.org/wp-content/uploads/2013/09/10.2013-Goldberg_Stumping-Patent-Trolls-On-The-Bridge-To-Innovation.pdf) (“The goal of the American patent system is to encourage inventors to publicly disclose how their inventions work in their patent applications so that others can understand and build off their technologies in an effort to quicken innovation.”) [<http://perma.cc/9PLG-6VNZ>].

37. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 730–31 (2002).

inventors to exclude others for a period of twenty years. But when patent owners use excessive litigation to assert overly broad patents, they assert their rights in a manner that is inconsistent with the underlying purpose of this property right: they may actually hinder innovation because defendants must reallocate resources to litigation, reducing spending on research and development.<sup>38</sup> The White House has observed, “[p]atent policy must navigate a fine line” because “[i]nnovators who fear inadvertently infringing existing patents may reduce innovative activity or take costly steps to defend against lawsuits claiming infringement, leading to fewer resources available for wages, job creation, and innovation of new products and services.”<sup>39</sup> Thus, the growing number of companies that exist solely to assert infringement claims may be incompatible with the patent system’s goal of protecting innovators who contribute to society with their inventions.<sup>40</sup>

### C. The Modern Patent Landscape

In 2011, Congress passed the Leahy-Smith America Invents Act<sup>41</sup> (AIA), a statute that many deem the most important patent reform since the 1950s.<sup>42</sup> Part I.C.1.a analyzes in detail the AIA’s changes to the patent system. While the AIA did provide a much needed overhaul of U.S. patent law, many believe that it did not go far enough and have proposed further reform.<sup>43</sup> Part I.C.1.b discusses the Innovation Act of 2015<sup>44</sup> and the PATENT Act,<sup>45</sup> the most recent patent reform bills before Congress. The modern patent landscape also has been further refined by several important Supreme Court rulings. Part I.C.2 analyzes some of those cases.

#### 1. Patent Legislation

In the early 2000s, many lawmakers began to call for patent reform.<sup>46</sup> After several failed attempts, Congress ultimately passed the AIA in 2011. The AIA introduced several reforms including the first-to-file system, procedural shifts, and greater transparency in the system.

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38. See *infra* Part II.B.3.a (discussing trolls’ impact on innovation).

39. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 2.

40. See *infra* Part III.

41. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011).

42. See Nathan Hurst, *How the America Invents Act Will Change Patenting Forever*, WIRED (Mar. 15, 2013, 6:30 AM), <http://www.wired.com/2013/03/america-invents-act/all/> (identifying the AIA as “the biggest shakeup at the USPTO since 1952”) [<http://perma.cc/8RFZ-UEC4>].

43. See *infra* Part I.C.1.b.

44. Innovation Act of 2015, H.R. 9, 114th Cong. (as reported by House, July 29, 2015).

45. PATENT Act, S. 1137, 114th Cong. (as reported by Senate, Sept. 8, 2015).

46. Congress introduced patent-reform legislation in 2005, 2006, 2007, 2009, and 2010; however, none of these bills passed. See Hung H. Bui, *An Overview of Patent Reform Act of 2011: Navigating the Leahy-Smith America Invents Act Including Effective Dates for Patent Reform*, 93 J. PAT. & TRADEMARK OFF. SOC’Y 441, 442–43 (2011).



*a. The Leahy-Smith America Invents Act (AIA)*

The AIA provided several major shifts in the area of patent law.<sup>47</sup> Perhaps the most notable shift was the adoption of a first-to-file system.<sup>48</sup> Prior to the AIA, the United States observed a first-to-invent system.<sup>49</sup> Supporters of the AIA believe that the adoption of a first-to-file rule provides more certainty for inventors and also decreases the need for litigation to determine the filer's subjective state of mind that may be necessary under a first-to-invent rule.<sup>50</sup> The ease of a first-to-file system also has the capacity to speed up the patent review process at the already congested USPTO.<sup>51</sup> Additionally, most other countries follow the first-to-file rule; therefore, the AIA's adoption of this rule puts the U.S. system in sync with the global trend.<sup>52</sup> However, critics note that the first-to-file rule could pose a problem for small inventors who must first secure funding before they can file, placing them at a disadvantage compared to companies that have easy access to financial assets.<sup>53</sup> Another potential downside of a first-to-file rule is the possibility that inventors will rush to file without properly refining the patent.<sup>54</sup>

The AIA also introduced several procedural shifts. The AIA created a new two-part standard for the joinder of defendants: defendants will be joined if "(1) any right to relief is asserted against the parties jointly, severally, or in the alternative with respect to or arising out of the same transaction, occurrence, or series of transactions or occurrences" and "(2) questions of fact common to all defendants or counterclaim defendants will arise in the action."<sup>55</sup> The House Report indicates that the drafters of this provision intended to address the problem of forum shopping, which often occurs through the joinder of dozens of defendants who have only "tenuous connections to the underlying disputes in patent infringement suits."<sup>56</sup>

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47. See Robert A. Armitage, *Understanding the America Invents Act and Its Implications for Patenting*, 40 AIPLA Q.J. 1, 4 (2012) (providing a detailed analysis of the AIA's "comprehensive reform of the law of patentability and patent enforceability" and the AIA's "dramatic changes to the role of the public in the patenting process").

48. See Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3, 125 Stat. 284 (2011). This provision took effect eighteen months after the AIA was passed, applying only to patent applications with filing dates on or after March 16, 2013. See U.S. PATENT & TRADEMARK OFFICE, AMERICA INVENTS ACT: EFFECTIVE DATES 6 (2011), [http://www.uspto.gov/aia\\_implementation/aia-effective-dates.pdf](http://www.uspto.gov/aia_implementation/aia-effective-dates.pdf) [<http://perma.cc/LK6J-LKGQ>].

49. See Leahy-Smith America Invents Act § 3.

50. See, e.g., Paul R. Gupta & Alex Feerst, *The U.S. Patent System After the Leahy-Smith America Invents Act*, 1 EUR. INTELL. PROP. REV. 60, 60 (2012), <http://www.orrck.com/Events-and-Publications/Documents/4466.pdf> (noting that "[s]upporters of this shift claim that it will increase the certainty of issued patents and reduce the extent and cost of litigation over who was first to invent") [<http://perma.cc/6S4W-CQ3V>].

51. See Hurst, *supra* note 42.

52. See Gupta & Feerst, *supra* note 50, at 60 (also noting that the new system's "harmonisation" with most other nations "will simplify and reduce the cost of gaining international patent protection").

53. See Hurst, *supra* note 42.

54. See *id.*; see also *infra* Part II.B.2.b (discussing low-quality patents).

55. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 19, 125 Stat. 284 (2011).

56. H.R. REP. NO. 112-98, pt. 1, at 54 (2011).

Before the new joinder rules, patent trolls could more easily join together defendants in pro-plaintiff venues, such as the Eastern District of Texas.<sup>57</sup>

Under the AIA, members of the public can have a much more hands-on role in the patent process. Members of the public may now submit materials they deem relevant for a patent examiner to consider before issuing a patent.<sup>58</sup> Additionally, once a patent has been issued, any member of the public may challenge the patent by filing a petition for post-grant review with the USPTO.<sup>59</sup> Supporters of these new provisions believe that post-grant proceedings will decrease the amount of litigation and clarify the parameters of existing patents.<sup>60</sup> The AIA provides some safeguards against abuse, requiring that a petition for post-grant review be filed no later than nine months after the date of the patent grant.<sup>61</sup> However, inventors may face unexpected early costs if they are faced with a post-grant proceeding.<sup>62</sup>

Finally, the AIA reformed business-method patents. While there is no widely established definition of a business-method patent,<sup>63</sup> the USPTO has classified these patents as an “apparatus or method [that] is uniquely designed for or utilized in the practice, administration, or management of an enterprise, or in the processing of financial data.”<sup>64</sup> The House Report indicates that these patents played a predominant role in the push for reform, noting that “the issuance of poor business-method patents during the late 1990’s through the early 2000’s led to the patent ‘troll’ lawsuits that compelled the Committee to launch the patent reform project.”<sup>65</sup> The AIA established a transitional program for post-grant review of business-method patents.<sup>66</sup> As is true with general post-grant review, any member of the public may challenge a business-method patent; however, the post-grant review for business methods is not limited to the nine-month window.<sup>67</sup>

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57. See *infra* Part I.B.2.c (discussing filing concentration in the Eastern District of Texas).

58. Leahy-Smith America Invents Act § 8 (“Any third party may submit for consideration and inclusion in the record of a patent application, any patent, published patent application, or other printed publication of potential relevance to the examination of the application.”).

59. *Id.* § 6.

60. See Gupta & Feerst, *supra* note 50, at 62–63.

61. Leahy-Smith America Invents Act § 6.

62. See Gupta & Feerst, *supra* note 50, at 63.

63. See Lois Matelan, *The Continuing Controversy over Business Method Patents*, 90 J. PAT. & TRADEMARK OFF. SOC’Y 125, 126 (2008).

64. See *Class Definition for Class 705*, U.S. PAT. & TRADEMARK OFFICE, <http://www.uspto.gov/web/patents/classification/uspc705/defs705.htm> (last visited Nov. 27, 2015) (emphasis omitted) [<http://perma.cc/J6HJ-469J>]. While there is a great deal of overlap between business-method patents and software patents, a business-method patent need not be implemented on a computer, though many are. See Matelan, *supra* note 63, at 127.

65. H.R. REP. NO. 112-98, pt. 1, at 54 (2011).

66. Leahy-Smith America Invents Act § 18.

67. *Id.*

It is also important to note that the AIA was silent on several crucial issues in the patent field, including damages and venue restrictions.<sup>68</sup> While prior patent-reform proposals contained provisions regarding venue and judges' discretion in awarding damages, these issues were ultimately left out of the AIA.<sup>69</sup>

*b. The Innovation Act of 2015 and the PATENT Act*

While the AIA provided much needed reform in a number of areas, many believe that it did not accomplish enough to remedy the patent system.<sup>70</sup> For example, President Obama has stated that the AIA “only went about halfway to where we need to go.”<sup>71</sup> The Obama Administration has generally expressed support for further patent-reform legislation.<sup>72</sup> Currently, there is competing patent reform legislation before Congress: the Innovation Act of 2015,<sup>73</sup> the latest bill before the House of Representatives, and the PATENT Act,<sup>74</sup> the latest bill before the Senate.

It is clear from the House Report for the Innovation Act of 2015 that lawmakers had patent trolls in mind while drafting the bill, and the legislation contains many key provisions designed to address troll behavior.<sup>75</sup> The legislation's first important provision is a heightened pleading requirement.<sup>76</sup> Currently, a party alleging infringement need only name the relevant patents in the complaint—the Federal Circuit has stated that under the Federal Rules of Civil Procedure, a plaintiff in a patent infringement case need not “plead facts establishing that each element of an asserted claim is met” nor “even identify which claims it asserts are being

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68. See Bui, *supra* note 46, at 445 n.35 (noting that “controversial provisions regarding damages apportionment, inequitable conduct, restriction on venue, and 18 month publication of all applications” were absent from the AIA); Gupta & Feerst, *supra* note 50, at 60 (observing that the AIA left several “key issues (e.g. damages and venue) largely untouched and ripe for further judicial development”).

69. See Gupta & Feerst, *supra* note 50, at 64.

70. See, e.g., COALITION FOR PATENT FAIRNESS, COMMENTS OF COALITION FOR PATENT FAIRNESS ON DOJ/FTC WORKSHOP ON PATENT ASSERTION ENTITY ACTIVITIES 1 (2013), <http://www.patentfairness.org/pdf/CPFCommentsOnPAEs.pdf> (“But notwithstanding several improvements achieved by the America Invents Act, the U.S. patent system presents grave obstacles to innovation and competitiveness.”) [<http://perma.cc/2FQR-8YGG>]. The Coalition for Patent Fairness's members are “a diverse group of companies dedicated to enhancing U.S. innovation, job creation, and competitiveness by strengthening our nation's patent system.” *Id.*

71. EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 3. This report indicates that the need for further reform may be due to the fact that “the impact of aggressive litigation tactics by PAEs and others was not widely known during the seven years the AIA was under negotiation.” *Id.*

72. See EXEC. OFFICE OF THE PRESIDENT, STATEMENT OF ADMINISTRATION POLICY: H.R. 3309—INNOVATION ACT (2013), [http://www.whitehouse.gov/sites/default/files/omb/legislative/sap/113/saphr3309r\\_20131203.pdf](http://www.whitehouse.gov/sites/default/files/omb/legislative/sap/113/saphr3309r_20131203.pdf) [<http://perma.cc/3XYQ-L98Q>].

73. Innovation Act of 2015, H.R. 9, 114th Cong. (as reported by House, July 29, 2015).

74. PATENT Act, S. 1137, 114th Cong. (as reported by Senate, Sept. 8, 2015).

75. See H.R. REP. NO. 114-235, at 25 (2015) (discussing how patent troll litigation has “negatively affected small businesses”); *id.* at 27–28 (discussing fee-shifting and PAEs); *id.* at 41–43 (discussing discovery burdens as they relate to patent trolls).

76. See H.R. 9 § 3(a).

infringed.”<sup>77</sup> However, the heightened initial pleading requirement under the Innovation Act would require greater specificity, mandating that the patent holder describe exactly how a patent is being infringed.<sup>78</sup> The bill also contains provisions that would increase transparency in the patent system.<sup>79</sup> For example, the bill requires that parties alleging infringement submit a list of all other complaints they have filed involving the same patent.<sup>80</sup> The bill would also require plaintiffs to disclose the name of any “interested party” that has a financial interest in the patent or in the plaintiff.<sup>81</sup> This provision aims to discourage the use of shell companies.<sup>82</sup>

The Innovation Act also contains important fee-shifting provisions. First, the bill makes it easier for a successful defendant to recover its litigation costs.<sup>83</sup> Second, if a losing plaintiff is not able to pay an award, the bill allows the court to order others with a financial stake in the plaintiff’s lawsuit to join the lawsuit and pay the necessary legal fees.<sup>84</sup> The bill also provides new rules for discovery that would delay the discovery phase of litigation until courts have interpreted the patent.<sup>85</sup> This provision aims to address both the heavy burden that early discovery can place on defendants and the fact that this burden is usually shirked by trolls because trolls do not produce any goods, so their discovery burden is inherently lower.<sup>86</sup> The Innovation Act also calls for the Director of the Administrative Office of the United States Courts to “conduct a study of the prevalence of the practice of sending patent demand letters in bad faith and the extent to which that practice may, through fraudulent or deceptive practices, impose a negative impact on the marketplace.”<sup>87</sup>

The PATENT Act contains many similar patent-reform provisions. Like the Innovation Act, it includes heightened pleading requirements<sup>88</sup> and

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77. *In re* Bill of Lading Transmission & Processing Sys., 681 F.3d 1323, 1335 (Fed. Cir. 2012).

78. *See* H.R. 9 § 3(a).

79. *See id.* § 4.

80. *See id.* § 4(a).

81. *Id.* § 3(c).

82. *See* H.R. REP. NO. 114-235, at 35 (2015) (citing hearing testimony about trolls’ use of shell companies and noting “the difficulties posed when ownership and financial-interest information is withheld” because “defendants do not know whom they are negotiating with or who has the authority to settle the case”). Shell companies are companies “which exist on paper only, with no real employees or offices.” *Launderers Anonymous*, *ECONOMIST* (Sept. 22, 2012), <http://www.economist.com/node/21563286> [<http://perma.cc/9R4H-SCKL>]; *see also infra* Part II.A (discussing shell companies as they relate to patent-troll behavior).

