

# Hastings Science & Technology Law Journal

## A Better Carrot Incentivizing Patent Reexamination

JAMES W. BEARD

CITE AS: 1 HASTINGS SCI. AND TECH. L.J. 169

### **Abstract**

Patent reexamination provides a potentially powerful alternative to full invalidity litigation, but it has been underutilized because of deficiencies in the patent reexamination system. The system's appeal as an alternative to invalidity litigation is greatly diminished by constraints on forms of evidence and grounds for invalidity, the limited potential for challengers to participate in the process, and the significant risk a challenger takes in pursuing patent reexamination. While reforms have been proposed, most have focused on enlarging the procedure within the context originally established by Congress. Although such reforms may be important, they do not address the central obstacle to third party challenges. This note discusses an incentive structure that may encourage third parties to overcome the perverse motivation to practice willful blindness, and encourage active reading of issued patents.

# A Better Carrot Incentivizing Patent Reexamination

by JAMES W. BEARD\*

## I. Introduction

Almost three decades ago, Congress created by statute the modern patent reexamination system.<sup>1</sup> By providing an administrative mechanism to challenge the validity of patents, reexamination was intended to serve as an inexpensive alternative to full litigation. However, the system, as it currently functions, lacks the power and scope to be a viable alternative to such litigation, and the relative dearth of reexaminations shows that parties threatened with, or involved in, litigation overwhelmingly choose to attempt invalidation of patents in court. Most critical analyses of the reexamination system focus on modifying the existing provisions of the Patent Act to address the core deficiencies of the process.<sup>2</sup> While

---

\* Research Fellow, University of California, Hastings Law & Bioscience Project; J.D. Candidate, University of California, Hastings College of the Law, 2009; B.A., University of California, Berkeley. I would like to thank Professor Jeffrey Lefstin for his tutelage and feedback, Professor Robin Feldman (University of California, Hastings College of the Law) for her continuing advice and guidance, and the staff of the *Hastings Science & Technology Law Journal* for their work on this piece.

1. See Mark D. Janis, *Rethinking Reexamination: Toward a Viable Administrative Revocation System for U.S. Patent Law*, 11 HARV. J. LAW & TECH. 1, 22 (stating that the reexamination process finally passed into law in 1980).

2. See, e.g., Allan M. Soobert, *Breaking New Grounds in Administrative Revocation of U.S. Patents: A Proposition for Opposition – And Beyond*, 14 SANTA CLARA COMPUTER & HIGH TECH. L.J. 63, 113-19 (1998) (identifying expanded use of non-documentary sources such as prior use, knowledge or invention as well evidence of failure to comply with the disclosure requirement as possible reforms); Dale L. Carlson & Robert A. Migliorini, *Patent Reform at the Crossroads: Experience in the Far East with Oppositions Suggests an Alternative Approach for the United States*, 7 N.C. J.L. & TECH. 261, 312 (2006) (proposing expansion of the scope of considered evidence in inter partes proceedings to include additional written documents, interviews, limited discovery tools, expert affidavits, and oral hearings of parties, witnesses, and experts); Janis, *supra* 1, at 118-22 (advocating the abandonment of formal attempts to reform the reexamination system, and instead implement a more comprehensive *inter partes* system akin to the European Patent Convention post-grant opposition and U.S. trademark *inter partes* review

these modifications are doubtlessly a key element of any successful reform, they fail to address a more fundamental deficiency in the schema.

The current reexamination procedures are premised on the assumption that firms are actively engaged in reading, learning from, and analyzing patents.<sup>3</sup> In such an environment, reexamination would be a far more attractive solution by affording a low-pressure and low-cost means to reevaluate the strength of a patent. In reality, the behavior of firms runs counter to the above assumption as parties avoid the reading and appraisal of issued patents as a defense to willful infringement and the consequent treble damages.<sup>4</sup> Thus, any successful reform to the reexamination system must overcome this institutional inertia, and encourage firms to read and analyze active patents.

The incentive structure of the Hatch-Waxman Act, though initially implemented to address a number of issues not relevant to other patentable subject matter, illustrates the potential for non-traditional incentive schemes. This Note will examine the origins and development of patent reexamination, its current implementation as part of the Patent Act, and possible reforms that would serve the fundamental interest in increasing the strength of issued patents and ensuring a dynamic and active intellectual property market.

## II. The Origins of Modern Administrative Opposition

### A. The Path to Reexamination

The modern reexamination system grew out of a discussion that began in 1966, with the publication of the Report on the President's Commission on the Patent System. The Report<sup>5</sup> was targeted at general reforms of the patent system, and included proposals for pre- and post-issuance opposition, but many professionals doubted the efficacy of the measures.<sup>6</sup> In 1974, the American Bar Association

---

systems); Jay P. Kesan, *Carrots and Sticks to Create a Better Patent System*, 17 BERKELEY TECH. L.J. 763, 776-83 (2002) (suggesting pre-grant publication of patent applications 90 days after the first office action in order to encourage pre-grant opposition challenges).

