

January 2014

## Evolving Patent Legislation Growing Pains

Eric Carr

---

### Recommended Citation

Eric Carr, *Evolving Patent Legislation Growing Pains*, 17 SMU Sci. & Tech. L. Rev. 387 (2014)

This Comment is brought to you for free and open access by the Law Journals at SMU Scholar. It has been accepted for inclusion in SMU Science and Technology Law Review by an authorized administrator of SMU Scholar. For more information, please visit <http://digitalrepository.smu.edu>.

# Evolving Patent Legislation Growing Pains

*Eric Carr\**

## I. INTRODUCTION

Erich Spangenberg and his Dallas-based company, IPNav, represent the interests of innovators.<sup>1</sup> IPNav, a nonpracticing entity, has sued more than any other entity in the patent field. Asserting the property rights of patentees against more than 1,600 companies requires Spangenberg to transform into a carefully modulated menace.<sup>2</sup> Companies resistant to diplomatic conversations may make Spangenberg, as he puts it, “go thug.”<sup>3</sup> However, “[o]nce you go thug, though, you can’t unthug. Actually, you can unthug, but if you do that, you can’t rethug. Then you just seem crazy.”<sup>4</sup> Whether you thug or not, companies like IPNav drive the important secondary patent market.

The secondary patent market acts as a catalyst for redistributing wealth from businesses using, making, selling, offering to sell, or importing an invention. The entire U.S. economy relies on some form of Intellectual Property (IP).<sup>5</sup> IP-intensive industries directly accounted for 27.1 million American jobs and 18.8% of all employment in 2010.<sup>6</sup> IP-intensive industries accounted for \$5.06 trillion in value added and 34.8% of U.S. gross domestic product in 2010.<sup>7</sup> Legislation must not hastily change the patent system because so much is at stake.

Nonpracticing entities are undisputedly causing much of the ruckus in recent patent legislation. Understanding the two predominant views of nonpracticing entities is important for drafting proper legislation. The first view is that nonpracticing entities provide small to medium-sized patent holders

---

\* Eric Carr is a 2015 candidate for a Doctorate of Jurisprudence from Southern Methodist University School of Law. He is registered to practice before the United States Patent and Trademark Office and currently provides litigation support for Acacia Research Group, LLC and Personal Audio, LLC in Plano, Texas. He would like to thank his professors, family, and colleagues for all of their support.

1. See David Segal, *Has Patent, Will Sue: An Alert to Corporate America*, N.Y. TIMES, July 13, 2013, [http://www.nytimes.com/2013/07/14/business/has-patent-will-sue-an-alert-to-corporate-america.html?pagewanted=1&\\_r=0&adxnnl=1&adxnnlx=1393693287-ebbf8SLyVmBMmtOfBIQSQ](http://www.nytimes.com/2013/07/14/business/has-patent-will-sue-an-alert-to-corporate-america.html?pagewanted=1&_r=0&adxnnl=1&adxnnlx=1393693287-ebbf8SLyVmBMmtOfBIQSQ).

2. *Id.*

3. *Id.*

4. *Id.*

5. ECONOMIC AND STATISTICS ADMINISTRATION AND UNITED STATES PATENT AND TRADEMARK OFFICE, *INTELLECTUAL PROPERTY AND THE U.S. ECONOMY: INDUSTRIES IN FOCUS* (Mar. 2012).

6. *Id.*

7. *Id.*

the opportunity to be compensated for their patent rights.<sup>8</sup> Nonpracticing entities allow patentees to avoid the prohibitively high cost of patent litigation.<sup>9</sup> Nonpracticing entities team up with contingent-fee lawyers to assert patent rights and collect money for patentees with limited resources, including universities.<sup>10</sup> The second view is that nonpracticing entities serve no useful purpose and take advantage of opportunities in the patent system.<sup>11</sup> In this view nonpracticing entities take advantage of the patent system by any means to make a quick buck.

The patent system has failed to control the range of actions a nonpracticing entity can take. Unreasonably expansive actions by nonpracticing entities have produced much angst in the patent system. The high transaction cost of patent litigation has led to an increasing number of “threat of litigation” lawsuits. Within the patent realm, these lawsuits generally involve one party asserting the rights of a patent, whether or not the rights are legitimately infringing. In these lawsuits the Plaintiff’s primary goal is to get the Defendant to settle because the cost of litigation is so great. Nonpracticing entities may assert marginal patents or take overly expansive claim constructions to unfairly extract money from those practicing the invention.

Lessening transaction costs of litigation must occur to optimize the patent system. The direct waste of legal resources, inordinate discovery requirements, and inefficiencies drive up the cost of litigation and provide greater leverage to those who want a quick settlement. Unfortunately, bridging technology and the law carries high transaction costs.

Developing new laws that remedy past problems while forging a more robust patent system is vital to protecting intangible assets and fostering innovation. Patent quality must be improved. Sadly, patents covering inventions for a crustless peanut butter and jelly sandwich and a method of exercising a housecat with a laser pointer exist.<sup>12</sup> Both inventor’s rights and patent quality must be considered in upcoming legislation for the future of the patent system. This article will address current trends in the patent system regarding its legal history, the current state of the law, and possible directions they may take, with a focus on the seemingly inevitable promulgation of the Innovation Act.

---

8. David Schwartz & Jay Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 CORNELL L. REV. 425, 428 (2014).

9. *Id.*

10. *Id.*

11. See Michael Risch, *Patent Troll Myths*, 42 SETON HALL L. REV. 457, 459 (2012).

12. U.S. Patent No. 5,443,036 (filed Nov. 2, 1993); U.S. Patent No. 6,004,596 (filed Dec. 8, 1997).

---

## II. HISTORICAL BACKGROUND

Forty years ago, less than one in twenty patent trials were in front of a jury.<sup>13</sup> Modern patent litigation almost always involves a jury trial because a jury provides more favorable rulings for patentees than judges.<sup>14</sup> Furthermore, jurors are reluctant to invalidate patents issued by the United States Patent and Trademark Office (PTO).<sup>15</sup> More importantly, preparation for a jury trial increases both the cost of patent litigation and the willingness to settle.<sup>16</sup> Patent validity jury trials are deciding questions of law; however, traditionally, juries decide fact questions.<sup>17</sup> The Supreme Court reiterated this in *Microsoft Corp. v. i4i LLC*.<sup>18</sup> Further, the interpretation of the terms is an issue for the judge, and it is the court's duty to resolve fundamental disputes regarding the scope of a claim.<sup>19</sup>

Term interpretation by juries has led to enormous settlements, greatly increasing activity in the secondary patent market. For example, a federal jury led Research in Motion to settle for \$612,500,000 because the use of the Blackberry infringed on patent rights.<sup>20</sup> In the 1960s and 1970s, patents could be ignored more easily because courts would often invalidate patents on the grounds of obviousness when a patent infringement action took place.<sup>21</sup> Forum shopping was rampant because litigators wanted their suits to be tried in specific regional circuits based on the circuits' disposition of patent rights.<sup>22</sup> In 1982, Congress moved toward clarifying and stabilizing patent laws by creating the Court of Appeals for the Federal Circuit.<sup>23</sup> Around the same

---

13. Mark A. Lemley, *Why Do Juries Decide If Patents are Valid?* 1674 (Stanford Public Law, Working Paper No. 2306152, 66, 2013).

14. *Id.*

15. *Id.*

16. *Id.*

17. See generally Eileen M. Herlihy, *Appellate Review of Patent Claim Construction: Should the Federal Circuit Be Its Own Lexicographer in Matters Related to the Seventh Amendment?*, 15 MICH. TELECOMM. & TECH. L. REV. 469, 498 (2009).

18. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S.Ct. 2238, 2242–43 (2011) (the Court stated that “the ultimate question of patent validity is one of law” (quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966))).

19. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“[w]hen the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it.”).

20. Martin E. Hsia, *Technological Revolution and Patent Law Evolution (or Devolution?)*: *The Recent Weakening of Patents*, 14 HAW. B.J. 117, 119 (2011).

21. *Id.* at 118.

22. *Id.*

23. *Id.*

time, Texas Instruments Inc. started to aggressively assert its patents.<sup>24</sup> This brought recognition to the revenue generation potential of patents.<sup>25</sup> The Federal Circuit provided a “pro patent” environment that allowed patentees to actualize the equity of their patents into the twenty-first century.<sup>26</sup>

This “pro patent” atmosphere created a rise in filing of patent applications. Utility patents granted by the PTO have increased for the fourth consecutive year.<sup>27</sup> Over a quarter-million patents were issued in 2013 by the PTO.<sup>28</sup> Indeed, nonpracticing entities encourage higher volumes of patent applications because over \$30 billion in settlement and licensing fees were collected last year.<sup>29</sup> This figure is trending upward rapidly and has increased fourfold in the past decade.<sup>30</sup> The secondary patent market continues to expand, despite recent Supreme Court decisions that reversed the Federal Circuit in a manner inconsistent with the recent “pro patent” trend.