83. *See* H.R. 9 § 3(b) (“The court shall award, to a prevailing party, reasonable fees and other expenses incurred by that party in connection with a civil action in which any party asserts a claim for relief arising under any Act of Congress relating to patents, unless the court finds that the position and conduct of the nonprevailing party or parties were reasonably justified in law and fact or that special circumstances (such as severe economic hardship to a named inventor) make an award unjust.”).

84. *See id.* § 3(c).

85. *See id.* § 3(d).

86. *See* H.R. REP. NO. 114-235, at 41–43.

87. H.R. 9 § 8(e); *see infra* Part II.B.4.b (discussing demand letters).

88. *See* PATENT Act, S. 1137, 114th Cong. § 3(b) (as reported by Senate, Sept. 8, 2015).

addresses transparency, requiring plaintiffs to identify any parties with a financial interest in the outcome of the case.<sup>89</sup> The PATENT Act also contains fee-shifting reform, but there are important differences from the fee-shifting provisions of the Innovation Act. The PATENT Act, like its counterpart before the House, allows a court to shift fees if the nonprevailing party's position or conduct was not "objectively reasonable."<sup>90</sup> However, under the PATENT Act, the prevailing party bears "the burden of demonstrating that [it] is entitled to an award."<sup>91</sup> Like the Innovation Act, the PATENT Act would allow a defendant to identify "interested parties" that the court may hold financially accountable.<sup>92</sup> The PATENT Act is less clear than the Innovation Act in defining the limits of discovery. Rather than identifying explicit changes to discovery requirements, the bill merely identifies "types of discovery rules and procedures to be considered" by the Judicial Conference.<sup>93</sup> The PATENT Act is, however, clearer in addressing demand letters. While the Innovation Act simply calls for a study, the PATENT Act imposes civil penalties for "unfair or deceptive acts or practices in connection with abusive demand letters."<sup>94</sup>

While proponents of these bills believe that the legislation takes necessary steps to impede patent trolls,<sup>95</sup> some critics also believe that the legislation goes too far. For example, patent reform legislation prompted many large corporations to join together to create a lobbying group, called the Partnership for American Innovation, aimed at resisting some of the proposed reforms.<sup>96</sup> The companies—which include Ford, Apple, and Pfizer—suggest that steps to curb patent trolls should be carefully considered because these changes can also inadvertently hurt truly innovative companies.<sup>97</sup>

## 2. Notable Supreme Court Rulings on Patent Law

While the AIA provided several overdue changes in the patent field, many called for reform in the 2000s, years before the AIA became law.<sup>98</sup> During Congress's years of inaction prior to the AIA's passage, the

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89. *See id.*

90. *Id.* § 7(b).

91. *Id.*

92. *Id.*

93. *Id.* § 6(a)(3).

94. *Id.* § 9(a).

95. The Electronic Frontier Foundation, for one, has expressed support for both bills. *See Stop Patent Trolls: Support the Innovation Act of 2015*, ELEC. FRONTIER FOUND., <https://act.eff.org/action/stop-patent-trolls-support-the-innovation-act-of-2015> (last visited Nov. 27, 2015) [<https://perma.cc/5323-3BQT>]; *Tell Your Senator to Support the PATENT Act*, ELEC. FRONTIER FOUND., <https://act.eff.org/action/tell-your-senator-to-support-the-patent-act> (last visited Nov. 27, 2015) [<https://perma.cc/77WH-BPD2>].

96. *See* Diane Bartz, *Apple, Pfizer, Others Form 'Go Slow' U.S. Patent Lobby Group*, REUTERS (Apr. 3, 2014, 10:03 AM), <http://www.reuters.com/article/2014/04/03/us-usa-patents-lobbying-idUSBREA3210R20140403> [<http://perma.cc/RE8P-QPYF>].

97. *See id.*

98. *See supra* note 46.

Supreme Court and the Federal Circuit<sup>99</sup> stepped in and decided several cases that addressed many of the issues voiced in previous patent-reform bills that failed to pass.<sup>100</sup> The Supreme Court has also addressed several patent issues in the post-AIA landscape, as many areas were either not addressed in the AIA or needed further clarification. In its 2013–2014 Term, the Supreme Court heard the highest proportion of intellectual property cases in its history.<sup>101</sup> Six of those were patent cases.<sup>102</sup>

*a. eBay: Granting District Courts Greater Discretion to Issue Injunctions in Patent Infringement Cases*

Under the U.S. Code, courts may issue injunctions “in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.”<sup>103</sup> Prior to 2006, only in “rare instances” did courts deny permanent injunctions for allegations of patent infringement.<sup>104</sup> However, the Supreme Court’s 2006 ruling in *eBay Inc. v. MercExchange, L.L.C.*<sup>105</sup> held that the traditional equitable test must be applied in patent infringement cases.<sup>106</sup>

This case arose out of a business-method patent<sup>107</sup> held by MercExchange for online auction technology.<sup>108</sup> MercExchange had approached eBay about licensing the patent to eBay, but these negotiations eventually dissipated.<sup>109</sup> At that point, MercExchange sued for patent infringement.<sup>110</sup> While a jury found MercExchange’s patent to be valid, the district court denied MercExchange permanent injunctive relief.<sup>111</sup> The

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99. The Federal Circuit has jurisdiction over all patent appeals. *See Court Jurisdiction*, U.S. COURT OF APPEALS FOR THE FED. CIRCUIT, <http://www.cafc.uscourts.gov/the-court/court-jurisdiction> (last visited Nov. 27, 2015) [<http://perma.cc/XEU6-NPHC>].

100. *See Bui, supra* note 46, at 442–45 (providing a discussion of the Patent Reform Acts of the 2000s that failed to pass and outlining several Supreme Court cases that altered the patent landscape during that time).

101. *See Lawrence Hurley, U.S. High Court Sets Record for Intellectual Property Caseload*, REUTERS (Feb. 27, 2014, 1:03 AM), <http://www.reuters.com/article/2014/02/27/us-usa-court-ip-analysis-idUSBREA1Q09B20140227> [<http://perma.cc/C4RY-NZQW>].

102. *Id.*

103. 35 U.S.C. § 283 (2012).

104. *See Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1547 (Fed. Cir. 1995).

105. 547 U.S. 388 (2006).

106. *Id.* at 390. Traditional equitable considerations that courts consider in deciding whether to grant injunctive relief include: whether there has “been irreparable injury,” “the inadequacy of legal remedies,” and “the public consequences in employing the extraordinary remedy of injunction.” *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982).

107. *See supra* notes 63–64 and accompanying text.

108. *eBay*, 547 U.S. at 390.

109. *Id.*

110. *Id.*

111. *Id.* at 390–91. In its opinion, the district court seemed to suggest that MercExchange did, in fact, exhibit many characteristics of a patent troll. Without explicitly using the terms “troll” or “PAE,” the district court based its decision not to grant injunctive relief on “[MercExchange]’s willingness to license its patents” and “its lack of commercial activity in practicing the patents,” ultimately concluding that MercExchange would not suffer irreparable harm if the court declined to issue an injunction. *MercExchange, L.L.C. v. eBay, Inc.*, 275 F. Supp. 2d 695, 712 (E.D. Va. 2003).

Federal Circuit reversed, applying its rule that courts will generally grant permanent injunctions in patent cases “absent exceptional circumstances.”<sup>112</sup> The Supreme Court held that the traditional four-part equitable test, which all plaintiffs must satisfy when seeking a permanent injunction, must also be applied in patent cases.<sup>113</sup> Under that test, a plaintiff must show that: (1) he has suffered an irreparable injury; (2) remedies such as damages will not sufficiently compensate him for his injury; (3) under a consideration of the hardships of the plaintiff and defendant, an equitable remedy is appropriate; and (4) the public interest will not be harmed by a permanent injunction.<sup>114</sup> Thus, the Court’s ruling reiterated the equitable discretion of district courts in granting or denying injunctive relief.<sup>115</sup>

Some commentators believe that the *eBay* holding institutionally weakened patent trolls.<sup>116</sup> Others counter that, upon closer inspection, *eBay* did not in fact reduce the momentum of trolls.<sup>117</sup> Many researchers point out that the Court did not instruct the lower courts on how to apply the four-part equitable relief test in patent cases.<sup>118</sup> Further, if this lack of guidance causes lower courts to apply the test differently, then trolls can forum shop and are not significantly deterred by the ruling.<sup>119</sup>

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112. *eBay*, 547 U.S. at 391 (quoting *MercExchange, L.L.C. v. eBay, Inc.*, 401 F.3d 1323, 1339 (2005)).

113. *Id.*

114. *Id.* Courts have long used equitable considerations to “balance[] the conveniences of the parties and possible injuries to them according as they may be affected by the granting or withholding of the injunction.” *Yakus v. United States*, 321 U.S. 414, 440 (1944); see also *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 313 (1982) (“These commonplace [equity] considerations applicable to cases in which injunctions are sought in the federal courts reflect a ‘practice with a background of several hundred years of history.’” (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329 (1944))).

115. *eBay*, 547 U.S. at 394.

116. See Stephany A. Olsen LeGrand, *eBay v. MercExchange: On Patrol for Trolls*, 44 HOUS. L. REV. 1175, 1178 (2007) (suggesting that the *eBay* ruling “empowered the lower courts to exercise their discretion . . . when the facts and circumstances of the case lend themselves to a suspicion of patent trolling or abuse of the patent system”); Jessica Holzer, *Supreme Court Buries Patent Trolls*, FORBES (May 16, 2006, 6:00 AM), [http://www.forbes.com/2006/05/15/eBay-scotus-patent-ruling-cx\\_jh\\_0516scotus.html](http://www.forbes.com/2006/05/15/eBay-scotus-patent-ruling-cx_jh_0516scotus.html) (“The high court’s decision deals a blow to patent trolls, which are notorious for using the threat of permanent injunction to extort hefty fees in licensing negotiations as well as huge settlements from companies they have accused of infringing.”) [<http://perma.cc/63V3-PJTN>].

117. See, e.g., Damian Myers, *Reeling in the Patent Troll: Was eBay v. MercExchange Enough?*, 14 J. INTELL. PROP. L. 333, 348 (2007) (concluding that the ruling “will not likely reduce the power of the patent troll to a significant degree”); see also Thomas L. Casagrande, *The Reach of eBay Inc. v. MercExchange, L.L.C.: Not Just for Trolls and Patents*, 44 HOUS. LAW. 10, 16 (2006) (noting that “many were disappointed that the Supreme Court did not provide specific guidance about how courts should deal with ‘patent trolls’”).

118. See Paul M. Mersino, *Patents, Trolls, and Personal Property: Will eBay Auction Away a Patent Holder’s Right to Exclude?*, 6 AVE MARIA L. REV. 307, 326 (2007); Myers, *supra* note 117, at 348.

119. See Myers, *supra* note 117, at 348.

*b. Alice: Refining the Definition of Software Patents*

In *Alice Corp. v. CLS Bank International*,<sup>120</sup> the Supreme Court was again faced with a patent case. In 2007, CLS Bank sued Alice Corp. seeking a declaratory judgment that Alice's patents, which included computer software designed to mitigate settlement risk, were invalid under 35 U.S.C. § 101, the Code's provision that defines patentable subject matter.<sup>121</sup> Alice counterclaimed, alleging that CLS Bank had infringed those patents.<sup>122</sup> The district court determined that the patents were ineligible under § 101.<sup>123</sup> The Federal Circuit ultimately affirmed the district court's ruling after granting a rehearing en banc.<sup>124</sup> The Supreme Court affirmed, holding that Alice's patents were invalid because they "fail[ed] to transform [an] abstract idea into a patent-eligible invention."<sup>125</sup> The Court relied on its long-held view that there are several types of subject matter that cannot be patented.<sup>126</sup> These exclusions include "[l]aws of nature, phenomena, and abstract ideas," none of which are patentable under § 101.<sup>127</sup> Granting a patent in any of these areas would, in the Court's view, create a monopoly over basic tools that should be available to everyone.<sup>128</sup> The Court further explained that, in determining whether a patent is excluded, it must "distinguish between patents that claim the 'buildin[g] block[s]' of human ingenuity and those that integrate the building blocks into something more, thereby 'transform[ing]' them into a patent-eligible invention."<sup>129</sup>

The Court then evaluated Alice's patents using the two-step framework established in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*<sup>130</sup> *Mayo* involved a medical patent, which the Court deemed ineligible because it concerned laws of nature; the Court concluded that the patent "involve[d] well-understood, routine, conventional activity previously engaged in by researchers in the field."<sup>131</sup> First, the *Alice* Court asked whether the claims are directed to a patent-ineligible concept or, in other words, whether the patents fall under one of the § 101 exclusions.<sup>132</sup> The Court answered this question in the affirmative because Alice's "claims are

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120. 134 S. Ct. 2347 (2014).

121. *Id.* at 2352–53. Section 101 defines patentable subject matter as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101 (2012).

122. *Alice*, 134 S. Ct. at 2353.

123. *Id.*

124. *Id.*

125. *Id.* at 2352.

126. *Id.* at 2354.

127. *Id.* (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)).

128. *Id.*

129. *Id.* (alterations in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1303, 1294 (2012)).

130. 132 S. Ct. 1289 (2012).

131. *Id.* at 1294.

132. *Alice*, 134 S. Ct. at 2355.



drawn to the abstract idea of intermediated settlement.”<sup>133</sup> The second step consists of “a search for an ‘inventive concept’—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’”<sup>134</sup> This step requires that the claimant transform the abstract idea in some more significant way than simply “adding the words ‘apply it.’”<sup>135</sup> The Court declined to identify an “inventive concept” in Alice’s patents because the claimed method did no more “than simply instruct the practitioner to implement the abstract idea of intermediated settlement on a generic computer.”<sup>136</sup> The Court reasoned that because the patent improved neither on the computer itself nor on any other technology, it did not sufficiently transform an abstract idea into an eligible invention under § 101.<sup>137</sup>

Many commentators posited that the *Alice* holding would impede patent trolls.<sup>138</sup> By preventing the assertion of weak software patents, the holding denies trolls one of their common strategies for forcing settlements.<sup>139</sup> The *Alice* decision is also important because it instructs examiners at the USPTO as to which software patents it may issue.<sup>140</sup> Thus, if weak software patents are not issued in the first place, trolls cannot use them to allege infringement. Additionally, a study by Lex Machina, a company that compiles litigation data, found that new patent case filings were down 40 percent between September 2013 and September 2014.<sup>141</sup> Mark Lemley, a cofounder of Lex Machina, believes that this decrease is directly tied to the Supreme Court’s *Alice* ruling, as those holding weak software patents now

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133. *Id.*

134. *Id.* (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294).

135. *Mayo*, 132 S. Ct. at 1294.

136. *Alice*, 134 S. Ct. at 2359.

137. *Id.* at 2359–60.

138. See Klint Finley, *Supreme Court Deals Major Blow to Patent Trolls*, WIRED (June 19, 2014, 3:48 PM), <http://www.wired.com/2014/06/supreme-court-deals-major-blow-to-patent-trolls/> (“The Supreme Court just dealt a major blow to patent trolls.”) [<http://perma.cc/U2SF-23WV>]; Julie Samuels, *Patent Trolls Are Mortally Wounded*, SLATE (June 20, 2014, 1:47 PM), [http://www.slate.com/articles/technology/future\\_tense/2014/06/alice\\_v\\_cls\\_bank\\_supreme\\_court\\_gets\\_software\\_patent\\_ruling\\_right.html](http://www.slate.com/articles/technology/future_tense/2014/06/alice_v_cls_bank_supreme_court_gets_software_patent_ruling_right.html) (“So now we’re living in a world where fewer bad software patents will be granted, and the patent troll arsenal will be a little lighter.”) [<http://perma.cc/4UYV-SW9N>].