3. Mark A. Lemley & Ragesh K. Tangri, *Ending Patent Law's Willfulness Game*, 18 BERKELEY TECH. L.J. 1085-87 (2003) (describing the disclosure function as a foundation of the patent system); *cf. id.* at 1101-02 (discussing the social effect of willful ignorance).

4. *See id.* at 1087-88 (describing the effect of willful ignorance of patents, with firms avoiding reading competitor's patents in order to avoid enhanced damages).

5. Soobert, *supra* note 2, at 82.

6. *Id.* at 83.

proposed a similar, though narrower, reform that required prior art and publications to be presented to the Patent and Trademark Office (“PTO”) for consideration before the sources could be used in a court invalidity proceeding.<sup>7</sup>

The first significant legislative action targeted at patent reexamination began in 1974.<sup>8</sup> Though the bill stalled after referral to the Committee on the Judiciary,<sup>9</sup> it included numerous provisions that were echoed and built upon in later proposals.<sup>10</sup> Notably, the provisions of the bill allowed for third parties to request reexamination of active patents via citation of prior art patents and printed publications bearing on the enforceability of the patent.<sup>11</sup> The challenger was required to pay a fee for the reexamination, but was strictly limited to the citation of prior art.<sup>12</sup>

Five years later Senator Bayh (D-Indiana) introduced Senate Bill (S.)1679, entitled the Patent Law Amendments of 1979.<sup>13</sup> The Amendments included reforms directed at the reexamination process, instructing the PTO to create regulations governing “(1) the citation to the [PTO] of prior art patents or publications. . . and (2) the reexamination of a patent to determine whether such a prior patent or publication has any bearing on the patentability of any claim,” and allowed any third party to “(1) cite to the [PTO] any such prior patent; and (2) request such a reexamination.”<sup>14</sup> Importantly, the bill also included a provision that declared “no prior patent or publication may be relied upon as evidence of nonpatentability in a civil action involving the validity or infringement of a patent” unless the prior art had been submitted to the PTO as per the bill’s provisions, or in cases where such consideration without submission would serve the interests of justice.<sup>15</sup>

---

7. *Id.*

8. N. Thane Bauz, *Reanimating U.S. Patent Reexamination: Recommendations for Change Based on a Comparative Study of German Law*, 27 CREIGHTON L. REV. 945, 947 (1994) (discussing Senator Fong’s introduction of Senate Bill 4259, which proposed an ex parte reexamination process).

9. Soobert, *supra* note 2, at 83.

10. *See id.* at 84-85 (discussing provisions of the Patent Modernization Act).

11. *Id.* at 84.

12. *Id.*

13. Summary of S. 1679, *A Bill to Amend the Patent Laws, Title 35 of the United States Code*, reported at S. Rept. 96-617, 4 Mar. 1980, available at [www.thomas.loc.gov](http://www.thomas.loc.gov) (last visited 21 Dec. 2008) (on file with author) [hereinafter *Summary of S. 1679*].

14. *Id.*

15. *Id.*

Additionally, the bill established criteria that allowed a court in a civil action to stay proceedings while a request for reexamination was pending, but used permissive language—that is, there was no requirement for the court to stay proceedings until the PTO had made a determination of validity or invalidity.<sup>16</sup> Thus, while the bill did not expressly *require* that prior art be submitted via the reexamination process, nor require stays of proceedings in civil actions while the PTO considered validity challenges, it did attempt to establish a comprehensive framework for patent reexamination. On March 20, 1980, the measure was indefinitely postponed in the Senate, effectively killing the measure, but together S. 4259 and S. 1679 created the backdrop for the first successful reexamination proposal.<sup>17</sup>

### **B. The Modern Schema**

On May 26, 1980, just six days after S. 1679 was tabled, Representative Kastenmeier (D-Wisconsin) introduced House Resolution 6933, entitled the Government Patent Policy Act of 1980, which was signed into law nine months later as Public Law 96-517 and codified as part of the Patent Act.<sup>18</sup> While the bill adopted some of the provisions of the earlier attempts, such as allowing limited third-party participation and usage of prior patent art and publications in the proceedings, it excluded the mandatory and permissive referrals to the PTO of prior art during civil litigation that appeared in S. 1679.<sup>19</sup> Although narrower in impact than the earlier measures, the Patent Policy Act effectively created the patent reexamination procedure as it exists and is implemented today.

The current procedure for patent reexamination is codified as sections 301 to 307 of the Patent Act, and it allows for limited third-party involvement in reexamination proceedings, which are constrained to consideration of narrow categories of evidence.<sup>20</sup> The sections allow for a potentially valuable alternative to full litigation of patent validity, but in practice litigants have opted, in most cases, to

---

16. *Id.*

17. *Id.*

18. Summary of H.R. 6933, *An Act to Amend the Patent and Trademark Laws*, 20 Nov. 1980, available at [www.thomas.loc.gov](http://www.thomas.loc.gov) (last visited 21 Dec. 2008) (on file with author).