In *eBay v. MercExchange L.L.C.*, the Supreme Court made permanent injunctions more difficult for patentees to obtain.<sup>31</sup> Permanent injunctions were issued to patent infringers absent “exceptional circumstances.”<sup>32</sup> The Court held that in seeking a permanent injunction, “a plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.”<sup>33</sup> The Court relied heavily on Section 283 of Title 35, which allows courts to grant 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>34</sup> The

---

24. See U.S. Gov’t Accountability Office, GAO-13-465, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE PATENT QUALITY 34 (2013), available at <http://www.gao.gov/assets/660/657103.pdf>.

25. See *id.*

26. See generally *id.*

27. U.S. PATENT & TRADEMARK OFFICE, PATENT TECH. MONITORING TEAM, U.S. PATENT STATISTICS CHART CALENDAR YEARS 1963–2013, [http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us\\_stat.htm](http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm) (last modified Jul. 24, 2014)).

28. *Id.*

29. Joel B. Carter, *Responding to a Patent Troll’s Threats*, ARKANSAS LAWYER, Summer 2013, at 30.

30. *Id.*

31. See *eBay v. MercExchange L.L.C.*, 547 U.S. 388, 397 (2006).

32. *Id.* at 388.

33. *Id.*

34. *Id.* at 392.

Court reasoned that equitable discretion over injunctions is allowed to adapt to the rapid technological and legal developments in the patent system.<sup>35</sup>

The decision in *eBay v. MercExchange L.L.C.* is extremely important because it exemplifies important issues underlying problems with patents. When the Court concluded that equitable discretion was allowed, Justice Kennedy noted “the potential vagueness and suspect validity of some of these patents may affect the calculus under the four-factor test.”<sup>36</sup> Claim scope uncertainty relates to the potential vagueness and remains a major issue in the patent system. The Court noted “that a ‘plaintiff’s willingness to license its patents’ and ‘its lack of commercial activity in practicing patents’ would be sufficient to establish that the patentee would not suffer irreparable harm” under the four-factor test.<sup>37</sup> This case is clearly not “pro patent” because permanent injunctions were a fundamental right to patent owners’ exclusive rights to make, use, and sell their inventions.<sup>38</sup>

In *KSR International Co. v. Teleflex Inc.*, the Supreme Court decided upon principle to decide whether a patent claiming a combination of elements was obvious.<sup>39</sup> The Court found that if a person of ordinary skill in the art could implement a variation, then patentability would be barred.<sup>40</sup> Similarly, if an improvement or technique used on a device would be recognizable to a person of ordinary skill in the art, obviousness would bar patentability.<sup>41</sup> This view of obviousness modified the existing requirement that “demonstrating a teaching, suggestion, or motivation to combine known elements” would show obviousness.<sup>42</sup> The Court stated that using the existing requirement was flawed because of its narrowness when applied to an obviousness inquiry.<sup>43</sup> Broadening the principles behind obviousness determinations is obviously not “pro patent.”

In *MedImmune, Inc. v. Genentech, Inc.*, the Supreme Court abrogated the Federal Circuit rule that prevented a patent licensee from filing a declaratory judgment when a current license existed.<sup>44</sup> The Court held that under Article III, the licensee had the right to seek a declaratory judgment based on invalidity or no infringement of the underlying patent.<sup>45</sup> Allowing a licensee

---

35. *Id.* at 397.

36. *See eBay*, 547 U.S. at 397.

37. *Id.* at 393.

38. 35 U.S.C. § 154(a) (2012).

39. *KSR Int’l, Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

40. *Id.*

41. *Id.*

42. *Id.* at 418.

43. *Id.* at 419.

44. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 128–29 (2007).

45. *Id.* at 137.

to challenge a patent when a license has already been taken is not “pro patent.”

In *Quanta Computer, Inc. v. LG Electronics, Inc.*, the Supreme Court ruled that the authorized sale of an article that embodies a patent exhausts the patentee’s rights to recover future sales use of the article.<sup>46</sup> The patents in this case, disclosed processes commonly found in electronics. For example, one patent covered a method of organizing read and write requests to memory that allowed for execution of outstanding write requests.<sup>47</sup> LG Electronics argued that because the patents are linked to a process, the use of that process infringes patent rights.<sup>48</sup> Under this theory patent exhaustion would not occur through sale of an article because practicing the patent would still infringe.<sup>49</sup> The Court found this theory to be dangerous because any downstream purchasers using the process could be liable for patent infringement.<sup>50</sup> Taking away patentees’ opportunity to collect rent from downstream purchasers in process patents is not “pro patent.” In 2010, *Bilski v. Kappos* lessened the importance of the “machine-or-transformation” test.<sup>51</sup> This test was key for granting business method patents and helped the Federal Circuit determine the patentability of a process.<sup>52</sup> The Supreme Court ruled that test was a “useful and important clue” for determining patentability, but not the “sole test.”<sup>53</sup> The Court noted that vagueness within business method patents invites a “pernicious use of patents” that has long been criticized.<sup>54</sup> Quoting the 1883 decision in *Atlantic Works*, the Court explained that patent laws are not intended to “creat[e] a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts.”<sup>55</sup> Ironically, 131 years later, a class of speculative schemers has been created, known as “patent trolls.”

Joel B. Carter, Associate at Quatdebaum, Grooms Tull & Burrow, has classified patent trolls as one of three types: inside patent trolls, heat seeking patent trolls, and trolling patent trolls.<sup>56</sup> An “inside patent troll” works with

---

46. *Quanta Computer, Inc. v. LG Elec. Inc.*, 553 U.S. 617, 638 (2008).

47. *Id.* at 622.

48. *Id.* at 628.

49. *Id.*

50. *Id.* at 630.

51. *Bilski v. Kappos*, 130 S.Ct. 3218, 3259 (2010).

52. *See generally id.*

53. *Id.*

54. *Id.* at 3256.

55. *Id.*

56. Carter, *supra* note 29.

an entity that practices the inventions disclosed in its patents.<sup>57</sup> “Heat seeking” patent trolls actively seek potential infringers and acquire patents through any means available.<sup>58</sup> “Trolling” patent trolls assert weak patents accompanied by drafts of complaints in front of a large number of targets to fish for anyone who will agree to license.<sup>59</sup> “Trolling” patent trolls are causing much of the commotion leading to patent reform in 2014.

Although no clear definition of “patent troll” exists, one’s definition of patent troll depends on perspective.<sup>60</sup> Peter Detkin, former Vice President of Intel, used to use the term “patent extortionists” until Intel was sued for libel, so he came up with the term “patent troll.”<sup>61</sup> Detkin defined the term as someone “who tries to make a lot of money off a patent that they are not practicing and have no intention of practicing and in most cases never practiced.”<sup>62</sup> Detkin is now the Co-Founder of Intellectual Ventures.<sup>63</sup> On NPR’s program *This American Life*, a Silicon Valley venture capitalist compared Intellectual Ventures’ patent licensing program to “a mafia style shake-down.”<sup>64</sup> Detkin responded to this assertion, calling it “ridiculous and offensive.”<sup>65</sup> Intellectual Ventures position is that it provides an efficient solution for patent holders to get paid because inventors have a right to recognize a return on their investments of time, money, and emotional resources into ideas.<sup>66</sup>

Regardless of perspective, “patent troll” is a pejorative term for a non-practicing entity. These nonpracticing entities almost always include universities, research institutes, government agencies, corporate research and development labs, individual inventors, and non-core businesses.<sup>67</sup> Research and development entities use patent license fees to fund technology develop-

---

57. *Id.*

58. *Id.*

59. *Id.*

60. See generally Brenda Sandburg, *You May Not Have a Choice. Trolling for Dollars*, THE RECORDER (July 30, 2001), available at <http://www.phonetel.com/pdfs/lwtrolls.pdf>.

61. *Id.*

62. *Id.*

63. Todd Bishop, *Intellectual Ventures Responds to This American Life Exposé: ‘We Fundamentally Disagree’*, GEEKWIRE (July 24, 2011), <http://www.geekwire.com/2011/intellectual-ventures-responds-american-life-expos-we-fundamentally-disagree/>.