139. See Samuels, *supra* note 138 (stating that *Alice* “significantly tighten[ed] the standard for what is and what is not patentable,” which “will undoubtedly lead to fewer low-quality software patents” and lighten “the patent troll arsenal”).

140. See Finley, *supra* note 138 (quoting Julie Samuels, the Executive Director at public policy think tank, Engine: “What the Supreme Court did in [*Alice*] is give parties dealing with those various patents a very important tool to fight back by invalidating those patents and, going forward, gives the patent office instruction about what it can and cannot issue patents on”).

141. Brian Howard, *September 2014 New Patent Case Filings Down 40% from September 2013*, LEX MACHINA (Oct. 8, 2014), <https://lexmachina.com/september-2014-new-patent-case-filings-40-september-2013/> [<https://perma.cc/7AHM-UHF5>].

face a lower likelihood of successful litigation in the post-*Alice* landscape.<sup>142</sup>

c. *Octane and Highmark*:  
*Shifting to More Lenient Discretion in Awarding Attorneys' Fees*

In April 2014, the Supreme Court issued twin rulings on attorney-fee awards in patent cases.<sup>143</sup> These rulings make it easier for defendants to force plaintiffs to compensate their defense costs, a step that many in the patent field believe may help curb trolls.<sup>144</sup>

In *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*,<sup>145</sup> the Court addressed the circumstances under which a court may award a prevailing party attorneys' fees.<sup>146</sup> The U.S. Code authorizes district courts to award fees to prevailing parties in "exceptional cases."<sup>147</sup> The Federal Circuit had previously interpreted this provision in a strict sense, making it nearly impossible for defendants to receive attorneys' fees, even when the case against them was weak.<sup>148</sup> Under the Federal Circuit's standard, a case is considered "exceptional" only in two limited circumstances: (1) "when there has been some material inappropriate conduct related to the matter in litigation"; or (2) when both "the litigation is brought in subjective bad faith, and . . . the litigation is objectively baseless."<sup>149</sup> In *Octane*, however, the Supreme Court ruled that the Federal Circuit's standard is "unduly rigid, and it impermissibly encumbers the statutory grant of discretion to district courts."<sup>150</sup> The Court concluded that the standard for awarding attorneys' fees should be more flexible and that district courts may award fees "in the case-by-case exercise of their discretion, considering the totality of the circumstances."<sup>151</sup>

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142. *Id.* ("Stanford Law Professor Mark Lemley, a patent litigator at Durie Tangri and a founder of Lex Machina, said that he thought more patentees were deciding not to file suit after *Alice*: 'In the last two months, we've seen over a dozen decisions invalidating software and business method patents on the basis of *Alice*. That's a pretty strong deterrent to software plaintiffs whose patent isn't directed to specific new computer technology.'").

143. Both rulings were unanimous. *See Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1752 (2014); *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1746 (2014).

144. *See Daniel Nazer, Watch Out Trolls: Supreme Court Expands Fee Shifting in Patent Cases*, ELEC. FRONTIER FOUND. (Apr. 29, 2014), <https://www.eff.org/deeplinks/2014/04/watch-out-trolls-supreme-court-expands-fee-shifting-patent-cases> ("This decision is bad news for patent trolls who bring weak cases and use the high cost of defense to extort settlements.") [<https://perma.cc/2677-6USQ>].

145. 134 S. Ct. 1749 (2014).

146. *Id.* at 1752–53.

147. 35 U.S.C. § 285 (2012).

148. *See Nazer, supra* note 144.

149. *Brooks Furniture Mfg., Inc. v. Dutailier Int'l, Inc.*, 393 F.3d 1378, 1381 (2005).

150. *Octane*, 134 S. Ct. at 1755.

151. *Id.* at 1756. The Court also rejected the Federal Circuit's requirement that an entitlement to fees under 35 U.S.C. § 285 be established by the heightened clear and convincing evidence standard. *Id.* at 1758.

The Court's opinion in *Highmark, Inc. v. Allcare Health Management Systems, Inc.*<sup>152</sup> also addressed fee awards in patent cases. In that case, the Court considered the issue of "whether an appellate court should accord deference to a district court's determination that litigation is 'objectively baseless.'"<sup>153</sup> Citing its ruling in *Octane*, the Court noted that, consistent with prior cases, matters of discretion are "reviewed only for abuse of discretion."<sup>154</sup> The Court emphasized that this makes sense administratively because district courts are situated more closely to the details of the case and "live[] with the case over a prolonged period of time."<sup>155</sup>

While many commentators note the importance of the Supreme Court's fee-shifting rulings, organizations like the Electronic Frontier Foundation note that *Octane* and *Highmark* addressed only one of a number of patent reform issues and that lawmakers must not lose focus on patent-reform legislation just because the Supreme Court issued a patent ruling.<sup>156</sup>

## II. PATENT TROLLS: WHO THEY ARE AND WHY THEY MATTER

The many inconsistencies and gray areas in the current patent system have driven the exponential increase in a new, litigious breed: patent trolls. Part II.A provides a case study of Intellectual Ventures, a well-known patent troll, and outlines many of the common characteristics and litigation patterns of patent trolls. Part II.B explains why lawmakers and inventors care about patent trolls. It also highlights the characteristics of our current patent system that have weaknesses—or gray areas—that trolls can exploit. Additionally, Part II.B summarizes several recent studies that show the negative impact of patent trolls on innovation. Part II.B concludes with a discussion of the anticompetitive nature of trolls and why this is significant under the antitrust laws. Part II.C discusses patent-troll supporters and how they view the patent troll's role in the patent system.

### A. Patent-Troll Behavior

An introduction to patent-troll behavior may best be presented through a case study of a patent troll. Intellectual Ventures, often identified as one of the predominant patent trolls in Silicon Valley,<sup>157</sup> provides an insightful peek into typical troll behavior. Many of the following details regarding Intellectual Ventures are drawn from *This American Life*'s investigatory work, broadcast on National Public Radio<sup>158</sup> (NPR).

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152. 134 S. Ct. 1744 (2014).

153. *Id.* at 1746 (quoting *Brooks*, 393 F.3d at 1381).

154. *Id.* at 1748.

155. *Id.*

156. See Nazer, *supra* note 144.

157. See *When Patents Attack!*, *supra* note 6.

158. See *id.*

Intellectual Ventures was founded in 2000 by Peter Detkin, the man who coined the term “patent troll,”<sup>159</sup> and Nathan Myhrvold, former Chief Technology Officer of Microsoft.<sup>160</sup> Intellectual Ventures is well known in the patent world—it has one of the largest patent portfolios in the United States and often approaches companies to demand money for licenses of patents it owns.<sup>161</sup> *This American Life* estimates that Intellectual Ventures has purchased more than 30,000 patents.<sup>162</sup>

Like Intellectual Ventures, most patent trolls do not “practice” their patents—that is, they do not develop or manufacture any goods or services related to the patents they own.<sup>163</sup> Rather, they acquire patents solely to pressure companies to pay licensing fees.<sup>164</sup> It is this trait that distinguishes a patent troll from a non-practicing entity (NPE). The term NPE includes any entity that owns patents, but does not manufacture or sell products with those patents.<sup>165</sup> Patent trolls share their nonpracticing status with NPEs, but NPEs also include legitimate nonpracticing parties, such as universities.<sup>166</sup> Trolls, on the other hand, use this status to immunize themselves from counterclaims of patent infringement.<sup>167</sup>

Patent trolls often acquire patents in bankruptcy proceedings.<sup>168</sup> For example, because so many companies failed after the dot-com boom, patent trolls were able to purchase intellectual property assets at discounted prices.<sup>169</sup>

The patent at issue in the *This American Life* episode on patents was owned by Chris Crawford.<sup>170</sup> That patent was granted for an invention that allowed personal computer owners to upgrade their computer software through the internet—these software updates have become commonplace in

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159. See *supra* note 6 and accompanying text.

160. See *When Patents Attack!*, *supra* note 6; see also *infra* Part II.C (discussing patent-troll supporters, including Detkin and Myhrvold).

161. See *When Patents Attack!*, *supra* note 6. The reporters also noted that many entrepreneurs in the Silicon Valley declined to speak with NPR, due to fear of Intellectual Ventures. *Id.*

162. *Id.*

163. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 4 (noting that trolls “do not do research or develop any technology or products related to their patents”).

164. See *id.*

165. See FTC & U.S. DEP’T OF JUSTICE, *supra* note 7, at 3–4.

166. See *id.* at 4.

167. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 4.

168. See Robin M. Davis, *Failed Attempts to Dwarf the Patent Trolls: Permanent Injunctions in Patent Infringement Cases Under the Proposed Patent Reform Act of 2005 and eBay v. MercExchange*, 17 CORNELL J.L. & PUB. POL’Y 431, 431–32 (2008) (noting that “[p]atent trolls typically purchase patents from defunct companies in bankruptcy proceedings or through venues that allow them to accumulate potentially valuable intellectual property without subjecting the patents to industry scrutiny and valuation processes”).

169. See Lorraine Woellert, *eBay Takes on the Patent Trolls*, BLOOMBERG (Mar. 29, 2006), <http://www.businessweek.com/stories/2006-03-29/eBay-takes-on-the-patent-trolls> (observing that “[t]he [troll] problem has escalated in [the] wake of the dot-com bust, when patents proliferated as a sort of venture-capital collateral, only to be sold at bargain-basement prices by bankruptcy courts”) [<http://perma.cc/VD39-CXAM>].

170. See *When Patents Attack!*, *supra* note 6.

modern computer use.<sup>171</sup> However, NPR revealed that more than 5000 other patents cover the same material as Crawford's patent.<sup>172</sup> This is one of trolls' common litigation tactics—they acquire vague patents and make broad assertions of infringement, betting that target companies will pay licensing fees rather than risk costly litigation.<sup>173</sup>

After Intellectual Ventures bought the patent from Crawford, the ownership history indicates that two other companies owned the patent following Intellectual Ventures in succession.<sup>174</sup> Those two companies, Kwon Holdings and Enhanced Software LLC, both had the same office address as Intellectual Ventures.<sup>175</sup> The patent ended up in the hands of another company, called Oasis Research, in June 2010.<sup>176</sup> Within a month, Oasis Research had used the patent to sue over a dozen companies.<sup>177</sup>

This part of *This American Life's* investigation highlights two important troll tactics: demand letters and shell companies. When a patent troll gets its hands on a patent, it usually sends letters to dozens, or even hundreds, of companies demanding licensing fees.<sup>178</sup> One study estimates that in 2012, trolls sent a minimum of 60,000 demand letters, with this number more likely exceeding 100,000.<sup>179</sup>

Additionally, the use of shell companies<sup>180</sup> has become a growing problem in patent litigation.<sup>181</sup> One article estimates that Intellectual Ventures has more than 2000 shell companies.<sup>182</sup> Patent trolls create shell companies to mask their true identity, often creating difficulty for defendant companies who wish to learn more about the patents being asserted and the companies asserting them.<sup>183</sup>

Hoping to learn more about Crawford's patent, *This American Life's* reporters repeatedly telephoned Oasis Research, but they only reached the company's voicemail.<sup>184</sup> Additionally, public information about Oasis was limited, and the reporters could not identify who owned the company or its

171. *Id.*

172. *Id.*

173. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 8. This tactic is especially prevalent for software patents. *Id.*; see also *infra* Part II.B.2.b.

174. See *When Patents Attack!*, *supra* note 6.

175. *Id.* Tom Ewing, an intellectual property lawyer, told the NPR reporters that Kwon Holdings and Enhanced Software were likely Intellectual Venture shell companies. *Id.*

176. *Id.*

177. *Id.*

178. See *infra* Part II.B.4.b (discussing patent troll MPHJ Technology Investments, LLC and demand letters).

179. EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 6.

180. See *supra* note 82.

181. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 4 (noting that shell companies "mak[e] it difficult for defendants to form common defensive strategies (for example, by sharing legal fees rather than settling individually)").

182. See Mike Masnick, *Intellectual Ventures: Don't Mind Our 2000 Shell Companies, That's Totally Normal*, TECHDIRT (Dec. 20, 2012, 2:15 PM), <https://www.techdirt.com/articles/20121220/02365821447/intellectual-ventures-dont-mind-our-2000-shell-companies-thats-totally-normal.shtml> [<https://perma.cc/R2NH-J6LY>].

183. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 4.

184. See *When Patents Attack!*, *supra* note 6.

number of employees, if any.<sup>185</sup> They were, however, able to track down an office address in Marshall, Texas.<sup>186</sup> When the reporters visited the office building, the door was locked, no employees were present, and the lights were turned off.<sup>187</sup> A local lawyer told NPR that he had never seen anyone come in or out of this office.<sup>188</sup>

In the Oasis Research case, sixteen of the eighteen companies that Oasis sued settled.<sup>189</sup> The other two companies, EMC and Carbonite, went to trial.<sup>190</sup> Carbonite won at trial.<sup>191</sup> Because they did not sign a nondisclosure agreement in a settlement, Carbonite was willing to share with the reporters that Oasis's original settlement offer was \$20 million.<sup>192</sup> *This American Life* also reported that Intellectual Ventures has generated \$2 billion in revenue since 2000.<sup>193</sup>

This story is not uncommon. Many trolls use similar tactics to those used by Intellectual Ventures: they create shell companies to mask their true identity; they assert weak patents; and they send letters to companies alleging patent infringement, demanding licensing fees, or threatening litigation.

### B. Why Do We Care About Patent Trolls?

Patent-troll behavior concerns many because patent trolls are able to game the system and assert weak patents against defendants who lack the financial capacity to litigate.<sup>194</sup> For one, many worry that patent trolls have exploited several weaknesses in the patent system.<sup>195</sup> Additionally, studies indicate that troll behavior has a negative impact on innovation,<sup>196</sup> a result at odds with the main functions of the patent system: to protect inventors and spur innovation.<sup>197</sup>

#### 1. Trolls Are Changing the Landscape of Patent Litigation

Because patent trolls do not produce goods with the patents they hold, they have an advantage over those who do manufacture goods as they are

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185. *Id.*

186. *Id.* This office building was located two doors away from the federal courthouse for the Eastern District of Texas. *Id.*; see also *infra* Part II.B.2.c (discussing filing concentration in the Eastern District of Texas).

187. See *When Patents Attack!*, *supra* note 6.

188. *Id.*

189. See *When Patents Attack . . . Part Two!*, *THIS AM. LIFE* (May 31, 2013), <http://www.thisamericanlife.org/radio-archives/episode/496/when-patents-attack-part-two> [http://perma.cc/AP4X-FNLC]. However, Intellectual Ventures is known to have one of the strictest nondisclosure agreements in the Silicon Valley, so NPR's attempts to interview any of the defendants were unsuccessful. See *When Patents Attack!*, *supra* note 6.