64. *Id.*

65. *Id.*

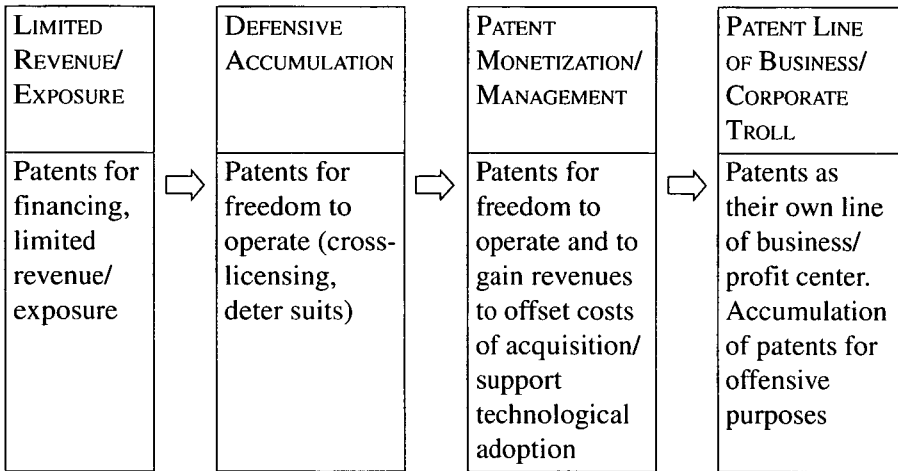
66. *Id.*

67. Colleen V. Chien, *From Arms Race to Marketplace: The Complex Patent Ecosystem and Its Implications for the Patent System*, 62 HASTINGS L.J. 297, 327 (2011).



ment.<sup>68</sup> Inversely, nonpracticing entities primarily use patents to collect license fees and do not fund technology development.<sup>69</sup> As a company's business evolves, the categorization of nonpracticing entities may change.<sup>70</sup> Figure 1 shows an example of one such business evolution.<sup>71</sup>

FIGURE 1: EXEMPLARY STAGES IN A COMPANY'S PATENT STRATEGY



With the PTO outputting higher numbers of patents each year, multiple ownership stakes in the same technology has created the “patent thickets” problem.<sup>72</sup> Patent thickets is a form of “tragedy of the anticommons,” by which people underuse scarce resources because of overlapping ownership.<sup>73</sup> This defensive use of patent portfolios in the corporate setting has allowed the patent thickets to grow.<sup>74</sup> These thickets create the subsequent need to invent around patents and can stifle innovation.<sup>75</sup> Generally, nonpracticing entities are immune from the effects of defensive patenting because they do not practice anything.<sup>76</sup> Consequently, a patent portfolio owned by the ac-

68. *Id.*

69. *Id.*

70. *Id.*

71. *Id.* at 325.

72. U.S.PATENT & TRADEMARK OFFICE, *supra* note 27.

73. J. McDonough, *The Myth of the Patent Troll: An Alternative View Of the Function of Patent Dealers in an Idea Economy*, 56 EMORY L.J. 189, 202 (2006).

74. *Id.*

75. *Id.*

76. *Id.*

cused infringer creates no countersuit threat.<sup>77</sup> Further, nonpracticing entities amplify the patent thickets problem because they can be more fearless in asserting patents.<sup>78</sup>

TiVo identifies the distinct quality that separates them from nonpracticing entities; TiVo actually makes and sells things.<sup>79</sup> TiVo complains that nonpracticing entities such as Rambus, Intellectual Ventures, and Acacia can assert patent rights all day long without ever being countersued.<sup>80</sup> According to TiVo, nonpracticing entities can “simply roll the dice, shrug their shoulders at the occasional setback, and keep betting until they hit a big payday.”<sup>81</sup> A study from the Boston University School of Law found that the average loss to a company’s stock following a patent suit between 1990 and 2010 was \$122 million.<sup>82</sup> The study claimed that patent trolls may have cost United States businesses as much as \$500 billion in stock value over this twenty-year period.<sup>83</sup>

Whatever the effect of patents on the economy is, it is important to understand the driving force for new patent legislation. Powerful companies are the largest targets of patent suits, and powerful companies have the greatest effect on Congress. Nonpracticing entities are disrupting powerful companies and Congress is geared toward protecting them.<sup>84</sup> “It’s all part and parcel of the same system, whether we’re talking about food libel laws, patent-trolling, internet censorship . . . the law is increasingly tilted against the individual and against freedom.”<sup>85</sup> New legislation must not limit the rights of inventors to an extent that would render the patent system broken. However, 68% of all the patent infringement lawsuits from 2007 to 2011 were brought by an operating company.<sup>86</sup>

From 2007 to 2011, almost one-third of patent infringement lawsuits were filed in three of the ninety-four federal district courts: the Eastern Dis-

---

77. *Id.*

78. *Id.*

79. Anders Bylund, *Is TiVo a Patent Troll Now?*, THE MOTLEY FOOL (Oct. 14, 2011), <http://www.fool.com/investing/general/2011/10/14/is-tivo-a-patent-troll-now.aspx>.

80. *Id.*

81. *Id.*

82. K. Aziz, *Patent Trolls Cost US Economy Half a Trillion Dollars Says Study*, INTELLECTUAL PROPERTY MAG. (Sept. 21, 2011).

83. *Id.*

84. Erik Kain, *SOPA, the NDAA, and Patent-Trolling: Why Americans Need a Civil Liberties Caucus*, FORBES (Dec. 10, 2011), <http://www.forbes.com/sites/erikkain/2011/12/10/sopa-the-ndaa-and-patent-trolling-why-americans-need-a-civil-liberties-caucus/>.

85. *Id.*

86. See U.S. Gov’t Accountability Office, *supra* note 24, at 17.

trict of Texas, the District of Delaware, and the Central District of California.<sup>87</sup> This shows that patentees are driven to districts favoring patent owners because of “quicker trials, higher success rates, and higher damage awards for patent owners.”<sup>88</sup> Many recent patent infringement lawsuits arise from three key factors: “(1) unclear and overly broad patents, (2) the potential for disproportionately large damage awards, and (3) the increasing recognition that patents are a valuable asset.”<sup>89</sup>

A majority bipartisan vote of 325-91 in December of 2013 vaulted the Innovation Act into the spotlight of patent reform in the United States.<sup>90</sup> Other patent reform legislation includes the Demand Letter Transparency Act, the Patent Litigation Integrity Act, the SHIELD Act, the Patent Quality Improvement Act, the STOP Act, the End Anonymous Patents Act, and the Patent Abuse Reduction Act. The Innovation Act aims to further limit rights of patentees and to investigate issues that Congress finds of particular importance. The Bill contains provisions that will substantially impact the enforcement, procurement, and ownership of patents. The Innovation Act is discussed alongside the current law because its promulgation is inevitable. Subsequent sections delve into analysis, suggestions, and possible solutions.

### III. CURRENT STATE OF THE LAW

Patent infringement cases begin when a party files a complaint in federal court. Federal courts follow a “notice pleading” standard that requires little information. The Supreme Court, in *Twombly* and *Iqbal*, raised this standard, which now requires a plaintiff to recite sufficient facts in the complaint to make the case plausible, which requires showing that liability is more probable than merely possible.<sup>91</sup> *Twombly* and *Iqbal* aid in filtering meritless cases that rely on the threat of litigation to reach undeserved settlements.<sup>92</sup> However, a five sentence standard patent complaint, known as Form 18, provides a loophole through which a threadbare complaint provides sufficient pleading.

Form 18 provides enough information to satisfy plausibility, which satisfies the “short and plain” statement of the plaintiff.<sup>93</sup> Federal Rules of Civil

---

87. *Id.* at 23.

88. *Id.* at 25.

89. *Id.* at 28.

90. See Jennifer A. Albert & April Weisbruch, *The Year Ahead in Patent Law*, GOODWIN PROCTER LLP (Jan. 9, 2014), [http://www.goodwinprocter.com/Publications/Newsletters/IP-Alert/2014/0108\\_The-Year-Ahead-in-Patent-Law.aspx](http://www.goodwinprocter.com/Publications/Newsletters/IP-Alert/2014/0108_The-Year-Ahead-in-Patent-Law.aspx).

91. *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007); *Ashcroft v. Iqbal*, 556 U.S. 662 (2009).

92. *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007); *Ashcroft v. Iqbal*, 556 U.S. 662 (2009).

93. Fed. R. Civ. P. 8(a)(2).

Procedure Rule 84 states: “the forms in the Appendix suffice under these rules and illustrate the simplicity and brevity that these rules contemplate.”<sup>94</sup> Form 18 is a template for a patent infringement pleading that contains:

(1) an allegation of jurisdiction; (2) a statement that the plaintiff owns the patent; (3) a statement that defendant has been infringing the patent ‘by making, selling, and using [the device] embodying the patent’; (4) a statement that the plaintiff has given the defendant notice of its infringement; and (5) a demand for an injunction and damages.”<sup>95</sup> In *K-Tech v. Time Warner*, K-Tech used Form 18 to state that Time Warner Cable was infringing “by making, selling, and using methods or systems embodying the patent.”<sup>96</sup>

The court did not read Form 18 to require a plaintiff to identify an accused device by name.<sup>97</sup> The Federal Circuit found that K-Tech used Form 18 properly, therefore, satisfying the pleading standards.<sup>98</sup>

The Innovation Act would further heighten the pleading requirement for patent infringement cases. Each element of each claim asserted would require “detailed specificity” within a clear and concise statement as to how each limitation is met by the accused instrumentality.<sup>99</sup>

The court in “exceptional cases may award reasonable attorney fees to the prevailing party.”<sup>100</sup> This is the current law for awarding attorney’s fees in patent cases. A litigation claim or argument must be deemed objectively baseless to award attorney’s fees under this law.<sup>101</sup> Objective baselessness requires the claim or argument to be “so unreasonable that no reasonable litigant could believe it would succeed.”<sup>102</sup> However, absent clear and convincing evidence of an objective baseless claim, fees can be awarded when a party engages in litigation misconduct.<sup>103</sup> Misconduct during patent litigation has led to eight-figure awards for attorney’s fees in recent cases.<sup>104</sup>

---

94. Fed. R. Civ. P. 84.

95. *K-Tech Telecomm., Inc. v. Time Warner Cable, Inc.*, 714 F.3d 1277, 1283 (Fed. Cir. 2013).

96. *Id.* at 1285.

97. *Id.* at 1286.

98. *Id.* at 1287.

99. Innovation Act of 2013, H.R. 3309, 113th Cong. § 281A(a)(5)(B) (2013).

100. 35 U.S.C. § 285 (2012).

101. *Old Reliable Wholesale, Inc. v. Cornell Corp.*, 635 F.3d 539, 544 (Fed. Cir. 2011).

102. *Id.*

103. *Id.* at 549.

104. *Takeda Chem. Indus., Ltd. v. Mylan Labs., Inc.*, 549 F.3d 1381, 1391 (Fed. Cir. 2008) (awarding \$16,800.80 in fees).

The Act would allow for the recovery of reasonable fees incurred by a prevailing party in a patent suit “unless the court finds that the position and conduct of the nonprevailing party or parties were reasonably justified in law and fact.”<sup>105</sup> A nonprevailing party may avoid the fees by showing special circumstances that make an award unjust.<sup>106</sup> For example, severe economic hardship to a named inventor qualifies as a special circumstance.<sup>107</sup>

Attorney’s fees are not the only major fees incurred in patent litigation; the cost of discovery in some patent cases is insurmountable. The cost of making copies of discovery may be taxed as fees.<sup>108</sup> The Federal Circuit has allowed electronic discovery recovery to implicitly derive from the language of “making copies” under 28 U.S.C. § 1920(4).<sup>109</sup> For example, after the Northern District of Georgia ruled in favor for Cisco on summary judgment based on non-infringement; Cisco was able to recover the \$243,453.02 it had paid to an electronic discovery company.<sup>110</sup> The court justified the taxation of these costs hoping that future litigants will exercise restraint in burdening parties with unlimited demands for electronic discovery.<sup>111</sup>

Discovery for patent cases does not exclusively take place within the Federal Circuit. The PTO conducts both *inter partes* and post grant reviews, which may require discovery. Discovery in post grant reviews is limited to evidence “directly related to factual assertions advanced by either party in the proceeding.”<sup>112</sup> Discovery is more limited in *inter partes* review, where depositions and “what is otherwise necessary in the interests of justice” is allowed.<sup>113</sup> Five factors are considered when determining if the “necessary in the interest of justice” standard is met under 35 U.S.C. § 316(a)(5).<sup>114</sup> These factors include: (1) more than a possibility of finding something “favorable in substantive value to a contention of the party moving for discovery”; (2) “Asking for the other party’s litigation positions and the underlying basis for those positions is not necessary in the interest of justice”; (3) “Information a party can reasonably figure out or assemble without a discovery request would not be in the interest of justice to have produced by the other party”; (4) requests must be easily understood; (5) requests must not be overly bur-

---

105. Innovation Act of 2013, H.R. 3309, 113th Cong. § 285(a) (2013).

106. *Id.*

107. *Id.*

108. 28 U.S.C. § 1920(4) (2012).

109. *CBT Flint Partners v. Return Path, Inc.*, 737 F.3d 1320, 1324 (Fed. Cir. 2013).

110. *Id.*

111. *Id.* at 1325.

112. 37 C.F.R. § 42.224 (2014).

113. *Id.* § 42.51(b)(2).

114. *See Garmin Int’l, Inc. v. Cuozzo Speed Tech., LLC*, 2013 WL 2023626, \*6–7 (P.T.A.B. Mar. 5, 2013).

densome to answer.<sup>115</sup> However, interference practice allows one to obtain more evidence since the Federal Rules of Evidence apply rather than the Federal Rules of Civil Procedure.

The Innovation Act would require the Judicial Conference of the United States to develop rules and procedures that address the “asymmetries in discovery burdens and costs.”<sup>116</sup> Additionally, electronic discovery requests must be specific and would not be allowed for general “information relating to a product or business.”<sup>117</sup> Some asymmetries in discovery derive from suits by nonpracticing entities that conceal entities with an interest in the patent rights. Patent law may be improved by requiring public disclosure of all relevant interests.

House Bill 3540 introduced the Demand Letter Transparency Act of 2013 to address egregious threats of litigation that operate as unfair competition.<sup>118</sup> The Act requires that any entity sending twenty or more demand letters during any one-year-period to submit a disclosure to the PTO.<sup>119</sup> The entity must identify and confirm that it owns the patent and has the rights to license the patent.<sup>120</sup> Failure to comply with this requirement would subject the entity to monetary sanctions to cover the reasonable costs of the adverse party.<sup>121</sup> A demand letter database would have to be created after consultation with the Attorney General and Federal Trade Commission.<sup>122</sup> The Act would require the demand letter to identify each accused infringing instrumentality as it relates to each claim in the asserted patent.<sup>123</sup> Similar to the Innovation Act, it would require showing how each claim corresponds to the functionality of the accused instrumentality with “detailed specificity.”<sup>124</sup>

The Innovation Act would require that the plaintiff’s initial disclosure include: assignee; any entity with rights to license or enforce; any entity with a financial interest; and the ultimate parent entity.<sup>125</sup> Ultimate parent entity is “an entity which is not controlled by any other entity.”<sup>126</sup> Additionally, the PTO has proposed a new set of rules for patent assignment recordation. In a

---

115. *Id.*

116. Innovation Act of 2013, H.R. 3309, 113th Cong. § 6(a)(1) (2013).

117. *Id.* at § 6(a)(2)(B)(i) (2013).

118. *See generally* Demand Letter Transparency Act of 2013, H.R. 3540, 113th Cong. (2013).

119. *See id.* § 263(a).

120. *Id.*

121. *Id.*

122. *Id.*

123. Demand Letter Transparency Act of 2013, H.R. 3540.

124. *Id.* § 264(a)(5)(C).

125. Innovation Act of 2013, H.R. 3309, 113th Cong. § 4(b)(1) (2013).

126. 16 C.F.R. § 801.1(a)(3) (2014).

push by the PTO to provide greater transparency, the proposed rules require information regarding patentees because some patentees have been hiding their identity to leverage bargaining power with nonpracticing entities.<sup>127</sup> Greater transparency is important to modernize patent examination and improve patent quality.<sup>128</sup> One reason to release information regarding who owns patent rights is to identify beneficial owners within complex corporate structures and licenses.<sup>129</sup> The information will be required upon recordation and will be applied retroactively to all patents with a proposed penalty of abandonment.<sup>130</sup> This would particularly help consumers of manufacturers who are sued for infringement by readily identifying exactly who is suing them.

The Act would require the stay of any patent infringement action against a customer when the manufacturer is involved in an action related to the same patent.<sup>131</sup> Consumers would also have a clear right to stay actions against them in which the manufacturer has a similar action against them. However, the manufacturer and customer must consent to the stay and the customer must agree to be bound by any final decisions.<sup>132</sup> Mutual consent would provide greater protection to consumers of goods and services that are patented and where a patentee may seek to target the profits of a consumer over that of a manufacturer.