190. See *When Patents Attack . . . Part Two!*, *supra* note 189.

191. *Id.*

192. *Id.*

193. See *When Patents Attack!*, *supra* note 6.

194. See *infra* Part II.B.1.

195. See *infra* Part II.B.2.

196. See *infra* Part II.B.3.

197. See *supra* Part I.B.

not subject to countersuits.<sup>198</sup> During litigation between two goods-producing companies, the parties often settle their claims by cross-licensing.<sup>199</sup> However, because trolls do not manufacture anything, they run no risk of infringing others' patents, which often leads to uneven negotiating power in litigation.<sup>200</sup>

In addition to uneven negotiating power, litigation involving patent trolls is frequently marred by asymmetrical financial burdens. Often working with lawyers under a contingency agreement, trolls can send hundreds of demand letters asserting infringement at relatively low cost and then simply pay the lawyer's fees on whichever assertions are successful.<sup>201</sup> They often use timing tactics by waiting to assert infringement claims until after a potential defendant's product has been widely commercialized.<sup>202</sup> This allows patent trolls to threaten litigation at a time when the defendant's cost of changing its product is too high, so the defendant is pressured into settling the claim.<sup>203</sup> Additionally, a troll often asserts multiple claims against a defendant to increase the cost of discovery and preparation, but will drop its weaker claims when it gets closer to trial.<sup>204</sup>

Patent trolls need not worry themselves with reputational harms, disruption to a product line, and other indirect costs.<sup>205</sup> Because trolls do not make products but rather have a business based purely on asserting infringement claims, their public image is not a concern.<sup>206</sup> Well-known companies that make consumer products, on the other hand, have an interest in avoiding a reputation of victimizing others.<sup>207</sup> Additionally, trolls do not face the risk that an injunction could halt sales of an entire line of products, which may be essential for a company to continue to remain competitive in the marketplace.<sup>208</sup> Companies may face other indirect costs in defending against a troll, including lost productivity from employees diverting their

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198. See Goldberg, *supra* note 36, at 5 (noting that "PAEs generally face little or no possibility of liability from counterclaims").

199. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 5 ("Rival makers of complex products are likely to be infringing each other's patents, so they have an incentive to settle competing infringement cases by cross-licensing, rather than engaging in expensive legal battles that do not add to society's stock of scientific knowledge.").

200. See *id.* (noting that "a PAE has no rival product, so it can't be counter-sued").

201. See *id.* at 5-6; see also Goldberg, *supra* note 36, at 4 (noting that "PAEs face little risk in pursuing an infringement claim").

202. See Goldberg, *supra* note 36, at 5.

203. See *id.*

204. See *id.*

205. See FTC & U.S. DEP'T OF JUSTICE, *supra* note 7, at 9; Julie Brill, Comm'r, FTC, Introductory Remarks at the CEA Innovation Policy Summit, Patent Litigation Reform: Who Are You Calling a Troll? 3 (Jan. 8, 2014), [https://www.ftc.gov/system/files/documents/public\\_statements/191751/140108patentlitigation.pdf](https://www.ftc.gov/system/files/documents/public_statements/191751/140108patentlitigation.pdf) (observing that trolls "have few of the reputational concerns that might deter a brand-conscious company from appearing to victimize other innovators or inadvertent infringers") [<https://perma.cc/7DEF-YHJQ>].

206. See Goldberg, *supra* note 36, at 5.

207. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 5.

208. See Goldberg, *supra* note 36, at 5; see also *infra* Part II.B.4 (discussing the anticompetitive nature of patent trolls).

time and attention to a lawsuit.<sup>209</sup> An analysis of these litigation tactics led the FTC to assert, “[W]e can see how PAEs have really changed this dynamic[] and made it economical both to bring suit, as well as to settle a suit.”<sup>210</sup>

## 2. Trolls Can Take Advantage of Weaknesses in the Patent System

There are numerous areas in current patent law that trolls exploit to their advantage, including several stemming from congestion at the USPTO.<sup>211</sup> Additionally, trolls enjoy many procedural benefits under current law.<sup>212</sup> These weak areas of patent law are strong tools for patent trolls, and they highlight the need for increased reform.

### a. High Volume at the USPTO

In the last few years, the USPTO has received an unprecedented number of patent applications. Between 2010 and 2012, the office received an average of 540,000 applications per year.<sup>213</sup> Between 2000 and 2002, the USPTO’s average number of applications per year was 340,000; between 1990 and 1992, it was only 180,000.<sup>214</sup> Because it is receiving so many more applications, the USPTO is issuing more patents now than in previous years.<sup>215</sup> However, more patents does not mean more *good* patents; more likely, the increased number of patent grants has led to the existence of far more overly broad or weak patents.<sup>216</sup> Gary Reback, a Silicon Valley antitrust and intellectual property lawyer, suggests that there may be financial motives behind this increase.<sup>217</sup> Because the USPTO receives fees when it grants a patent, in recent years it has relished its role as “a government profit center.”<sup>218</sup> In fact, Reback notes, “[T]he USPTO started openly advocating that its performance be measured by the amount that it

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209. See Goldberg, *supra* note 36, at 5; see also COALITION FOR PATENT FAIRNESS, *supra* note 70, at 4 (“Every hour that a scientist, engineer or software developer spends reviewing and producing documents for litigation, or preparing for or participating in a deposition, or helping lawyers figure out how to defend or whether to settle a PAE suit, is an hour that could have been spent inventing a better product.”).

210. FTC & U.S. DEP’T OF JUSTICE, *supra* note 7, at 10.

211. See *infra* Part II.B.2.a–b.

212. See *infra* Part II.B.2.c.

213. See Goldberg, *supra* note 36, at 3.

214. *Id.*

215. *Id.*

216. See Gary L. Reback, *Patently Absurd*, FORBES (June 24, 2002), <http://www.forbes.com/asap/2002/0624/044.html> (“Abusers of the patent system have been aided and abetted by the USPTO. At best, the office has abdicated its role in forming patent policy. More accurately, the office has concluded, without the benefit of analysis, that more patents are better for society. In fact, every patent issued comes at significant economic cost. Usually, a company needs to make better products more cheaply to succeed. But as an incentive to innovate, a patent holder gets a free pass from the rigors and challenges of competition.”) [<http://perma.cc/YPZ7-PUVF>].

217. *Id.*

218. *Id.*



contributed to the public coffers.”<sup>219</sup> He also points out that economists have shown that patents may hinder the introduction of new products in certain situations.<sup>220</sup>

The U.S. Department of Commerce estimates that the USPTO has a backlog of more than 750,000 patent applications.<sup>221</sup> This number is twice as great as it was one decade ago.<sup>222</sup> Additionally, the average wait time between the filing of a patent application and its final disposition is thirty-four months.<sup>223</sup> The Department of Commerce notes that delays are “particularly problematic for startups with high growth potential.”<sup>224</sup> The significant delays due to backlog at the USPTO can hinder these companies from obtaining financing in the crucial early stages of investment.<sup>225</sup> Additionally, one study conducted by the U.K. Intellectual Property Office, focusing on all major patent systems across the world, found that these types of patent delays often result in “foregone innovation,” which can cost the economy billions of dollars a year.<sup>226</sup>

### *b. Low-Quality Patents*

Many point to low-quality patents as the primary defect of the current patent system. These include overly broad patents, many of which are software patents, as well as patents being issued for the same invention.

It is easy to see why an inventor would prefer a broad patent—the wider the net of protected subject matter is cast, the more rights the patent owner can claim.<sup>227</sup> However, the grant of overly broad patents is problematic because these patents often fail to meet the statutory requirement of nonobviousness.<sup>228</sup>

Many note that a majority of software patents are vague or overly broad, making it difficult for others to discern what they cover.<sup>229</sup> Patent trolls make a business out of capitalizing on this uncertainty. According to one study, 82 percent of defendants sued by patent trolls were sued on the basis

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219. *Id.*

220. *Id.*

221. See ARTI RAI ET AL., U.S. DEP’T OF COMMERCE, PATENT REFORM: UNLEASHING INNOVATION, PROMOTING ECONOMIC GROWTH & PRODUCING HIGH-PAYING JOBS 5 (2010), [http://2010-2014.commerce.gov/sites/default/files/documents/migrated/Patent\\_Reform-paper.pdf](http://2010-2014.commerce.gov/sites/default/files/documents/migrated/Patent_Reform-paper.pdf) [<http://perma.cc/79NW-YEVC>].

222. *Id.*

223. *Id.* at 6.

224. *Id.* at 5.

225. *Id.*

226. *Id.* (citing LONDON ECON., ECONOMIC STUDY ON PATENT BACKLOGS AND A SYSTEM OF MUTUAL RECOGNITION—FINAL REPORT TO THE INTELLECTUAL PROPERTY OFFICE (2010), <http://www.ipo.gov.uk/p-backlog-report.pdf> [<http://perma.cc/V8ET-2KQD>]).

227. See Goldberg, *supra* note 36, at 3 (“In part, patent applications are inherently ambiguous because applicants intentionally use vague or expansive terms to define what they have invented. Their goal is to claim the broadest property right possible.”).

228. See RAI ET AL., *supra* note 221, at 5 (defining low-quality patents as those “that are obvious, overly broad, or unclear”); see also *supra* Part I.A (discussing the patent system’s filing requirements).

229. See Samuels, *supra* note 138.

of a software patent, compared to 30 percent of defendants sued by non-trolls.<sup>230</sup> Software-patent litigation is also problematic because it can deter innovation and present economic issues.<sup>231</sup> Julie Brill, a commissioner of the FTC, reported that the FTC “found that trivial and overbroad patents—including software and business method patents—can undermine competition, with no offsetting benefits to consumers, by leading a competitor to forgo research and development in an area the patent supposedly covers, deterring follow-on innovation and new market entry.”<sup>232</sup>

Because of rapid technological growth, a single product today can incorporate the use of thousands of patents.<sup>233</sup> Therefore, in ensuring efficient licensing, the scope of these patents must be clearly defined. According to the FTC, an overly broad or unclear patent harms competition because “it is much more difficult to license and cross-license patents in a manner that promotes innovation and competition.”<sup>234</sup> Patent trolls have exploited this growth in technology and the unclear boundaries of software patents.<sup>235</sup>

Patent trolls also have exploited other areas of legal uncertainty surrounding software patents. First, because of the vague boundaries of these patents, it becomes difficult for defendants to predict whether the patent will be invalidated in court.<sup>236</sup> Additionally, because litigation is expensive, defendants usually find it more economical to pay the licensing fees for these weak patents than to challenge them in court.<sup>237</sup> According to the Department of Commerce, “[L]itigation and . . . licensing costs represent a significant tax on innovation.”<sup>238</sup>

Another problem arises when patents are issued for technologies that have already been patented. NPR interviewed David Martin, who runs the company M-CAM—which governments, businesses, and other entities

230. See Colleen V. Chien & Aashish R. Karkhanis, *Functional Claiming and Software Patents* (Santa Clara Univ. Legal Studies, Research Paper No. 6-13, 2013), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2215867](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2215867) [<http://perma.cc/JV6R-YG5B>].

231. See RAI ET AL., *supra* note 221, at 5 (stating that “some economists have argued that patent quality in technological areas such as software may have been so low during certain time periods that the litigation costs of defending against dubious patents exceeded the innovation benefits offered by high-quality patents”).

232. See Brill, *supra* note 205, at 2.

233. By one estimate, there may be as many as 250,000 patents relevant to a smartphone. Steve Lohr, *Apple-Samsung Case Shows Smartphone As Legal Magnet*, N.Y. TIMES (Aug. 25, 2012), [http://www.nytimes.com/2012/08/26/technology/apple-samsung-case-shows-smartphone-as-lawsuit-magnet.html?\\_r=0](http://www.nytimes.com/2012/08/26/technology/apple-samsung-case-shows-smartphone-as-lawsuit-magnet.html?_r=0) [<http://perma.cc/FP5L-YMMC>].

234. See Brill, *supra* note 205, at 3.

235. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 2 (“Because of rapid technological change and the special characteristics of software, it has been hard to define clear boundaries for patents, and hard to set an appropriate bar for non-obviousness.”).

236. See Rajkumar Vaikhari, *The Effect of Patent Trolls on Innovation: A Multi-Jurisdictional Analysis*, 1 INDIAN J. INTELL. PROP. L. 33, 40 (2008), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1320553](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1320553) [<http://perma.cc/VM6T-Z46E>].

237. See FTC & U.S. DEP’T OF JUSTICE, *supra* note 7, at 5.

238. RAI ET AL., *supra* note 221, at 6. The Department of Commerce also observes that “[d]elay, uncertainty, and poor quality . . . ultimately make private investments in innovation less likely and undermine the potential for economic growth and job creation.” *Id.* at 4.

hired to evaluate patent quality—for the *This American Life* story. Martin has testified before Congress that 30 percent of U.S. patents are issued for products that already have been invented.<sup>239</sup> This poses a problem in the enforcement of patents because there may be more than one patent holder asserting rights in the same technology.

*c. Filing Concentration in Certain Districts*

Another layer contributing to the complexity of the modern patent system is the concentration of patent cases in just a few federal district courts. Lex Machina reported a 12.4 percent increase in new patent cases filed from 2012 (5418 new cases) to 2013 (6092 new cases).<sup>240</sup> The report also found that these cases tend to be extremely concentrated in two respects: in the district courts that hear them and in the judges within those districts who preside over them.<sup>241</sup> In 2013, 1495 cases were filed in the Eastern District of Texas, and 1336 cases were filed in the District of Delaware.<sup>242</sup> Nearly 25 percent of patent suits in 2013 were filed in the Eastern District of Texas.<sup>243</sup> Additionally, within the Eastern District of Texas in 2013, one judge, Judge Gilstrap, heard 941 cases—63 percent of that district's patent cases that year.<sup>244</sup>

Commentators offer several explanations for the high filing concentration in the Eastern District of Texas. Some note that juries in this part of Texas are notoriously plaintiff friendly, especially to patent owners trying to win a large verdict.<sup>245</sup> Others explain that patent litigators were originally just looking for a district without many criminal prosecutions, as those cases take precedent in the federal court system over civil cases.<sup>246</sup> In a similar vein, some point out that the Eastern District's quick litigation timetable enables trolls to pressure defendants to settle.<sup>247</sup>

Another possible factor is the district's local practices that may favor patent trolls. Specifically, parties must seek the court's permission before

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239. See *When Patents Attack!*, *supra* note 6.

240. OWEN BYRD & BRIAN HOWARD, LEX MACHINA, 2013 PATENT LITIGATION YEAR IN REVIEW I (2014).

241. See *id.* at 2–7.

242. See *id.* at 2–3 (noting, however, that only twenty-five cases went to trial in each of these districts in 2013).

243. See *id.* at 1–2.

244. *Id.* at 6. The next highest number of cases heard by a single judge in the Eastern District of Texas was 263. *Id.*

245. See *When Patents Attack!*, *supra* note 6.

246. See *id.* (noting that “sleepy Marshall, Texas,” provided a venue “with fewer criminals to prosecute”).

247. See Daniel Nazer & Vera Ranieri, *Why Do Patent Trolls Go to Texas? It's Not for the BBQ*, ELEC. FRONTIER FOUND. (July 9, 2014), <https://www.eff.org/deeplinks/2014/07/why-do-patent-trolls-go-texas-its-not-bbq> [https://perma.cc/B7SU-UYV]. Some commentators note, however, that while the quick litigation timetable may have been true at one point in time, this is no longer the case, and parties may face lengthy wait times in going to trial. See Joe Mullin, *Why East Texas Courts Are Back on “Top” for Patent Lawsuits*, ARS TECHNICA (Jan. 16, 2013, 10:30 PM), <http://arstechnica.com/tech-policy/2013/01/east-texas-courts-are-back-on-top-for-patent-lawsuits/> (noting that “[p]atent suits filed in Texas since 2008 typically take two to three years to reach trial”) [http://perma.cc/7AU9-SC8M].

submitting a motion for summary judgment.<sup>248</sup> The Electronic Frontier Foundation, for one, criticizes this practice for not only its inconsistency with the Federal Rules of Civil Procedure,<sup>249</sup> but also for the district's "refusal . . . to end meritless cases before trial."<sup>250</sup> Thus, defendants in the Eastern District of Texas face an additional hurdle in having a motion for summary judgment decided.<sup>251</sup> Additionally, a defendant whose summary judgment motion is not heard could face exorbitant trial costs, which may encourage a settlement even though the troll's patent is invalid.<sup>252</sup>

The Lex Machina study also reported that the ten plaintiffs who filed the most new cases in the United States in 2013 were all patent trolls.<sup>253</sup> The top three plaintiffs filed 137, 131, and 117 new cases, respectively.<sup>254</sup> Many of these companies buy office space in Texas to establish jurisdiction in the district.<sup>255</sup> While the joinder provisions of the AIA were intended to prevent forum shopping,<sup>256</sup> Lex Machina's data suggests that trolls are still fully capable of choosing preferential venues even in the post-AIA landscape.