Consumers are easy targets for quick settlements and are generally uneducated about the nuances of patent law. The Act improves information transparency by creating a user-friendly website to notify the public of patent cases brought in federal court.<sup>133</sup> Educational resources regarding patent infringement and abusive patent litigation practices will be developed for small businesses.<sup>134</sup> These may be short-term remedies for the growing pains of the patent system, but Section 8 of the Act provides the initiative to develop a more effective patent system.

Section 8, *Studies on Patent Transactions, Quality, and Examination*, asks the PTO to research pressing issues and develop legislative recommendations while examining economic impacts of the secondary patent market.<sup>135</sup> The Act requires a study on: Impact of Legislation on Ability of Individuals and Small Businesses to Protect Exclusive Rights to Inventions and Discoveries, Business Method Patent Quality, Demand Letters, Patent

---

127. 79 Fed. Reg. 4105, 4108 (proposed Jan.24, 2014).

128. *Id.*

129. *Id.*

130. *Id.*

131. Innovation Act of 2013, H.R. 3309, 113th Cong. § 296(a) (2013).

132. *Id.*

133. *Id.* § 7.

134. *Id.*

135. *Id.* § 8.

Small Claims Court, Patent Quality and Access to the Best Information During Examination, Patents Owned by the United States Government, and Secondary Market Oversight for Patent Transactions to Promote Transparency and Ethical Business Practices.<sup>136</sup> The Act requires examining licensing and generating oversight requirements for the secondary patent market.<sup>137</sup> Specifically, “to ensure that the market is a level playing field and that brokers in the market have the requisite expertise.”<sup>138</sup> Further, the Act requires the Comptroller General of the United States to report on ways to improve patent quality through technology and other best practices.<sup>139</sup>

Patent quality requires unambiguous language to develop each element of a claim. Many recent patent infringement lawsuits involve low-quality patents.<sup>140</sup> Low-quality patents have “unclear property rights, overly broad claims, or both.”<sup>141</sup> Claims must be read in view of the specification.<sup>142</sup> The specification may act as a dictionary to construe terms used in the claims.<sup>143</sup> Patent prosecution history should also be used as “undisputed public record” to define claim terms.<sup>144</sup> Extrinsic evidence may help explain scientific principles and technical terms.<sup>145</sup> However, intrinsic evidence, such as the specification, pertains to the manner in which a patent is issued.<sup>146</sup> The PTO uses the specification “as it would be interpreted by one of ordinary skill in the art” to give claims their broadest reasonable construction.<sup>147</sup> The specification must provide clear support or antecedent basis for the terms and phrases in the claims.<sup>148</sup> Greater accuracy and clarity in the specification will likely yield higher quality patents.

Accuracy and clarity for patent cases in the Federal Circuit has grown since Congress established the Patent Pilot Program in 2011.<sup>149</sup> The Patent Pilot Program allows the fifteen district courts with the greatest number of

---

136. Innovation Act of 2013, H.R. 3309, 113th Cong. § 8 (2013).

137. *Id.* § 8(a)(1)(C).

138. *Id.*

139. *Id.* § 8(c).

140. See U.S. Gov’t Accountability Office, *supra* note 24, at 28.

141. *Id.*

142. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996).

143. *Id.*

144. *Id.* at 980.

145. *Id.*

146. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005).

147. *Id.*

148. *Id.*

149. Patent Pilot Program Act, Pub. L. No. 111-349, 124 Stat. 3674 (2011).



patent cases filed to develop greater expertise in patent protection cases.<sup>150</sup> The program requires a report analyzing the improved efficiency of the courts and any evidence that litigants favor certain judicial districts.<sup>151</sup> At the end of the program, Congress will decide if the program should be extended or made permanent.<sup>152</sup> The program also allows for some patent cases to be transferred based on the enhanced expertise certain courts may have.<sup>153</sup> However, participation in the Patent Pilot Program is not a dispositive factor when considering transfer.<sup>154</sup>

The Patent Pilot Program may provide improvements to the patent system when it comes time for claim construction. Patent cases can be won or lost when the court construes the claims of an asserted patent. Juries are tasked with applying how the court construes the claims to determine infringement and validity. Juries deciding issues on validity has become the norm over the past thirty years.<sup>155</sup> Further, the jury adds to the uncertainty of patent litigation, often driving defendants to settle weak cases brought by patentees.<sup>156</sup>

In claim construction, one must not import limitations from specifications that are not part of the claim.<sup>157</sup> Generally, claims are not limited to any particular embodiment disclosed in the specification, even where only a single embodiment is disclosed.<sup>158</sup> However, patent owners can add new subject matter to the patent application by filing continuation applications.<sup>159</sup> Although limitations may not be imported from the specification, patent owners may still form claims via filing a continuation to disrupt the claim construction notion. This is one of the many nuances of patent law that has complicated litigation and encouraged new legislation.

---

150. *Id.* § 1, 124 Stat. at 3675.

151. *Id.*

152. *Id.* at 1376.

153. *See* ESCO Corp. v. Cashman Equipment Co., 2013 WL 4710258, \*3 (D. Nev. 2013); *see also* Lewis v. Grote Industries, Inc., 841 F. Supp. 2d 1049, 1055–56 (N.D. Ill. 2012); Round Rock Research, LLC v. Oracle Corp., 2011 WL 5600363, \*9 (E.D. Tex. 2011).

154. *See* One StockDuq Holdings, LLC v. Becton, Dickinson and Co., 2013 WL 1136726, \*89 (W.D. Tenn. 2013); *see also* Caterpillar, Inc. v. ESCO Corp., F. Supp. 2d, 2012 WL 6618602, \*7 (C.D. Ill. Dec. 18, 2012); Technology Licensing Corp. v. Harris Corp., 2012 WL 1298611, \*24 (N.D. Ill. 2012).

155. Lemley, *supra* note 13.

156. *Id.*

157. Deere & Co. v. Bush Hog, 703 F.3d 1349, 1354 (Fed. Cir. 2012).

158. Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1117 (Fed. Cir. 2004).

159. *See* U.S. Gov't Accountability Office, *supra* note 24.

On June 4, 2013, executive actions and legislative recommendations were proposed to decrease frivolous litigation and increase patent quality.<sup>160</sup> Legislative recommendations included many of the same topics outlined in the Innovation Act of 2013, such as disclosing the “Real Party-in-Interest” and providing greater discretion to award attorney fees.<sup>161</sup> Additionally, the Legislature recommended two major improvements for the ITC. Specifically, Congress pushed for using the four-factor injunction test in *eBay Inc. v. MercExchange* to provide consistency in the ITC and it recommended hiring more qualified administrative law judges.<sup>162</sup> The patent system was strengthened through an Executive Order to strengthen the enforcement of exclusion orders pursuant to 19 U.S.C. § 1337.<sup>163</sup>

Conversely, the patent system was weakened through an Executive Order eliminating a patentee’s right to exclude downstream users.<sup>164</sup> Many non-practicing entities assert rights of patented software features and patented business methods against end-users.<sup>165</sup> Overly broad functional claiming within these patented features and methods subjected end-users to lawsuits. An Executive Order for the PTO to increase scrutiny of functional claims was announced to improve claim clarity.<sup>166</sup> Over 100 companies in an open letter to Congress criticized these functional claims for halting innovation by discouraging investment.<sup>167</sup>

On February 20, 2014, President Obama announced “three new executive actions to encourage innovation and further strengthen the quality and accessibility of the patent system.”<sup>168</sup> First, to improve patent quality the PTO has begun a new initiative to crowd source prior art searches.<sup>169</sup> Second, the PTO expanded its Patent Examiner Technical Training Program to help keep up with fast-changing technologies.<sup>170</sup> Third, the PTO will create educa-

---

160. Press Release, White House, Office of the Press Sec’y, Fact Sheet: White House Task Force on High-Tech Patent Issues (Jun. 4, 2013), <http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues>.

161. *Id.*

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.*

166. White House, *supra* note 160.

167. Albert, *supra* note 90.

168. Press Release, White House, Office of the Press Sec’y, Fact Sheet: Answering the President’s Call to Strengthen Our Patent System and Foster Innovation (Feb. 20, 2014), <http://www.whitehouse.gov/the-press-office/2014/02/20/fact-sheet-executive-actions-answering-president-s-call-strengthen-our-p>.