### 3. Patent Trolls Can Harm Innovation

While promoting innovation is a primary goal of patent protection, patent-troll behavior has a negative effect on innovation. According to the White House, "Even if patent assertion entities do not prevail in the courtroom, their actions can significantly reduce incremental innovation while litigation is ongoing, a situation that can persist for years."<sup>257</sup> Companies sued by patent trolls must allocate resources to defensive

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248. See *Local Rules*, U.S. DIST. COURT FOR THE E. DIST. OF TEX., [http://www.txed.uscourts.gov/cgi-bin/view\\_document.cgi?document=19741](http://www.txed.uscourts.gov/cgi-bin/view_document.cgi?document=19741) (last visited Nov. 27, 2015) ("Prior to filing any summary judgment motion, . . . the parties must submit a letter brief . . . seeking permission to file the motion.") [<http://perma.cc/8Z5E-A9Y5>].

249. Rule 56(a) provides the following:

A party may move for summary judgment, identifying each claim or defense—or the part of each claim or defense—on which summary judgment is sought. The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law. The court should state on the record the reasons for granting or denying the motion.

FED. R. CIV. P. 56(a).

250. See Nazer & Ranieri, *supra* note 247.

251. See *id.*; see also Mullin, *supra* note 247 (stating that "defendants are very unlikely to win a case on summary judgment," a quality making the Eastern District of Texas "perennially attractive to patent-holders").

252. See Nazer & Ranieri, *supra* note 247.

253. See BYRD & HOWARD, *supra* note 240, at 8. The study opted to use the term "patent monetization entities" instead of PAEs or patent trolls, but the defined category covers the same entities.

254. *Id.*

255. See *supra* Part II.A (discussing NPR's visit to an unoccupied office of a suspected troll shell company).

256. See *supra* Part I.C.1.a.

257. See EXEC. OFFICE OF THE PRESIDENT, *supra* note 7, at 10. The report also notes that PAEs "pursu[e] legal action in a way that does not increase incentives for innovation, and in fact reduces these incentives and complicates normal business operation." *Id.* at 6.

strategies—funds that otherwise would have been spent on developing technology.<sup>258</sup> Litigation costs thus hinder research and development<sup>259</sup> (R&D). Without litigation spending, companies could invest more in R&D to create new patentable inventions, resulting in what the U.S. Department of Commerce calls “a virtuous cycle of innovation, growth, and additional innovation.”<sup>260</sup>

Several studies published in the last two years aim to quantify the impact of patent trolls on R&D at different types of companies. All find a tangible impact.

*a. Recent Studies Provide Concrete Evidence  
of a Negative Impact on Innovation*

Several recent studies indicate the damage that patent trolls have on innovation. One study, conducted by Harvard University and the University of Texas, aimed to discover how trolls affect innovation at publicly traded companies.<sup>261</sup> As an initial matter, the researchers concluded that “NPEs on average behave as patent trolls,”<sup>262</sup> so the study generally uses the terms synonymously. The study found that “as NPEs become effective at bringing opportunistic lawsuits, they can inefficiently crowd out some firms that would otherwise produce welfare-enhancing innovations without engaging in infringement.”<sup>263</sup> The study also determined that certain types of firms, including “[f]irms with large cash balances and firms with positive shocks to their cash holdings,” are more likely to be targeted by NPEs.<sup>264</sup> The study found that “losing to an NPE has a large and negative impact on future R&D activities,” with the study’s results showing that “firms that lose to a large aggregator NPE . . . invest significantly less in R&D in the years following the loss . . . relative to firms that were also targeted by NPEs but won.”<sup>265</sup> Additionally, patent trolls are more likely to sue companies that have a small legal department or are tied up in other litigation, which may encourage companies to spend

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258. *See id.* at 9 (reporting that defense costs in patent-troll litigation can range from “\$650,000 for smaller cases, to a median of over \$5 million per case where the amount in controversy exceeds \$25 million,” which has “added significant costs to the innovation ecosystem and sapped investments in research and development, causing great harm to society”).

259. *See* Vaikhari, *supra* note 236, at 36 (“The legal costs associated with litigation initiated by patent trolls also reduce the funding available for innovation, and these legal costs can rise to quite significant amounts. Personnel who would otherwise be engaged in promoting innovation throughout the organization will have their attention diverted elsewhere by the litigation, which will consume the human resources of the technology developers in addition to the financial resources.”).

260. RAI ET AL., *supra* note 221, at 2.

261. Lauren Cohen et al., *Patent Trolls: Evidence from Targeted Firms* (Harvard Bus. Sch., Working Paper No. 15-002, 2015), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2464303](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2464303) [<http://perma.cc/WM28-UDRJ>].

262. *See* Cohen et al., *supra* note 261, at 5.

263. *Id.* at 34.

264. *Id.* at 18.

265. *Id.* at 31.

money on hiring lawyers that could instead be spent on developing new technology.<sup>266</sup> Companies may thus invest less in new technologies.<sup>267</sup> They may also make settlement payments to patent trolls to avoid the time and expense of litigation.<sup>268</sup>

Additionally, Catherine Tucker, a researcher at the Massachusetts Institute of Technology, studied the effects of patent-troll litigation on medical-imaging businesses.<sup>269</sup> Tucker was able to compare the innovative behavior of firms that made otherwise similar products; the only difference among firms was whether they had been the target of patent litigation.<sup>270</sup> Tucker focused on the patent litigation instituted by a company called Acacia, “the seventh-largest patent-assertion entity in terms of its patent holdings,” which is known for the aggressive litigation of its patent portfolio.<sup>271</sup> Acacia’s litigation centered on its 2005 purchase of two patents for medical-imaging systems.<sup>272</sup> Tucker found evidence of “a large reduction in sales of imaging software products affected by the patent litigation relative to other similar products that were produced by the same firms.”<sup>273</sup> Firms that were not the target of patent litigation experienced “no such significant change in sales” of their similar imaging software product.<sup>274</sup> Tucker explained that the reason for the disparate sales figures stems from the fact that firms facing litigation did not release new models

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266. *Id.* at 4.

267. See Timothy B. Lee, *New Study Shows Exactly How Patent Trolls Destroy Innovation*, VOX (Aug. 19, 2014, 7:20 AM), <http://www.vox.com/2014/8/19/6036975/new-study-shows-exactly-how-patent-trolls-innovation> (“That’s a problem because it creates a disincentive for larger companies to make risky investments in cutting-edge technologies. Trolls may target a company for patent infringement long before a product begins turning a profit. Since there’s no guarantee that new technology products ever will turn a profit, firms may be deterred from investing in high-tech products in the first place.”) [<http://perma.cc/884Q-V5AA>].

268. One recent example of this is Adam Carolla’s settlement with Personal Audio, a company that sued Carolla to claim royalties on his podcast. See Jason Abbruzzese, *Adam Carolla Settles Podcast Suit with ‘Patent Troll,’ but the War Continues*, MASHABLE (Aug. 18, 2014), <http://mashable.com/2014/08/18/adam-carolla-patent-case-settle> [<http://perma.cc/YB67-BF5J>]. The Electronic Frontier Foundation, however, expressed disappointment with Carolla’s decision to settle. The nonprofit wrote, “By settling now, Carolla gives up the chance to make Personal Audio pay his fees. If a defendant wins on the merits, it can get fees in extraordinary cases. Winning fees would be a huge deterrent to future litigation from Personal Audio.” Daniel Nazer, *The Good, the Bad, and the Ugly of Adam Carolla’s Settlement with the Podcasting Troll*, ELEC. FRONTIER FOUND. (Aug. 18, 2014), <https://www.eff.org/deeplinks/2014/08/good-bad-and-ugly-adam-carollas-settlement-podcasting-troll> [<https://perma.cc/DFD3-MS9C>].

269. Catherine Tucker, *Patent Trolls and Technology Diffusion: The Case of Medical Imaging* (Mass. Inst. of Tech., Working Paper, 2014), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1976593](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1976593) [<http://perma.cc/V88L-2V5J>].

270. *Id.* at 3. Tucker summarized the focus of her study as “the effect of patent litigation on the sales of affected products relative to similar products made by the exact same firms.” *Id.*

271. *Id.* at 5–6.

272. *Id.* at 6. The lawsuit was filed in the Eastern District of Texas against a number of companies including GE Healthcare, Fujifilm Medical Systems, and Philips Electronics. *Id.* at 7.

273. *Id.* at 3.

274. *Id.*

or update their existing products during the period of litigation.<sup>275</sup> Thus, the firms facing litigation did not engage in product innovation while defending themselves against patent-infringement claims.<sup>276</sup> Tucker stressed that the whole period of litigation significantly hinders innovation, often for lengthy amounts of time, and she explained that the products of target firms may become increasingly less desirable due to the slowed or halted product innovation.<sup>277</sup>

A 2013 study confirmed that patent-troll litigation has a deleterious effect on small businesses.<sup>278</sup> The researchers found that small firms not only have higher rates of litigation as alleged infringers, but that litigation also puts a greater strain on small firms than on large firms.<sup>279</sup> This can, therefore, lead to more settlements, as smaller firms have a financial incentive to avoid litigation.<sup>280</sup>

*b. Patent Trolls Are Not Innovators*

Innovation plays a major role in the economy of the United States—it creates new jobs<sup>281</sup> and stimulates economic growth.<sup>282</sup> One report estimates that innovation accounts for 75 percent of post-World War II growth in the United States.<sup>283</sup> However, because trolls do not create products or use the patents they own in any manner other than extracting license fees and initiating litigation, their business model does not spawn further innovation, one of the primary purposes of patent law.<sup>284</sup> Additionally, they generally acquire existing patents rather than inventing new technologies themselves.<sup>285</sup> It is well established in Supreme Court jurisprudence that a valid patent requires “an innovation for which society is truly indebted to the efforts of the patentee.”<sup>286</sup> Thus, while patent trolls utilize many advantages and protections that the patent system offers, they contribute no such benefit to society due to their lack of innovation.

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275. *Id.* at 4.

276. *Id.*

277. *Id.*

278. See James Bessen & Michael J. Meurer, *The Patent Litigation Explosion*, 45 LOY. U. CHI. L.J. 401, 425 (2013).

279. *Id.*

280. See *supra* Part II.B.1.

281. Additionally, studies show that innovation produces not just jobs, but produces *high-paying* jobs. See RAI ET AL., *supra* note 221, at 3.

282. *Id.* at 2. Innovation also “helps decrease the price of many existing products, . . . improves their quality[,] . . . creates opportunities for investment in altogether new types of capital equipment, such as robotics[,] [and] . . . promotes efficiency by generating better ways of working, manufacturing, [and] selling.” *Id.* at 3.

283. See *id.* at 2.

284. See *infra* Part I.B (discussing patent law’s policy goals).

285. See COALITION FOR PATENT FAIRNESS, *supra* note 70, at 2.

286. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 330–31 (1945) (further noting that “[t]he primary purpose of our patent system is not reward of the individual but the advancement of the arts and sciences” and that the “disclosure of [these] advances in knowledge . . . be beneficial to society”).

#### 4. Patent Trolls Exhibit Anticompetitive Behavior

Trolls may deter competition in various ways. In a 2011 report, the FTC found that trolls' assertions of patents impose costs that threaten to "distort competition in technology markets, raise prices and decrease incentives to innovate."<sup>287</sup> Thus, to address this anticompetitive behavior, lawmakers must balance the policy goals of two bodies of law: patent law, which aims to foster innovation by granting the inventor a temporary monopoly, and antitrust law, which aims to promote competition in the marketplace and protect consumers.<sup>288</sup> In the last few years, the FTC has expressed interest in the patent-troll problem. While some have called for the antitrust authorities to play an increased role in policing trolls, it is unclear what their role will be going forward.

##### *a. What Is Antitrust Law's Role in the Patent System?*

Antitrust law seeks to ensure competition in the marketplace and protect consumers.<sup>289</sup> Lawmakers further these goals by regulating business practices and penalizing anticompetitive behavior.<sup>290</sup> The main statutes that govern antitrust law are the Sherman Act, the Clayton Act, and the Federal Trade Commission Act.<sup>291</sup> The Sherman Act, passed in 1890, provides the foundation for antitrust law—it prohibits certain business practices that Congress deemed anticompetitive.<sup>292</sup> The Clayton Act, passed in 1914, builds upon the Sherman Act by forbidding several specific practices not mentioned in the Sherman Act.<sup>293</sup> For example, the Clayton Act governs mergers and acquisitions, a topic not explicitly covered by the Sherman Act.<sup>294</sup> The Federal Trade Commission Act bans "unfair methods of competition" and "unfair or deceptive acts or practices."<sup>295</sup> It also established the FTC, which consists of five commissioners appointed by the

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287. FTC, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 71 (2011), <http://www.ftc.gov/os/2011/03/110307patentreport.pdf> [<http://perma.cc/G4F2-PV7W>].

288. See Reback, *supra* note 216 ("The tension between the patent as a way to stimulate invention and the patent as a weapon against legitimate competition is inherent in the system.").

289. See *The Antitrust Laws*, FTC, <http://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/antitrust-laws> (last visited Nov. 27, 2015) ("[F]or over 100 years, the antitrust laws have had the same basic objective: to protect the process of competition for the benefit of consumers, making sure there are strong incentives for businesses to operate efficiently, keep prices down, and keep quality up.") [<http://perma.cc/PV7B-VJAC>].

290. See *id.*

291. See *id.* ("With some revisions, these are the three core federal antitrust laws still in effect today.").

292. See 15 U.S.C. §§ 1–7 (2012).

293. See *id.* §§ 12–27.

294. See *id.* § 18.

295. *Id.* § 45(a)(1).



President.<sup>296</sup> Together, these statutes promote antitrust law's policy goals of furthering marketplace competition and consumer protection.<sup>297</sup>

Balancing the policy goals of patent law and competition law is not a new concept. Over two centuries ago, Thomas Jefferson voiced concerns about patent law's temporary monopolies. The Supreme Court has summarized Jefferson's qualms: "[T]he underlying policy of the patent system that 'the things which are worth to the public the embarrassment of an exclusive patent,' as Jefferson put it, must outweigh the restrictive effect of the limited patent monopoly."<sup>298</sup> The Federal Circuit also has described these two bodies of law as having a reciprocal relationship: "Intellectual property rights do not confer a privilege to violate the antitrust laws. 'But it is also correct that the antitrust laws do not negate the patentee's right to exclude others from patent property.'"<sup>299</sup> Thus, to address the patent-troll problem, lawmakers must establish guidelines that prevent trolls from abusing the system without punishing innovators or harming competition.

The Federal Circuit has long recognized that "the aims and objectives of patent and antitrust laws . . . are actually complementary, as both are aimed at encouraging innovation, industry and competition."<sup>300</sup> Through the existence of a competitive market, companies are constantly motivated to innovate.<sup>301</sup> In a workshop sponsored by the USPTO, FTC, and Department of Justice (DOJ), Christine Varney—the Assistant Attorney General for the Antitrust Division of the DOJ at the time—discussed these overlapping policies, explaining that "[b]oth disciplines promote dynamic

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296. *See id.* § 41.

297. *See The Antitrust Laws, supra* note 289.