169. *Id.*

170. *Id.*

tional and practical resources to provide pro bono assistance to inventors.<sup>171</sup> President Obama encouraged Congress to pass patent legislation to combat patent trolls.<sup>172</sup>

President Obama's executive actions play a small role in the bigger picture of patent law where the Federal Circuit controls. The Federal Circuit struggles with the dynamic nature of patent law, leaving the Supreme Court to produce plurality opinions that impact patent practice. For example, the Federal Circuit has struggled to uniformly analyze patentable subject matter under 35 U.S.C. § 101.<sup>173</sup> In *Bilski*, the Supreme Court rejected the machine-or-transformation test used by the Federal Circuit.<sup>174</sup> Although the test is "an investigative tool" there is no clear method in determining patentable subject matter.<sup>175</sup> The Supreme Court decided to provide more insight on 35 U.S.C. § 101 by granting *certiorari* in *Alice Corp. Pty Ltd. v. CLS Bank Intern.*<sup>176</sup>

Over forty amicus curiae briefs have been filed with the Supreme Court for the upcoming *CLS Bank* decision.<sup>177</sup> On March 31, 2014, the Supreme Court will hear arguments to determine "whether claims to computer-implemented inventions [constitute] patent-eligible subject matter within the meaning of 35 U.S.C. § 101."<sup>178</sup> Briefs from prominent entities such as the American Intellectual Property Law Association and the Institute of Electrical and Electronics Engineers have weighed in on the issue.<sup>179</sup> Currently, patent law is in flux as the courts as well as the PTO must balance many conflicting interests.

#### IV. CRITICAL ANALYSIS OF THE LAW; FORECAST/RECOMMENDATION

The PTO will soon have satellite offices in Dallas, Denver, Detroit, and the Silicon Valley.<sup>180</sup> With more offices, the PTO's services will allow for greater public engagement and increased customer satisfaction.<sup>181</sup> Michelle Lee, Director of the PTO, says expanding the PTO's presence "enables the

---

171. *Id.*

172. *Id.*

173. Albert, *supra* note 90.

174. *Bilski v. Kappos*, 130 S.Ct. 3218, 3259 (2010).

175. *Id.*

176. Albert, *supra* note 90.

177. *See Alice Corp. Pty Ltd. v. CLS Bank International*, SCOTUSBLOG, <http://www.scotusblog.com/case-files/cases/alice-corporation-pty-ltd-v-cls-bank-international/> (last visited Mar. 7, 2014).

178. *Id.*

179. *Id.*

180. Michelle Lee, *Moving Forward in 2014*, USPTO BLOG (Jan. 23, 2014), [http://www.uspto.gov/blog/director/entry/moving\\_forward\\_in\\_2014](http://www.uspto.gov/blog/director/entry/moving_forward_in_2014).

181. *Id.*

agency to issue better quality patents.”<sup>182</sup> Lee supports Congress’s current push to “target abusive patent litigation tactics” and speed up processes surrounding disputes over patent rights.<sup>183</sup> Lee plans to work with Commerce Secretary Penny Pritzker to create an economy more conducive to inventing.<sup>184</sup> Specifically, Lee plans to find new opportunities to create an agile patent system that “catalyzes innovation, incentivizes commercial research and development, and promotes good jobs that support our nation’s competitive edge.”<sup>185</sup>

The broader goals of the PTO miss the more effective strategy of identifying and remedying smaller patent issues. For example, jury trials are not the most cost effective way to try a patent case. Reducing the number of jury trials may very well result in faster and cheaper resolutions.<sup>186</sup> Alternatively, jury trials could focus on the damages and require infringement and validity to be tried separately, outside the control of a jury.<sup>187</sup> Some patent cases do not involve a damages trial, so a jury trial would be unnecessary, saving even more time and money.<sup>188</sup> Bifurcation would allow parties to focus more energy on the damages phase, possibly producing better damage decisions.<sup>189</sup>

Legislation from Congress and other top-down approaches to fixing the patent system may be combined with bottom-up approaches. Professor Xuan-Thao Nguyen<sup>190</sup> believes “[i]t is time to embrace a spirit of dynamic federalism by acknowledging and encouraging innovative reform at the local level, thereby solving, in part, a national problem.”<sup>191</sup> Instead, Congress has discouraged the judges who are central to patent reform from thinking outside-the-box.<sup>192</sup> Unfortunately, this has resulted in isolationism among judges and bar associations. In reality there have been “successful results from judges and local bar associations working together to control patent litigation, curb tactical abuses, reduce costs, deliver swift justice, and enhance judicial ex-

---

182. *Id.*

183. *Id.*

184. *Id.*

185. *Id.*

186. Lemley, *supra* note 13.

187. *Id.*

188. *Id.*

189. *Id.*

190. Professor Xuan-Thao Nguyen teaches Intellectual Property Licensing at the Southern Methodist University and is an expert in the Taxation of Intellectual Property matters. She is joining Indiana University in August 2014 and will lead the Center for Intellectual Property Law and Innovation at the IU Robert H. McKinney School of Law.

191. See Xuan-Thao Nguyen, *Dynamic Federalism and Patent Law Reform*, 85 IND. L.J. 449, 452 (2010).

192. *Id.* at 489.

pertise in patent cases.”<sup>193</sup> Innovation needs local patent reform to properly overhaul the patent system.<sup>194</sup>

The PTO must continuously work to improve the patent system to foster innovation. The PTO should do its best to create a reputation for an effective and efficient inventing economy. Bad policy and publicity will only stifle the public’s trust in innovation. For example, the PTO should avoid well publicized conflicts. For instance, Gilbert Hyatt has over seventy patents issued with the PTO.<sup>195</sup> However, Mr. Hyatt is currently suing the PTO because, allegedly, it has left two patent applications pending for over forty years.<sup>196</sup> Whether or not the PTO is at fault, there is no logical reason for pendency of a patent application to eclipse four decades.

Pendency has dropped in recent years because of greater application allowance rates by the PTO.<sup>197</sup> Additionally, research studies through the Intellectual Property Institute have shown continuing applications and refiled continuing applications have accounted for the filing increase at the PTO.<sup>198</sup> Approximately 20,000 continuing applications were filed in 1998, compared to almost 90,000 continuing applications filed in 2007.<sup>199</sup> Filing continuations allows a patentee to have “multiple bites at the apple” while maintaining the priority date of the original disclosure.

Filing continuations are a valuable tool in litigation, especially where the claims of an issued patent do not necessarily fit the accused instrumentalities, but the disclosure scope of the issued patent allows for such claims to be introduced through a continuing application to better fit the accused instrumentalities. Patent prosecutors may advise clients to file continuations before the first-filed patent is allowed, so he or she can extract value from the scope of the disclosure at the opportune moment. The ability to mold claims around inventions that exhibit significant market success from a disclosure given a priority date years before the “inventions” were reduced to practice is perplexing. One may argue that allowing a patentee to “have his cake and it eat it too” has caused much of the strife in the world’s strongest patent system.

---

193. *Id.*

194. *Id.*

195. Complaint at 7, Hyatt v. USPTO (No. 2:14-cv-11).

196. *Id.* at 3.

197. Christopher A. Cotropia et al, *Patent Applications and the Performance of the U.S. Patent and Trademark Office* (February 26, 2013). Richmond School of Law, Intellectual Prop. Inst., Research Paper No. 2013-01, 11.

198. *Id.*

199. Dennis Crouch, *Filing of Continuations and RCEs: 1998–2007*, PATENTLYO, <http://patentlyo.com/patent/2008/07/filing-of-conti.html> (last visited Mar. 7, 2014).

However, strengthening the patent system further may lead to unforeseen problems. Foreign inventors can obtain patents in the United States, offering little advantage to United States inventors over foreign rivals.<sup>200</sup> In fact, foreign rivals are obtaining patents in record numbers because the United States has the largest economy in the world and foreign investors see opportunity through the patent system.<sup>201</sup> Nevertheless, lawmakers have pressed for strengthened patent protection over the last three decades, believing it will increase U.S. competitiveness.<sup>202</sup>

Potential accused infringers, not interested in increasing competition, also want to strengthen the patent system. Specifically, science and technology companies believe the PTO lacks the proper access to prior art information.<sup>203</sup> Microsoft has led a prior art initiative because it has recognized its interest in patent transparency and quality aligns with the PTO.<sup>204</sup> Haracio Gutierrez, Vice President of Legal and Corporate Affairs at Microsoft, recognized that this “same commitment to transparency and quality has driven our efforts to make prior art information more easily accessible to the PTO.”<sup>205</sup> Microsoft currently provides visibility to its more than 37,000 patents through its Patent Tracker Tool.<sup>206</sup> Microsoft plans to make its prior art service with over ten million technical documents available to all patent examiners by May 2014.<sup>207</sup> New features and functionalities for prior art searches allow for greater transparency when prosecuting patents and leads to higher quality patents.