298. *Graham v. John Deere Co.*, 383 U.S. 1, 10–11 (1966). The Court further elaborated on Jefferson's precocious views of the patent system:

The patent monopoly was not designed to secure to the inventor his natural right in his discoveries. Rather, it was a reward, an inducement, to bring forth new knowledge. The grant of an exclusive right to an invention was the creation of society—at odds with the inherent free nature of disclosed ideas—and was not to be freely given. Only inventions and discoveries which furthered human knowledge, and were new and useful, justified the special inducement of a limited private monopoly. Jefferson did not believe in granting patents for small details, obvious improvements, or frivolous devices. His writings evidence his insistence upon a high level of patentability.

*Id.* at 9.

299. *In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322, 1325 (Fed. Cir. 2000) (quoting *Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1362 (Fed. Cir. 1999)); *see also* *Abbott Labs. v. Brennan*, 952 F.2d 1346, 1354 (Fed. Cir. 1991) (noting that "[t]he commercial advantage gained by new technology and its statutory protection by patent do not convert the possessor thereof into a prohibited monopolist").

300. *Atari Games Corp. v. Nintendo of Am., Inc.*, 897 F.2d 1572, 1576 (Fed. Cir. 1985) (citing *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 876–77 (Fed. Cir. 1985)).

301. *See* Christine A. Varney, Assistant Attorney Gen. for the Antitrust Div. of the Dep't of Justice, Remarks As Prepared for the Joint Workshop of the U.S. Patent and Trademark Office, the Federal Trade Commission, and the Department of Justice, Promoting Innovation Through Patent and Antitrust Law and Policy 2 (May 26, 2010), <http://www.justice.gov/atr/public/speeches/260101.pdf> (noting that "this [competitive] environment is what pushes companies to constantly innovate and allows them to profit when they do") [<http://perma.cc/K6ZU-735T>].

efficiency.”<sup>302</sup> She continued by observing that patent law’s “system of property rights” and antitrust law’s “market rules” work together to “create appropriate incentives for invention, innovation, and risk taking—delivering the greatest returns for society not just for today, but tomorrow as well.”<sup>303</sup> Antitrust law, she explained, respects the role that patents play in furthering innovation, but also provides certain rules about how patent monopolies operate in the marketplace.<sup>304</sup>

A violation of the antitrust laws may occur in certain instances in a patent case. For example, antitrust allegations may arise where a patent is fraudulently obtained and is then asserted in an anticompetitive manner.<sup>305</sup> Additionally, a patent holder may violate section 2 of the Sherman Act<sup>306</sup> if he initiates a series of infringement actions in bad faith and has exclusionary power in the relevant market.<sup>307</sup> In a 2013 opinion, the Supreme Court made clear that the FTC can sue patent abusers on antitrust grounds, noting, “[T]his Court’s precedents make clear that patent-related settlement agreements can sometimes violate the antitrust laws.”<sup>308</sup> In recent years, however, the antitrust rules only have been used to a limited extent in combating trolls.<sup>309</sup>

Antitrust and patent authorities alike have an interest in the outcome of patent cases. For example, the government submitted an amicus curiae brief in *eBay*.<sup>310</sup> The brief explained, “[B]ecause the grant or denial of patent injunctions may directly affect competition and innovation in the marketplace, this case implicates questions of core concern to both the Federal Trade Commission . . . and the Antitrust Division of the United States Department of Justice.”<sup>311</sup> Additionally, as Congress has vested the power of patent examination in the USPTO, an agency of the Department of Commerce, the government has a continuing interest in patent litigation.<sup>312</sup> When injunctive relief is cast too widely, this may impair competition when

302. *Id.*

303. *Id.* Varney further noted, “[A]ntitrust and patent law work together to create and preserve the appropriate incentives for technological progress by creating property rights and preserving competition around those rights.” *Id.* at 3.

304. *Id.* at 2–3.

305. See *Walker Process Equip., Inc. v. Food Mach. & Chem. Corp.*, 382 U.S. 172, 174 (1965) (“We have concluded that the enforcement of a patent procured by fraud on the Patent Office may be violative of § 2 of the Sherman Act provided the other elements necessary to a § 2 case are present.”).

306. Section 2 covers individuals who seek to monopolize the market. 15 U.S.C. § 2 (2012).

307. *Handgards, Inc. v. Ethicon, Inc.*, 601 F.2d 986, 993, 993 n.13 (9th Cir. 1979) (also observing that “infringement actions initiated and conducted in bad faith contribute nothing to the furtherance of the policies of either the patent law or the antitrust law”).

308. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2225 (2013).

309. See *infra* Part II.B.4.b (discussing several states that have attacked patent trolls through consumer protection laws).

310. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006); see *supra* Part I.C.2.a.

311. See Brief for the United States As Amicus Curiae Supporting Respondent at 2, *eBay*, 547 U.S. 388 (No. 05-130), <http://www.justice.gov/atr/cases/f215700/215790.pdf> [<http://perma.cc/K6C4-Z6PH>].

312. See *id.* at 1–2.

an innovative product is halted in the marketplace.<sup>313</sup> Additionally, when a troll uses the threat of an injunction or litigation to extract licensing fees, some inventors may become discouraged from innovating at all, which can slow the progress of technology as a whole.<sup>314</sup> Varney pointed out that trolls pose “a real competition problem of the kind that the Antitrust Division faces every day.”<sup>315</sup> Thus, it is not surprising that the antitrust authorities have begun to pay much closer attention to the patent-troll problem, as troll behavior raises important competition concerns.

*b. How Have Lawmakers Used Antitrust Policy to Combat Trolls?*

In the last few years, the FTC has shown great interest in the patent-troll problem. In 2012, the FTC and DOJ held a joint workshop focusing on patent trolls and their impact on innovation and competition.<sup>316</sup> The FTC and DOJ received public comments in conjunction with the workshop.<sup>317</sup> In 2013, the FTC launched an investigation into the behavior of twenty-five identified patent trolls, also seeking public comments on the issue.<sup>318</sup> Intellectual Ventures<sup>319</sup> and MPHJ Technology Investments, LLC (“MPHJ”) are two of the companies included in the investigation.<sup>320</sup> The purpose of the investigation is to examine the ways patent trolls “impact innovation and competition.”<sup>321</sup> In addition to the investigation, the FTC also proposed a study to supplement the existing literature and data on patent trolls.<sup>322</sup> One important aspect of this study is the FTC’s “unique [c]ongressional authority to collect nonpublic information, such as licensing agreements, patent acquisition information, and cost and revenue data,” giving the FTC access to important information that is unavailable to other researchers.<sup>323</sup> In November 2013, the FTC extended the public comment period through the end of 2013.<sup>324</sup>

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313. See Varney, *supra* note 301, at 13.

314. See *id.* at 14–15.

315. *Id.*

316. See generally FTC & U.S. DEP’T OF JUSTICE, *supra* note 7.

317. See Press Release, FTC, FTC Seeks to Examine Patent Assertion Entities and Their Impact on Innovation, Competition (Sept. 27, 2013), <http://www.ftc.gov/news-events/press-releases/2013/09/ftc-seeks-examine-patent-assertion-entities-their-impact> [hereinafter Press Release] [<http://perma.cc/6S7W-F5YW>].

318. See *id.*

319. See *supra* Part II.A.

320. MPHJ responded to the investigation by suing the FTC, along with its five commissioners, arguing that the FTC’s investigation violated MPHJ’s First Amendment rights. See Mike Masnick, *Patent Troll Sues the FTC, Saying It Has a First Amendment Right to Shake Down Companies Using a Scanner*, TECHDIRT (Jan. 14, 2014, 4:12 PM), <https://www.techdirt.com/articles/20140114/13300325875/patent-troll-sues-ftc-threatening-its-business-model.shtml> [<https://perma.cc/MG5Z-NJ43>]. The federal district court for the Western District of Texas dismissed MPHJ’s suit, holding that the FTC may continue its investigation. See MPHJ Tech. Invs., LLC v. FTC, 2014 U.S. Dist. LEXIS 146288, at \*14 (W.D. Tex. Sept. 16, 2014).

321. See Press Release, *supra* note 317.

322. *Id.*

323. *Id.* Under section 6(b) of the Federal Trade Commission Act, the FTC can issue subpoenas to “person[s], partnership[s], and corporation[s], engaged in or whose business

On November 6, 2014, the FTC settled its first consumer-protection lawsuit against a troll for using deceptive trade practices.<sup>325</sup> The company was MPHJ—a troll that, according to the FTC, sent demand letters to more than 16,000 companies accusing them of violating a patent for the use of document scanners connected to a computer network.<sup>326</sup> In the letters, MPHJ offered to sell these companies a license for the patent and threatened litigation if the companies refused.<sup>327</sup> The offering price for the license ranged from \$1000 to \$1200 per employee.<sup>328</sup> Additionally, the letters falsely represented how many other businesses had already paid licensing fees to MPHJ.<sup>329</sup> According to the FTC, MPHJ never intended to initiate legal action nor was it prepared to do so.<sup>330</sup> In a press release, MPHJ claimed that it intended to bring the lawsuits, but that its patents were being challenged at the time, delaying its ability to initiate litigation.<sup>331</sup> However, MPHJ agreed to the FTC’s settlement offer; MPHJ says it settled simply to avoid further hearings and appeals.<sup>332</sup> The settlement requires MPHJ, its founder, and its law firm to refrain from making false representations when asserting its patent rights.<sup>333</sup>

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affects commerce” to gain access to important information that would not otherwise be available, including details about “the organization, business, conduct, practices, management, and relation to other corporations, partnerships, and individuals.” 15 U.S.C. § 46(a)–(b) (2012).

324. See Press Release, FTC, FTC Extends Public Comment Period for Proposed Patent Assertion Entity Study Through December 16, 2013 (Nov. 22, 2013), <http://www.ftc.gov/news-events/press-releases/2013/11/ftc-extends-public-comment-period-proposed-patent-assertion> [<http://perma.cc/87GT-792J>].

325. See Edward Wyatt, *F.T.C. Settles First Case Targeting “Patent Troll”*, N.Y. TIMES (Nov. 6, 2014), [http://www.nytimes.com/2014/11/07/business/ftc-settles-first-case-targeting-patent-troll.html?\\_r=1](http://www.nytimes.com/2014/11/07/business/ftc-settles-first-case-targeting-patent-troll.html?_r=1) [<http://perma.cc/N3ER-VGT6>]; Susan Decker, *Notorious “Patent Troll” MPHJ Will Ease Tactics: FTC*, BLOOMBERG (Nov. 6, 2014, 5:30 PM), <http://www.bloomberg.com/news/2014-11-06/notorious-patent-troll-mphj-will-ease-tactics-ftc.html> [<http://perma.cc/TE7M-B6JU>].

326. See Wyatt, *supra* note 325. MPHJ targeted small and midsize companies with fewer than 100 employees. *Id.*

327. *Id.*

328. *Id.*

329. See Daniel Nazer, *Notorious Scanner Troll Settles with FTC*, ELEC. FRONTIER FOUND. (Nov. 6, 2014), <https://www.eff.org/deeplinks/2014/11/notorious-scanner-troll-settles-ftc> [<https://perma.cc/T2CZ-GVV6>]. Additionally, according to the Electronic Frontier Foundation, MPHJ set up over 100 shell companies to make its deceptive practices harder to track. *Id.*

330. See Wyatt, *supra* note 325.

331. *Id.*

332. *Id.*

333. *Id.* Under the terms of the settlement, MPHJ must not make any representations about its licensing deals with other parties “unless the representation is non-misleading” and is substantiated by “competent and reliable evidence.” Agreement Containing Consent Order at 4, *In re MPHJ Tech. Invs., LLC et al.*, FTC File No. 142-3003 (Nov. 6, 2014), <http://www.ftc.gov/system/files/documents/cases/141106mphjagree.pdf> [<http://perma.cc/5F79-NZZQ>]. Additionally, MPHJ may not make any representations regarding the initiation of lawsuits “unless at the time such representation is made, Respondents have decided to take such action . . . and rely upon competent and reliable evidence sufficient to substantiate” the threat of litigation. *Id.* at 5.

Many commentators have criticized this settlement as a mere “slap on the wrist.”<sup>334</sup> Jon Potter, the president of the Consumer Electronics Association,<sup>335</sup> stated, “This settlement doesn’t even qualify as a slap on the wrist to a company that sent demand letters to thousands of businesses—extorting money, threatening jobs, and stifling innovation.”<sup>336</sup> Pointing to the absence of both a financial punishment and an admission of guilt, some commentators have expressed doubt that this settlement will deter other trolls from engaging in the same deceptive tactics.<sup>337</sup> The Electronic Frontier Foundation, on the other hand, hopes that this case will establish the FTC’s continued role in addressing patent-troll activity.<sup>338</sup>

Before the FTC stepped in to address MPHJ’s business tactics, lawmakers in Vermont, Nebraska, and New York took action against MPHJ for its dealings within those states. In 2013, the Vermont Attorney General sued MPHJ for violating the state’s Consumer Protection Act.<sup>339</sup> This was the first time a patent troll had ever been sued by a state government.<sup>340</sup> The complaint alleged that MPHJ had violated the Consumer Protection Act through its use of “unfair” and “deceptive” trade practices.<sup>341</sup> The alleged unfair trade practices included: “[s]tating that litigation would be brought against the recipients, when Defendant was neither prepared nor likely to bring litigation”; “[t]argeting small businesses that were unlikely to have the resources to fight patent-litigation, or even to pay patent counsel”; “[s]ending letters that threatened patent-infringement litigation with no independent evidence that the recipients were infringing its patent”; and “[u]sing shell corporations in order to hide the true owners of the patents, avoid liability, and encourage quick settlements.”<sup>342</sup> The complaint also alleged that MPHJ engaged in deceptive trade practices “by making deceptive statements in the threatening letters,” which would lead consumers to believe that MPHJ “would sue the target businesses if they did not respond within two weeks,” that MPHJ “would sue the target businesses if they did not pay money,” and that MPHJ’s “licensing program

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334. See Mike Masnick, *Scanner Patent Troll Slapped on the Wrist by FTC; Told to Stop Misleading Behavior*, TECHDIRT (Nov. 7, 2014, 3:41 PM), <https://www.techdirt.com/articles/20141106/18033129073/scanner-patent-troll-slapped-wrist-ftc-told-to-stop-misleading-behavior.shtml> [https://perma.cc/UA4V-SV3D].

335. The Consumer Electronics Association is an organization composed of 2000 companies whose goal is to grow the consumer electronics industry. See *About CEA*, CONSUMER ELECS. ASS’N, <http://www.ce.org/About-CEA.aspx> (last visited Nov. 27, 2015) [http://perma.cc/N66C-NUN2].

336. See Decker, *supra* note 325.

337. See *id.*

338. See Nazer, *supra* note 329 (noting, however, “We still need broader reform to deal with low-quality patents and widespread patent trolling”).

339. Complaint at 1, *Vermont v. MPHJ Tech. Invs., LLC*, 2014 Vt. Super. LEXIS 57 (Vt. Super. Ct. May 8, 2013) (No. 282-5-13 Wncv).

340. See Joe Mullin, “Scan-to-email” Patent Troll Loses Its Lawsuit Against the FTC, ARS TECHNICA (Sept. 18, 2014, 4:00 PM), <http://arstechnica.com/tech-policy/2014/09/scan-to-email-patent-troll-loses-its-lawsuit-against-ftc/> [http://perma.cc/2MED-YBG7].

341. See Complaint at 8–10, *MPHJ Tech.*, 2014 Vt. Super. LEXIS 57 (No. 282-5-13 Wncv).

342. *Id.* at 8–9.

had received a positive response from the business community.”<sup>343</sup> In response, MPHJ tried to remove the case to federal court; both the district court and the Federal Circuit ruled that the case was properly in state court, where MPHJ is currently defending the matter.<sup>344</sup>

A few weeks after the Vermont suit was filed, the state’s governor signed into law the Bad Faith Assertions of Patent Infringement Act.<sup>345</sup> In response, MPHJ filed a separate federal court action against the state’s attorney general challenging the constitutionality of this act as well as the application of Vermont’s Consumer Protection Act in the state court action against MPHJ.<sup>346</sup> The court denied the Attorney General’s motion to dismiss MPHJ’s challenges to the Bad Faith Demand Act, reasoning that as “there has been no civil enforcement action under the [Bad Faith Assertions of Patent Infringement Act], abstention with respect to that statute is unwarranted.”<sup>347</sup> The court observed that even though MPHJ had not been accused of violating this act, “the lack of a specific threat to enforce the [law] does not deny MPHJ standing.”<sup>348</sup> The district court, however, granted the Attorney General’s motion to dismiss as it related to MPHJ’s challenges of the application of the Consumer Protection Act, noting, “The constitutionality of the statute being enforced can be determined by the state courts.”<sup>349</sup>

Nebraska was the second state to go after MPHJ. Nebraska’s Attorney General sent MPHJ’s law firm a cease-and-desist letter ordering that no infringement demands be made until the Attorney General completed an investigation into MPHJ’s alleged use of unfair or deceptive practices.<sup>350</sup> MPHJ filed a motion for a permanent injunction in the District of Nebraska, asking that the court “enjoin any further cease and desist orders or investigation by the Attorney General regarding the patent enforcement activity related to this lawsuit.”<sup>351</sup> The judge ruled that the Attorney General’s cease-and-desist letter violated MPHJ’s right to send patent letters, finding that MPHJ had a constitutional right to “threaten suit for infringement.”<sup>352</sup> The court preliminarily enjoined the Attorney General

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343. *Id.* at 9.

344. *See* Mullin, *supra* note 340.

345. *See* VT. STAT. ANN. tit. 9, § 2451 (West 2012).

346. *See generally* Complaint, MPHJ Tech. Invs., LLC v. Sorrell, 2014 WL 10119940 (D. Vt. Dec. 29, 2014) (No 2:14-cv-191).

347. MPHJ Tech. Invs., LLC v. Sorrell, 2015 WL 3505224, at \*4 (D. Vt. June 3, 2015).

348. *Id.* at \*7.

349. *Id.* at \*5.

350. Letter from David D. Cookson, Chief Deputy Attorney Gen. of Vt., to M. Brett Johnson, Partner, Farney Daniels LLP (July 18, 2013), [https://docs.google.com/file/d/0B\\_b15LgT1GHYRS00Wno2MmVPSG8/edit](https://docs.google.com/file/d/0B_b15LgT1GHYRS00Wno2MmVPSG8/edit) (“Given the significant ramifications posed to Nebraska consumers and businesses by your potentially unlawful conduct, I hereby demand that you immediately cease and desist the initiation of any and all new patent infringement enforcement efforts within the state of Nebraska pending the outcome of this office’s investigation.”) [<https://perma.cc/MJ7M-XC2Q>].

351. Memorandum Order at 2, Activision TV, Inc. v. Bruning, No. 8:13CV215, 2014 WL 1350278 (D. Neb. Apr. 4, 2014) (No. 8:13CV215).

352. *Id.* at 8 (citing *Concrete Unlimited Inc. v. Cementcraft, Inc.*, 776 F.2d 1537, 1539 (Fed. Cir. 1985)).

from enforcing the cease-and-desist letter unless he could “make a showing of bad faith.”<sup>353</sup> The court also awarded MPHJ attorneys’ fees.<sup>354</sup>

Additionally, in January 2014, New York’s Attorney General reached a settlement with MPHJ that forbids the firm from using “deceptive” business practices with New York businesses.<sup>355</sup> Under the settlement, MPHJ may only assert a patent if it has a “good faith basis for [a]sserting the patent” and has already conducted “reasonable diligence.”<sup>356</sup> MPHJ must also describe the alleged infringing activity with “reasonable specificity” and identify any party with a financial interest in the patent.<sup>357</sup> In a press release, the Attorney General’s office noted, “The requirements imposed on MPHJ in the settlement should be viewed by other patent trolls as the minimum standards that such entities seeking to contact New York businesses must follow to avoid liability for unlawful deceptive practices.”<sup>358</sup>

### *c. Anticompetitive Behavior*

Lawmakers and companies have voiced similar concerns about trolls’ anticompetitive business tactics. According to the Coalition for Patent Fairness (CPF), because trolls do not use their patents to create products or services, “they do not engage in pro-competitive cross-licensing of technology to create new products using complementary technologies.”<sup>359</sup> Additionally, trolls wait to threaten suit until a company has invested significant resources in its product line or has introduced its product to the market.<sup>360</sup> The CPF explains the purpose of this tactic: “Their goal is to maximize potential settlement value or damages, so PAEs typically threaten or file suit after the defendant has generated a significant revenue stream and after the defendant is locked in to the allegedly infringing products and technologies.”<sup>361</sup> Thus, because an injunction could potentially halt another company’s sales, trolls can use the threat of an injunction to their advantage. Further, trolls are immune from the risk of an injunction because they do not bring products to the market.<sup>362</sup>

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353. *Id.* at 14–15.

354. *Id.* at 15.

355. *See generally* Assurance of Discontinuance, *In re* Investigation by Eric T. Schneiderman, Attorney Gen. of the State of N.Y., of MPHJ Tech. Invs., LLC, No. 14-015 (Jan 13, 2014), <http://www.ag.ny.gov/pdfs/FINALAODMPHJ.pdf> [<http://perma.cc/PSQ7-TJXF>].

356. *Id.* at 12.

357. *Id.* at 13–14.

358. Press Release, N.Y. State Office of the Attorney Gen., A.G. Schneiderman Announces Groundbreaking Settlement with Abusive “Patent Troll” (Jan 14, 2014), <http://ag.ny.gov/press-release/ag-schneiderman-announces-groundbreaking-settlement-abusive-%E2%80%9Cpatent-troll%E2%80%9D> [<http://perma.cc/2UJY-2ULQ>].

359. COALITION FOR PATENT FAIRNESS, *supra* note 70, at 2.

360. *See supra* Part II.B.1.

361. COALITION FOR PATENT FAIRNESS, *supra* note 70, at 2.

362. *See supra* Part II.B.1.

In response to the FTC's solicitation for public comments after its 2012 workshop,<sup>363</sup> many companies focused their comments on trolls' anticompetitive behavior. For example, Google, Blackberry, Earthlink, and Red Hat prepared a unified submission to the FTC.<sup>364</sup> Their comments noted the numerous ways that "operating companies and PAEs interact that may implicate competition policy and our nation's antitrust laws."<sup>365</sup> The bulk of the comments narrowed in on one worrisome trend: "the outsourcing of patent enforcement by operating companies—companies that develop technology and sell products—to PAEs and the competitive implications of such activities."<sup>366</sup> Also called "privateering," this practice "amplifies the threat to innovation and competition already posed by PAEs" in several ways.<sup>367</sup> First, privateering reduces the likelihood that these companies will cross-license their patents.<sup>368</sup> If an operating company outsources its patents to a troll, the troll is then immune from patent countersuits, and so it has no incentive to cross-license with another operating company.<sup>369</sup> Additionally, operating companies work with trolls to raise their rivals' costs.<sup>370</sup> For example, they may agree to target only direct competitors of the operating company, in turn burdening rivals "with additional costs that enable the [operating] company (or its allies) to exercise market power."<sup>371</sup> The comments suggest that these "privateering" arrangements "transgress the antitrust laws," subjecting them to a number of statutory provisions.<sup>372</sup> For one, when trolls acquire patents from operating companies, these acquisitions "are subject to [s]ection 7 of the Clayton Act, as well as the Sherman Act."<sup>373</sup> Additionally, when trolls and operating companies collude to drive up rivals' costs, these schemes may also be "subject to invalidation under Sherman Act [s]ection 1 and [s]ection

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363. See *supra* Part II.B.4.b.

364. See Comments of Google, Blackberry, Earthlink & Red Hat to the Federal Trade Commission and U.S. Department of Justice on Patent Assertion Entities 1 (Apr. 5, 2013), <http://www.justice.gov/atr/public/workshops/pae/comments/paew-0049.pdf> [hereinafter Google Comments] ("We believe that many PAE activities are inconsistent with the fundamental goal of the patent system.") [<http://perma.cc/LXH6-WWMU>].

365. *Id.* at 11.

366. *Id.* at 2.

367. *Id.*; see also Mark S. Popofsky & Michael D. Laufert, *Antitrust Attacks on Patent Assertion Entities*, 79 ANTITRUST L.J. 445, 455 (2014) ("So-called privateering reflects [a] set of PAE activities that can raise significant antitrust concerns. Privateering involves operating companies out-sourcing strategic patent enforcement to PAEs. For example, an operating company might transfer a patent portfolio to a PAE and provide the PAE a list of priority infringement targets, most likely comprised of the operating company's closest rivals. More subtly, an operating company might transfer patents subject to conditions that induce the PAE to target its rivals.").

368. See Google Comments, *supra* note 364, at 2.

369. *Id.* at 2–3.

370. *Id.* at 3.

371. *Id.*

372. *Id.*

373. *Id.* Section 7 of the Clayton Act governs mergers and acquisitions. 15 U.S.C. § 18 (2012).



2.”<sup>374</sup> The comments then recommend that the FTC “employ its authority under [s]ection 6(b) of the FTC Act . . . to initiate an inquiry into the relationship between PAEs and operating companies.”<sup>375</sup>

To counteract trolls’ toll on innovation, some companies have publicly pledged that they will not assert their patents against people who use them to innovate. In its Open Patent Non-Assertion Pledge, Google wrote, “Google is committed to promoting innovation to further the overall growth and advancement of information technology and believes that Free or Open Source Software is a very important tool for fostering innovation. Google is therefore pledging the free use of certain of its patents . . . .”<sup>376</sup> In a statement accompanying the pledge, Google’s Senior Competition Counsel wrote, “Trolls are hurting consumers and are increasingly going after small businesses, hampering innovation and reducing competition.”<sup>377</sup> Twitter also published a patent agreement, promising “not [to] use the patents from employees’ inventions in offensive litigation without their permission.”<sup>378</sup> Elon Musk, the CEO of Tesla, made a similar pledge regarding his company’s patents, promising that “Tesla will not initiate patent lawsuits against anyone who, in good faith, wants to use our technology.”<sup>379</sup> Musk further elaborated, “Tesla Motors was created to accelerate the advent of sustainable transport. If we clear a path to the creation of compelling electric vehicles, but then lay intellectual property landmines behind us to inhibit others, we are acting in a manner contrary to that goal.”<sup>380</sup> By opening up Tesla’s patents, Musk hopes that others will improve upon Tesla’s existing product.<sup>381</sup> This add-on innovation can help increase the sales of electric cars and, thus, put modern transportation on a path toward efficiency and sustainability.

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374. See Google Comments, *supra* note 364, at 3. Under section 1 of the Sherman Act, “[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal.” 15 U.S.C. § 1. See also *supra* note 306 regarding section 2 of the Sherman Act.

375. Google Comments, *supra* note 364, at 4. Just a few months after these comments were submitted, the FTC did in fact use its section 6(b) authority to initiate a study on patent trolls. See *supra* note 323 and accompanying text.

376. *Open Patent Non-Assertion Pledge*, GOOGLE, <http://www.google.com/patents/opnpledge/pledge/> (last visited Nov. 27, 2015) [<http://perma.cc/563Z-KPDZ>].

377. Matthew Bye, *It’s Time to Take Action Against Patent Trolls and Patent Privateering*, GOOGLE PUB. POL’Y BLOG (Apr. 5, 2013), <http://googlepublicpolicy.blogspot.co.uk/2013/04/its-time-to-take-action-against-patent.html> [<http://perma.cc/G629-BQNT>].

378. Adam Messinger, *Introducing the Innovator’s Patent Agreement*, TWITTER (Apr. 17, 2013, 5:00 PM), <https://blog.twitter.com/2012/introducing-innovators-patent-agreement> [<https://perma.cc/9QFR-UWH6>].

379. Elon Musk, *All Our Patent Are Belong to You*, TESLA BLOG (June 12, 2014), <http://www.teslamotors.com/blog/all-our-patent-are-belong-you> [<http://perma.cc/TT4A-A9RY>].

380. *Id.*

381. *Id.*

C. *The Other Side of the Story:*  
*Patent Trolls Are Not Undermining the Patent System*

Some, however, have a contrary view of the role of patent trolls. Nathan Myhrvold, cofounder of Intellectual Ventures,<sup>382</sup> alleges that the danger of patent trolls is a myth.<sup>383</sup> In an editorial for the *Wall Street Journal*, Myhrvold wrote, “A tiny minority of patent suits are due to bad actors, but it’s hardly a crisis.”<sup>384</sup> Peter Detkin,<sup>385</sup> another cofounder of Intellectual Ventures, is one of the most vocal supporters of trolls. He believes that “[e]merging models of patent monetization will help the patent system to regain its balance.”<sup>386</sup> Detkin suggests that the inequities in the patent field arise from the “barriers that small inventors currently face in negotiating their licensing deals.”<sup>387</sup> He notes that a large portion of inventions in the United States come from small companies, not from large corporations.<sup>388</sup> Additionally, R&D at large corporations tends to focus on improving existing products, not on creating entirely new products.<sup>389</sup>

A small inventor who independently tries to sell his patent to a large corporation often faces many obstacles. Corporations frequently take advantage of the inventor’s lack of bargaining power by dragging out negotiations and questioning the validity of the patent—even when the corporation knows it is valid—just to whittle down the licensing fee.<sup>390</sup> Often, the corporation will engage in months of back-and-forth discussions only to decline to license the patent.<sup>391</sup> Detkin suggests that it is therefore not surprising when these small inventors become frustrated, especially when there is “often blatant poaching of [inventors’] supposedly protected ideas.”<sup>392</sup> Some inventors then turn to litigation and may be “derided as ‘patent trolls’” as a result.<sup>393</sup>

It is here where Detkin’s company, Intellectual Ventures, steps in. The company’s patent-monetization strategies, according to Detkin, help to “garner enough resources to work productively with corporations that either infringe small inventors’ intellectual property or want to draw on it as a source for innovation.”<sup>394</sup> According to Detkin, these strategies can help small inventors monetize their patents by connecting them with “important

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382. See *supra* Part II.A.

383. See Nathan Myhrvold, *Inventors Have Rights, Too!*, WALL STREET J. (Mar. 30, 2006, 12:01 AM), <http://online.wsj.com/articles/SB114368437650611883> [<http://perma.cc/6MHP-SA3L>].

384. *Id.*

385. See *supra* note 6 and accompanying text.

386. Peter N. Detkin, *Leveling the Patent Playing Field*, 6 J. MARSHALL REV. INTELL. PROP. L. 636, 642 (2007).

387. *Id.* at 636.

388. *Id.* at 637.

389. *Id.*

390. *Id.* at 639.

391. *Id.*

392. *Id.* at 641.