In theory, the optimal level of patent protection lies where the marginal cost curve intersects the marginal benefit curve.<sup>208</sup> Litigants believe the more

---

200. See William Hubbard, *Competitive Patent Law*, 65 FLA. L. REV. 341, 354 (2013).

201. See U.S. PATENT & TRADEMARK OFFICE, *supra* note 27.

202. See Keith Bentele & Alexander Ibsen, *Exploring the Patent Surge: Increased Incentives or Multiplying Motives?*, 95 J. PAT. & TRADEMARK OFF. SOC'Y 99, 100 (2013) (stating patent protection has been strengthened over the past three decades).

203. Pedro Hernandez, *Microsoft Voices Support for Patent Reform, Backs White House Plan*, EWEK (Feb. 23, 2014), [http://www.eweek.com/enterprise-apps/microsoft-voices-support-for-patent-reform-backs-white-house-plan.html?utm\\_content=bufferac988&utm\\_medium=social&utm\\_source=twitter.com&utm\\_campaign=buffer](http://www.eweek.com/enterprise-apps/microsoft-voices-support-for-patent-reform-backs-white-house-plan.html?utm_content=bufferac988&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer).

204. *Id.*

205. *Id.*

206. *Id.*

207. *Id.*

208. See generally Tim Worstall, *The Tabarrok Curve: Why the Patent System Is Not Fit for Purpose*, FORBES (June 23, 2013, 9:39 PM), <http://www.forbes.com/sites/timworstall/2013/06/23/the-tabarrok-curve-why-the-patent-system-is-not-fit-for-purpose/>.

money they invest, the better their chances of winning.<sup>209</sup> For example, X may have a skewed incentive because they have more at stake than Y.<sup>210</sup> This skewed incentive on average will yield skewed outcomes.<sup>211</sup> When the true underlying merits are balanced, the court should recognize and expect that X will present a better case than Y.<sup>212</sup> Calibrating the appropriate standard of proof would require the court to know: “(1) the overall cost of upholding patents that ought to be invalidated; (2) the cost of invalidating patents that ought to be held valid . . . ; (3) the stakes for each party; and (4) how expenditures affect success rates.”<sup>213</sup> However, these metrics are difficult to accurately assess because an entity challenging patent validity must meet the clear and convincing evidence standard.<sup>214</sup>

A unified analysis of the incentives to litigate may prove useful to patent reform. The Innovation Act would require public recordation of all parties with a beneficial interest in a patent. Public recordation would clarify true incentives to litigation by readily identifying exactly who is suing them. An alleged infringer has three options after receiving a demand letter from a patentee: (1) agree to the terms of the license by the patentee and pay the appropriate royalty; (2) do nothing and expect to raise validity and infringement issues as a defense in court; or, (3) file a declaratory judgment. The incentives of each option should be weighed relative to the probability and cost of each option.

Assuming that profits of an entity subsequent to a challenge is  $U$ , and profits from licensing as a function of royalty is  $V(r)$ .<sup>215</sup> The difference between  $U$  and  $V(r)$  is presumably positive.<sup>216</sup> Assuming payoff from losing litigation is  $W$ , and the patentee's stake in litigation is  $S$ , accounting for the infringer's probability of winning and the expected litigation costs will allow expected outcomes to be modeled for each of the infringer's three options.<sup>217</sup> Infringer's probability of winning is denoted as  $p(U-W, S)$  and expected litigation costs are denoted as  $L(U-W, S)$ .<sup>218</sup> The infringer can rationally decide

---

209. Joseph Farrell & Robert P. Merges, *Incentives to Challenge and Defend Patents: Why Litigation Won't Reliably Fix Patent Office Errors and Why Administrative Patent Review Might Help*, 19 BERKELEY TECH. L.J. 943, 948 (2004).

210. *Id.*

211. *Id.*

212. *Id.* at 951.

213. *Id.*

214. See David L. Schwartz & Christopher B. Seaman, *Standards of Proof in Civil Litigation: An Experiment from Patent Law*, 26 HARV. J.L. & TECH. 429, 432 (2013).

215. Farrell, *supra* note 209, at 956.

216. *Id.*

217. *Id.*

218. *Id.* at 957.

to take a license if the cost of a license,  $V(r)$ , exceeds the expected value of not taking a license,  $-L(U-W, S) + W + (U-W)p(U-W, S)$ .<sup>219</sup>

Modeling patent-related decisions in terms of dollars and cents may provide insight into beneficial changes in the patent system. However, the focus should not be on making cost-driven decisions, but rather, on what decisions can be made to reduce transaction costs. After all, the crusade for patent reform began because of the inordinate cost of patent litigation. Moreover, the problem with creating a functional model to make decisions in patent cases is that uncertainty is too high and settlements are too unpredictable.

Most settlement details outside of a patent trial are confidential, keeping uncertainty in patent cases high. If every company published how much they paid in royalties or settlements, accurate models could stabilize the secondary patent market. However, it is this uncertainty that keeps lucrative nonpracticing entities in business. Most companies hedge risk whenever reasonable and almost every large company hedges risk whenever possible. Therefore, companies will continue to pay to mitigate these risks. In light of the high level of uncertainty, companies are paying off entities asserting weak or unrelated patents

If settlement details included the patent numbers asserted, than weak and unrelated patents could more easily be identified. By identifying weak and unrelated patents quickly, the patent system would be more efficient. Companies would better understand the risk associated with the demand letters they receive and could take the appropriate action without paying counsel tens of thousands of dollars simply to investigate the matter. The Demand Letter Transparency Act of 2013 may further clarify potential patent suits.<sup>220</sup> The Act would require that any licensing term or pricing commitments associated with an asserted patent be identified.<sup>221</sup> Greater transparency within patent litigation will allow immediate action rather than lengthy investigation. Uncertainty in patent cases does not begin from the demand letter—it begins from uncertainty in the scope of patent claims.

Defining claim scope uncertainty may be a solution to improve the quality of patents. Grouping sources of scope uncertainty, that are difficult to avoid, and those that can be improved might lower the number of patent cases that win or lose on claim construction.<sup>222</sup> Then, using “perfect scope” as a hypothetical and theoretical claim, and objectively classify every product as either infringing or non-infringing.<sup>223</sup> But all claims will likely infringe to some extent. Literal uncertainly scoped claims are those where a significant

---

219. *Id.*

220. See Demand Letter Transparency Act of 2013, H.R. 3540, 113th Cong. § 264(a)(12) (2013).

221. *Id.*

222. See Harry Surden, *Efficient Uncertainty in Patent Interpretation*, 68 WASH & LEE L. REV. 1737, 1766 (2011).

223. *Id.* at 1772.



percentage of relevant products cannot be classified as infringing or non-infringing.<sup>224</sup> The magnitude of legal uncertainty may be related to the amount of equally reasonable outcomes or options.<sup>225</sup> At the very least, modeling legal uncertainty will highlight analogous problems with patent scope.<sup>226</sup>

Classifications based upon claim scope uncertainty may enhance precision and uniformity within the patent system. For example, the literal infringement doctrine requires juries to proceed through a claim, element by element.<sup>227</sup> Parameters derived from the properties of physical parts and features of inventions may be used to identify complete correspondence of a given claim element.<sup>228</sup> Every unique element will represent a classification rule.<sup>229</sup> Scope underdetermination will occur when a claim word has several distinct interpretations that are plausible.<sup>230</sup> Underdetermination may also occur when words are placed in the specification with the primary purpose to describe the existing state of the art.<sup>231</sup> Although these words were intended to describe the state of the art, they may import scope limitations detrimental to interpretation of claim elements.<sup>232</sup> By explicitly disambiguating inferred constraints, patent quality may increase and interpretation disputes may decrease.

Disambiguating inferred constraints will not be an easy task if the Supreme Court continues to develop rules with large magnitudes of uncertainty. For example, in *eBay v. MercExchange L.L.C.*, Justice Kennedy noted that a “‘plaintiff’s willingness to license its patents’” and “‘its lack of commercial activity in practicing patents’” would be sufficient to establish that the patent holder would not suffer irreparable harm under the four-factor test.<sup>233</sup> The terms “willingness to license” and “lack of commercial activity” have highly uncertain scopes. When deciding patent cases with such precedential value, courts need to consider the consequences of making more laws. Maybe Supreme Court decisions on patent cases should involve judges from the relevant art unit of the PTO. Perhaps Supreme Court Justices are not as equipped to analyze patent cases as a PTO judge with decades of experience deciding patent claim language ambiguities. Astute patent attorneys will now cite Su-

---

224. *Id.*

225. *Id.* at 1769.

226. *Id.* at 1771.

227. *Id.* at 1773.