393. *Id.*

394. *Id.* at 642.

commercial partners” and increasing their bargaining power.<sup>395</sup> Detkin describes the business model of Intellectual Ventures as “assembling portfolios of patents” and “coupl[ing] the portfolios with careful analysis and research to create a rational licensing model for managing invention rights in markets where products rely on multiple technologies from multiple sources.”<sup>396</sup> A firm like Intellectual Ventures, Detkin says, can promote inventions in various ways. First, by prescreening patents to ensure they are legitimate and relevant to the operations of other companies, Intellectual Ventures helps parties reach an agreement more quickly.<sup>397</sup> Second, his company has expertise in licensing negotiations, so its business skills bring a unique benefit to the table.<sup>398</sup> Third, Intellectual Ventures saves inventors from using their valuable time in negotiations.<sup>399</sup> Detkin notes that this not only saves time for the inventor, but also for the company licensing the patent, as Intellectual Ventures “match[es] patent owners with patent users.”<sup>400</sup> Intellectual Ventures, he says, allows companies to buy patents in an efficient manner and license them “at a fair price.”<sup>401</sup>

Detkin also criticizes legislative reform efforts, which, in his words, typically “would tilt an already unbalanced playing field to further benefit large corporations.”<sup>402</sup> Like Detkin, Raymond Niro warns of the dangers of using legislation to address trolls when “no evidence has been offered that patent trolls are a major problem.”<sup>403</sup> Niro then suggests that it is not patent trolls that are undermining the patent system, but rather members of Congress who divert funds from the USPTO.<sup>404</sup> Due to this diversion of resources, he says, “the pendency of patent applications has increased and patent quality has increasingly become suspect.”<sup>405</sup>

Niro also identifies an emerging trend, where commentators distinguish between manufacturing companies and nonmanufacturing companies.<sup>406</sup> These commentators believe that companies who do not create goods or services with their patents should be required to grant licenses—so-called compulsory licenses.<sup>407</sup> Niro points out that the Constitution does not limit the right to obtain and enforce patents to only manufacturing companies.<sup>408</sup> As such, small inventors “should not be forced to grant compulsory licenses

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395. *Id.* at 637.

396. *Id.* at 643.

397. *Id.*

398. *Id.* at 643–44.

399. *Id.* at 644.

400. *Id.*

401. *Id.*

402. *Id.* at 637.

403. Raymond P. Niro, *Who Is Really Undermining the Patent System—“Patent Trolls” or Congress?*, 6 J. MARSHALL REV. INTELL. PROP. L. 185, 186 (2007) (“Weakening patent laws, whether in the Supreme Court or Congress, is no more than a government bailout of the infringement problems big tech companies deliberately made for themselves.”).

404. *Id.* at 195 (noting that “Congress . . . diverts millions in fees inventors pay the PTO”).

405. *Id.* at 194.

406. *Id.* at 193.

407. *Id.* at 195.

408. *Id.* at 193.

because big companies call them ‘patent trolls.’”<sup>409</sup> According to Niro, compulsory licenses will impose a greater burden on small inventors than big corporations.<sup>410</sup> He explains that big corporations prefer a compulsory license because “it eliminates the threat of an injunction and accordingly results in a ‘heads, I win; tails, you lose’ situation.”<sup>411</sup> Niro cautions that this approach “drips with inequity because an infringer that lost at trial should not be treated like [a] willing licensee.”<sup>412</sup> Overall, Niro concludes that it is the diminishment of small inventors’ rights—not the existence of patent trolls—that harms innovation.<sup>413</sup>

### III. PATENT REFORM WILL BE MOST EFFECTIVE THROUGH THE COMBINED DILIGENCE OF THE FTC AND CONGRESS

Trolls’ litigation tactics financially burden innovative companies and stifle competition.<sup>414</sup> Contrary to Detkin’s assertions,<sup>415</sup> patent trolls do not promote invention. Detkin insists that Intellectual Ventures protects small inventors;<sup>416</sup> however, studies and commentary have shown that small companies are usually the targets of troll litigation and suffer financial hardship due to the high costs of legal defense.<sup>417</sup> If the purpose of Detkin’s company really is to level the playing field,<sup>418</sup> then the targets of troll lawsuits would tend to be large corporations rather than the small, innovative companies that most often find themselves the victims of patent litigation.<sup>419</sup>

One approach to curbing patent trolls lies at the intersection of intellectual property law and competition law.<sup>420</sup> Stricter enforcement of antitrust law against patent trolls has the capacity to transform the patent field. Benefits would include a more efficient economy that spawns innovation rather than hinders it, better protection for legitimate inventors, and less frivolous litigation. Part III.A proposes that the FTC play a more hands-on role in curbing exploitative patent-troll behavior. Additionally, there are several opportunities for reform in the patent system itself that can help curb patent-troll abuses. Thus, it is imperative that Congress address those inconsistencies in patent law that trolls manipulate. Part III.B discusses several changes that would deter the assertion of weak patents.

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409. *Id.* at 195.

410. *Id.*

411. *Id.*

412. *Id.*

413. *Id.* at 196 (“This is the core of the problem. Diminish small entity patent rights, and you diminish the incentive to invent or commercialize. In turn, if you diminish the incentive to invent, markets become less competitive, fewer innovations get made, and society’s welfare suffers. . . . It is much easier for people to react to ad hominem that ‘patent trolls’ make consumer prices go up. But it is just not true.”).

414. *See supra* Part II.B.

415. *See supra* Part II.C.

416. *See supra* notes 394–96 and accompanying text.

417. *See supra* Part II.A, II.B.3.a.

418. *See supra* notes 386–87 and accompanying text.

419. *See supra* note 326.

420. *See supra* Part II.B.4.a.

A. *Stricter Use of Antitrust Law and Enhanced FTC Involvement  
Will Deter Patent-Troll Abuses*

Antitrust law and patent law have overlapping goals—they both aim to foster competition and reward innovation.<sup>421</sup> Lawmakers should take advantage of the complementary nature of these two bodies of law to police trolls more aggressively.<sup>422</sup> The Clayton Act and the Sherman Act are important antitrust tools that lawmakers can use against trolls *now*, avoiding the delays of new legislation. The Coalition for Patent Fairness,<sup>423</sup> for example, advocates that the antitrust authorities assume “a broader role” in policing trolls by “deploying their economic expertise and investigatory power.”<sup>424</sup>

The FTC can—and should—use its authority to combat trolls.<sup>425</sup> Because trolls such as Intellectual Ventures enter into strict nondisclosure agreements,<sup>426</sup> the FTC is in a unique position to investigate trolls’ business practices, with tools at its disposal that are unavailable to others.<sup>427</sup> Trolls engage in several tactics in an effort to thwart competition. They assert patents aggressively because they have no fear of retaliation and are immune from reputational harms.<sup>428</sup> While it is somewhat more difficult for trolls to capitalize on the fear of an injunction in the post-*eBay* landscape,<sup>429</sup> trolls continue to bully defendant companies by threatening expensive litigation and forcing target companies to pay licensing fees.<sup>430</sup> Some targets’ only choice is to pay the fee or go out of business.<sup>431</sup> Trolls often wait to assert infringement claims until the defendant company has made a large investment in a product line.<sup>432</sup> Once a product has already been manufactured and marketed, these product sales are often essential for a company to remain viable. Additionally, trolls strategically burden target companies. They frequently assert legal claims that they intend to drop as trial approaches, causing companies to incur discovery and preparation costs on weak claims that the troll did not actually expect to pursue.<sup>433</sup>

421. *See supra* Part II.B.4.a.

422. *See supra* notes 300–04 and accompanying text.

423. *See supra* note 70.

424. *See* COALITION FOR PATENT FAIRNESS, *supra* note 70, at 4. The Coalition for Patent Fairness further encourages

the antitrust agencies to enforce the law vigorously against abuses by PAEs, whether they involve acquisition of substitute technologies to accumulate market power, hybrid PAEs combining with product market competitors to raise rivals’ costs, use of patent litigation and threats thereof to deter innovation by rivals, cheap exclusion by threats and sham litigation, or other abuses.

*Id.* at 2 n.3.

425. *See supra* Part II.B.4.b.

426. *See supra* note 189.

427. *See supra* notes 318–23 and accompanying text.

428. *See supra* notes 205–07 and accompanying text.

429. *See supra* Part I.C.2.a.

430. *See supra* Part II.A, II.B.4.b.

431. *See When Patents Attack!*, *supra* note 6.

432. *See supra* notes 208–09, 360–62 and accompanying text.

433. *See supra* note 204 and accompanying text.

The FTC should continue to foster settlements with patent trolls; however, agreements should be stricter than the MPHJ settlement in order to deter other trolls who engage in similar tactics.<sup>434</sup> Financial sanctions could serve as a warning to trolls that behave anticompetitively.<sup>435</sup> The FTC also should use its authority under the Sherman and Clayton Acts to police privateering.<sup>436</sup> The FTC should monitor these types of arrangements for possible antitrust law violations—for example, when manufacturing companies work with trolls to target rival companies with infringement claims and to drive up competitors' costs.<sup>437</sup> Additionally, many companies have voiced concerns that privateering reduces the likelihood of procompetitive cross-licensing.<sup>438</sup> Given that the patent-troll business model fails to advance competition, aggressive antitrust enforcement is appropriate.

### *B. Patent-Reform Legislation*

Although the Supreme Court ruled on several important patent issues in 2014, Congress must not lose focus on patent reform.<sup>439</sup> There are still many areas that Congress should address to realign the patent system with its fundamental purpose of promoting innovation.<sup>440</sup>

#### 1. Reform at the USPTO

Congress should increase funding to the USPTO to decrease the backlog of patent applications and expedite post-grant review.<sup>441</sup> Taken together, these two changes could decrease weak patents in the system at the outset and eliminate already-issued weak patents. Even patent-troll supporters believe that Congress must provide more funds for the USPTO.<sup>442</sup> Additionally, increased funding to the USPTO will get to the root of the weak patent problem, an issue that the Innovation Act of 2015 ignores.<sup>443</sup>

The USPTO's backlog creates numerous problems—it delays the issuance of patents and allows high numbers of weak patents to be issued for material that is probably not patentable under the U.S. Code.<sup>444</sup> When weak patents emerge out of the USPTO, patent trolls have more opportunities to assert them against companies who cannot afford the cost of a legal defense.<sup>445</sup>

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434. *See supra* Part II.B.4.b.

435. *See supra* note 337 and accompanying text.

436. *See supra* notes 366–74 and accompanying text.

437. *See supra* notes 370–74 and accompanying text.

438. *See supra* notes 368–69 and accompanying text.

439. *See supra* note 156 and accompanying text.

440. *See supra* Part I.B.

441. *See supra* Part II.B.2.a.

442. *See supra* notes 404–05 and accompanying text.

443. *See supra* Part I.C.1.b.

444. *See supra* Part II.B.2.b.

445. *See supra* notes 213–16 and accompanying text.

The AIA<sup>446</sup> took an important step toward reform of the USPTO by instituting post-grant review.<sup>447</sup> The Department of Commerce supports post-grant review as one remedy for the costs of the USPTO's backlog because it "offer[s] a timely and much less expensive mechanism for challenging weak patents."<sup>448</sup> The FTC also has endorsed enhanced post-grant review.<sup>449</sup> The Department of Commerce estimates that post-grant review is 50 to 100 times cheaper than patent litigation.<sup>450</sup> This can be especially helpful for smaller firms that cannot afford patent litigation because post-grant review is a more efficient mechanism for challenging weak patents.<sup>451</sup> For post-grant review to weed out weak patents, the USPTO must have sufficient funding to ensure that these proceedings occur promptly. The current wait time at the USPTO is several years;<sup>452</sup> if Congress provides additional funds for the USPTO to employ more patent examiners, it can decrease this wait time. It will then be easier for small companies to secure financing in the early stages of product development and minimize the financial loss that is often symptomatic of USPTO delays.<sup>453</sup>

Another opportunity for reform comes from within the USPTO itself. In rulings like *Alice*,<sup>454</sup> the Supreme Court has instructed the USPTO about which patents it may issue.<sup>455</sup> To curb the assertion of weak patents, the USPTO must stop issuing them in the first place.<sup>456</sup> Thus, it is imperative that USPTO examiners pay close attention to the Supreme Court's guidance regarding patent validity. For the Court's *Alice* ruling to have any effect, examiners should implement the ruling by refusing to issue patents for ineligible subject matter.<sup>457</sup> If the USPTO follows the Supreme Court's guidance, lower courts should see decreased rates of litigation involving low-quality patents.

## 2. Procedural Changes

The Innovation Act of 2015 and the PATENT Act contain many important provisions to combat trolls.<sup>458</sup> One important aspect of both bills

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446. See *supra* Part I.C.1.a.

447. See *supra* notes 58–62 and accompanying text.

448. See RAI ET AL., *supra* note 221, at 7.

449. See FTC, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY ch. 6, at 18–20 (2003), <http://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf> (recommending that Congress increase the USPTO's funding and that the USPTO expand its "second-pair-of-eyes" review to certain types of patents, including software and business-method patents) [<http://perma.cc/5AYX-6RW5>].

450. See RAI ET AL., *supra* note 221, at 7.

451. *Id.*

452. See *supra* note 223 and accompanying text.

453. See *supra* notes 225–26 and accompanying text.

454. See *supra* Part I.C.2.b.

455. See *supra* note 140 and accompanying text.

456. See *supra* Part II.B.2.b.

457. See *supra* Part I.C.2.b.

458. See *supra* Part I.C.1.b.

is the requirement that parties asserting infringement divulge the name of any entity with an interest in the patent.<sup>459</sup> Trolls' use of shell companies has become a problem.<sup>460</sup> Because companies such as Intellectual Ventures often consist of hundreds or thousands of shell companies, it is difficult for defendants to even identify the parties involved in litigation because trolls can hide behind the names of unknown shell companies. In fact, New York's settlement with MPHJ contained a provision similar to that of the Innovation Act of 2015 and the PATENT Act, requiring that MPHJ identify any party with a financial interest in its patents.<sup>461</sup> Disclosing this information will increase transparency in the system and may help defendants win attorneys' fees awards under *Octane* and *Highmark* by revealing entities with deep pockets.<sup>462</sup> If a losing plaintiff cannot pay attorneys' fees, the pending legislation allows courts to impose that obligation on parties with a stake in the patent.<sup>463</sup> Thus, this provision is crucial in helping to deter deceptive troll behavior.

Additionally, the heightened pleading requirement is an essential tool for increasing transparency in patent litigation.<sup>464</sup> Currently, a party alleging infringement need only name the patent being infringed, which allows for a great deal of abuse.<sup>465</sup> Vague complaints can leave defendants guessing as to which aspect of their business is infringing the patent. The legislation's heightened pleading standard would require plaintiffs to explain how the patent is being infringed on and to provide a list of other complaints it has filed regarding the same patent.<sup>466</sup> These requirements will give a defendant a better idea of the exact claims that the plaintiff has against it. Additionally, defendants will be better able to evaluate whether they should pay the licensing fee or fight it out in court. This heightened disclosure will decrease the rate of extorted licensing fees.<sup>467</sup>

#### CONCLUSION

The current patent landscape does not reflect the model that our country's Framers imagined when they created a system that grants property rights to inventors for their contributions to society. By allowing patent trolls to exploit inconsistencies in the law, the system taxes the innovation that it was supposed to encourage. Because patent trolls engage in numerous anticompetitive business tactics, a more aggressive application of antitrust law to trolls is necessary to protect legitimate inventors. The stricter use of competition laws, coupled with important patent reform aimed to address various inconsistencies in the law, will put the patent system back on track

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459. See *supra* notes 81–82 and accompanying text.

460. See *supra* Part II.A.

461. See *supra* note 357 and accompanying text.

462. See *supra* Part I.C.2.c.

463. See *supra* note 84 and accompanying text.

464. See *supra* notes 76–80 and accompanying text.

465. See *supra* note 77 and accompanying text.

466. See *supra* notes 76–80 and accompanying text.

467. See *supra* Part II.A.



to fulfilling its goals of fostering innovation and benefiting society through technological advancement.