228. *See* Surden, *supra* note 222, at 1773.

229. *Id.* at 1774.

230. *Id.*

231. *Id.* at 1778.

232. *Id.*

233. *eBay v. MercExchange L.L.C.*, 547 U.S. 388, 393 (2006).

preme Court cases like *eBay v. MercExchange L.L.C.* to clarify auxiliary ambiguities, only to find enormous uncertainty in the language for the rules.

Patent quality may also increase by adding requirements to the current patent prosecution process. Claims must particularly point out—and distinctly claim—the subject matter in the specification.<sup>234</sup> Another way to improve patent quality is to add a section in the specification that explicitly defines all ambiguities with the proper plain definition of each ambiguity. . Patentees will no longer have the option to argue their most favorable definition when ambiguities arise, or worse, adapt definitions not intended from the time of conception to allowance. The definition will be permanent and examined by the PTO, likely reducing the gamesmanship in patent litigation. The PTO grants exclusive rights to patentees by issuing claims, therefore, it must clarify ambiguities within claim scope. Fewer ambiguities will create higher quality patents, less disputes, and stronger inventor's rights.

Ambiguities not addressed by the PTO may be disputed, leaving the definition of the elements of an invention to claim constructions during litigation. Claim construction is solely a question of law.<sup>235</sup> If the Constitution grants inventors “the exclusive right to their respective writings,” why must additional questions of law arise after the PTO grants a patent?<sup>236</sup> Deciding questions of law multiple times is inefficient. If the PTO only allowed patents with exceptional clarity, further disputes may diminish.

Exceptional clarity may be achieved by eliminating or narrowing functional claiming in patent applications. This may allow patentees to sue for infringement over an entire technology when they only have the exclusive rights to a small improvement of the technology.<sup>237</sup> Further, patentees may be able to claim rights to future technologies that their patent did not intend to cover.<sup>238</sup> Allowing functional claims makes unintentional infringers vulnerable to broad claims. Unintentional infringers are defenseless when sued over broad functional claims because patent infringement is a strict liability offense.<sup>239</sup> Overly broad and vague patent claims produce unclear boundaries, making it hard to determine the technological scope of a patent.<sup>240</sup>

Creating bounds for the technological scope of a patent may decrease the uncertainty in patent infringement lawsuits. Defining a category, or range of categories, of technological scope upon the issuance of a patent may optimize the patent system. Accused infringers will be able to view the techno-

---

234. 35 U.S.C. § 112(b) (2012).

235. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 983–84 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996).

236. Const. Art. I § 8, cl. 8.

237. See U.S. Gov't Accountability Office, *supra* note 24.

238. *Id.*

239. *Id.* at 1.

240. *Id.* at 30.

logical scope of patents and make more effective licensing decisions. Moreover, the quality of a patent may be more easily defined. Quality improvements should be made at the PTO. Naturally, the PTO receives large amounts of criticism for the patent system's performance. Shawn Miller, an Economics Ph.D. Candidate at George Mason University, analyzed the quality of patents.<sup>241</sup> Miller estimated 27 percent of patents would have at least one claim invalidated based on anticipation or obviousness if litigated.<sup>242</sup>

More importantly, Miller recognized the "relative difficulty PTO examiners face in comparing claimed ideas to the relevant prior art."<sup>243</sup> Miller found that software and business method patents are difficult for examiners to find relevant prior art, therefore, difficult to reject.<sup>244</sup> Inversely, patents protecting inventions in the medical and energy industries are easier for examiners to find prior art, thus, easier to reject.<sup>245</sup> The availability and ease of finding relevant prior art will help determine novelty and obviousness at the examination level. However, the PTO should create new procedures post-issuance to optimize the patent system.

Creating more demanding administrative procedures with threat of abandonment for failure to comply may be a logical change. For instance, the PTO could change the current fee regime. Currently, patent owners pay maintenance fees to the PTO at 3.5, 7.5, and 11.5 years after they issue. Annual fees may lessen the amount of frivolous litigation. The PTO could place the annual fees towards the latter half of the patent term, like in Canada and the United Kingdom. New features should be considered and studied for the current administrative system.

In August of 2013 the U.S. Government Accountability Office (GAO) assessed factors, mandated by Section 34 of the American Invents Act, which may help improve patent quality.<sup>246</sup> The GAO's mandate to assess these factors was due to "concerns that patent infringement litigation by [nonpracticing entities] [was] increasing and that this litigation, in some cases, has imposed high costs on firms that are actually developing and manufacturing products."<sup>247</sup> The GAO concluded that no such nonpracticing entity problem

---

241. Shawn Miller, *Where's the Innovation? An Analysis of the Quantity and Qualities of Anticipated and Obvious Patents* (Feb. 10, 2012), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2029263](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2029263).

242. *Id.* at 28.

243. *Id.*

244. *Id.*

245. *Id.*

246. Adam Mossoff, *GAO Report Confirms No "Patent Troll" Litigation Problem, Center For The Protection of Intellectual Property*, CENTER FOR THE PROTECTION OF INTELLECTUAL PROPERTY (Oct. 4, 2013), <http://cpip.gmu.edu/2013/10/04/gao-report-confirms-no-patent-troll-litigation-problem/>.

247. *Id.*

existed.<sup>248</sup> The GAO, a nonpartisan agency under Congress, primarily used data “compiled from Lex Machina, a firm specialized in collecting and analyzing IP litigation data.”<sup>249</sup>

The GAO suggested that a focus on the type of patent may be more important than the type of litigant.<sup>250</sup> The GAO found software patent lawsuits accounted for approximately 89% of the increase in defendants from 2007 to 2011.<sup>251</sup> More importantly, the assessment recognized a “valuable opportunity to improve the quality of issued patents and the patent examination process and to further strengthen the U.S. patent system.”<sup>252</sup> Linking internal data from the PTO examination process to litigation data may provide insight on patent quality.<sup>253</sup> An objective, data-driven approach that accurately reflects patent-related behavior is critical to optimizing the patent system through legislation.<sup>254</sup>

## V. CONCLUSION

Ample uncertainty in patent litigation accounts for many of the problems in the patent system. The large number of patent cases brought by practicing and nonpracticing entities has impacted the market so profoundly that new patent legislation is inevitable. Many factors may explain the causes of the current state of the U.S. patent system. Given the complexity and technical aspects of patent law, an easy fix is not an option. Although the number of lawsuits by nonpracticing entities has risen, no single, exclusive explanation for this phenomenon exists.<sup>255</sup>

Creating legislation to improve the patent system, where the range of potential causes for inefficiencies is as expansive as the availability of actions, is troublesome. Several potential explanations for the current state of the patent system include: nonpracticing entities asserting more frivolous lawsuits; the PTO issued vaguely-worded, overly-broad patents in the 1990s that are being enforced now; many patents were awarded in the e-commerce and consumer-electronics field that are being asserted now; patents held by nonpracticing entities are being infringed more often; nonpracticing entities are buying patents that are already infringed; and inventors who did not have an avenue to assert patent rights before, due to limited resources, are now

---

248. *Id.*

249. *Id.*

250. See U.S. Gov’t Accountability Office, *supra* note 24.

251. *Id.*

252. *Id.*

253. *Id.* at 45.

254. Schwartz, *supra* note 8, at 427.

255. *Id.* at 449.

using nonpracticing entities.<sup>256</sup> Better data must be compiled before informed, educated legislation is deployed.

Before major legislation is drafted, data should be compiled about the relation between merits in a patent case to the settlement amounts, the length of time specific patent cases last, and the amount of attorneys' fees in patent cases.<sup>257</sup> The Innovation Act of 2013 will not dramatically change the patent system. Raising the pleading standard should help discourage frivolous patent suits, but will not stop the majority of patent suits. Patent litigation, like all litigation, involves three types of cases: (1) clearly frivolous cases; (2) clearly meritorious cases; and (3) cases in between.<sup>258</sup> Clearly frivolous cases must be stopped and laws must deter frivolous cases because they damage the patent system.

Valid, reliable data, compiled by an objective third party, concerning patent-related issues should be used to create legislation. Unfortunately, most studies are funded by groups that have ulterior motives. Even the studies within Section 8 of the Innovation Act are biased by ulterior motives. Government conducted studies are not entirely objective, even if the data used is valid and reliable. The methodology and motives behind data must be understood before patent reform actions are taken. Careful consideration of the sources used to make patent legislation is imperative because the legislation will affect the secondary patent market. Legislation that produces adverse outcomes in the secondary patent market may weaken the patent system. A weak patent system will fail to foster innovation in the world's most innovative country.

---

256. *Id.*

257. *Id.*

258. *Id.* at 448.