19. Soobert, *supra* note 2, at 87.

20. See *In re Recreative Techs. Corp.*, 83 F.3d 1394, 1397 (1996) (observing that the reexamination provision allows “[n]o grounds of reexamination . . . other than [those] based on new prior art and sections 102 and 103”).

pursue invalidity via civil litigation rather than through reexamination proceedings, despite the difference in cost.

### C. Structure of the Code

#### 1. *Ex Parte Reexamination*

As currently implemented, the reexamination procedure establishes two mechanisms for third parties<sup>21</sup> to challenge the validity of an issued patent. First, the challenger can cite prior art, consisting of patents or printed publications only, to the PTO.<sup>22</sup> If the challenger is able to explain “in writing the pertinency and manner of applying such prior art to at least one claim of the prior art,” the prior art becomes part of the official file of the patent.<sup>23</sup> Challengers citing prior art under section 301 can opt to have their identity excluded from the patent file, and thereby hide their involvement from the patentee.<sup>24</sup> In cases where the challenger produces products or utilizes methods that potentially read on the patent at issue, anonymity serves to encourage participation by minimizing exposure.

The second method of third-party action, a direct request for reexamination, allows the challenger to initiate reexamination by the PTO on the basis of any artwork cited under section 301.<sup>25</sup> The challenger must submit a request in writing, accompanied by the payment of a reexamination fee—currently \$2,520 for an *ex parte* proceeding<sup>26</sup>—and include an explanation of the pertinency and manner in which the prior art impacts the patent at issue.<sup>27</sup> Unlike section 301 citation, however, requests for reexamination are not kept confidential, and the name of the challenging party becomes part of

---

21. Importantly, a patentee may choose to initiate a reexamination proceeding on their own, and often do—data shows that patentees have initiated about 40 percent of *ex parte* reexamination proceedings. J. Steven Baughman, *Reexamining Reexaminations: A Fresh Look at the Ex parte and Inter partes Mechanisms for Reviewing Issued Patents*, 89 J. PAT. & TRADEMARK OFF. SOC'Y 349, 354 (2007). This mechanism gives patentees a means to submit newly discovered prior art and confirm the validity of a patent, reaffirming the strength of a patent in a low cost environment. *See id.* This Note does not address patentee-initiated reexamination, however, and instead focuses on adversarial use of the system as an alternative to invalidity litigation.

22. 35 U.S.C. § 301 (2006).

23. *Id.*

24. *Id.*

25. 35 U.S.C. § 302 (2006).

26. 37 C.F.R. 1.20(c)(1) (2008).

27. 35 U.S.C. § 302 (2006).

the patent's official record.<sup>28</sup> Upon receiving the reexamination request, the PTO sends a copy of the request to the owner of the patent.<sup>29</sup>

Once the request has been received by the PTO, the Director must "determine whether a substantial new question of patentability" that bears on any claim of the patent is raised by the request and the submitted prior art.<sup>30</sup> This prevents the reexamination process from being used as a vexatious administrative proceeding to harass patentees by requiring the Director to first determine if subjecting the patent to reexamination is necessary.<sup>31</sup> Importantly, the Act expressly provides that previous examination of the submitted prior art by the PTO—for example, if the submitted prior art had been part of the initial examination of the patent—does not bar a submission from raising such a substantial new question of patentability.<sup>32</sup> This allows for challengers to illustrate the reasons for invalidity via the written statement accompanying the prior art, prospectively where the PTO failed to recognize such reasons.

Upon a finding that the submission raises a substantial new question of patentability, the patentee is given two months to respond to the challenge via submission of a statement.<sup>33</sup> In the response, the patentee is also allowed to file amendments to the patent, including "new claims he may wish to propose, for consideration in the reexamination,"<sup>34</sup> provided that such amendments do not enlarge the scope of the patent claim.<sup>35</sup> Amendments during reexamination proceedings are thereby limited to refining and narrowing the scope in light of new prior art to prevent the claim as a whole from a finding

---

28. *See id.*

29. *Id.*

30. 35 U.S.C. § 303 (2006).

31. *See infra* Part 0 for additional discussion on the intended balance between encouraging challenges to active patents and preventing harassment of patentees.

32. 35 U.S.C. § 303 (2006) ("[t]he existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office"); *see also* Baughman, *supra* note 21, at 350 (stating that even the prior art previously submitted and considered by the Patent Office can give rise to substantial new questions of patentability).

33. 35 U.S.C. § 304 (2006).

34. *Id.*

35. *See* 35 U.S.C. § 305 (2006) ("No proposed amendment or new claim enlarging the scope of a claim of a patent will be permitted in a reexamination proceeding under this chapter"); *see also* Quantum Corp. v. Rodime, PLC, 65 F.3d 1577, 1584, 36 USPQ 2d 1162, 1168 (Fed. Cir. 1995), *cert. denied*, 116 S. Ct. 1567 (1996) (holding claims at issue invalid because the scope had been broadened in reexamination).

of invalidity in litigation. After the patentee files a response, the challenger is given two months to submit a reply, at which point its participation in the process comes to an end.<sup>36</sup>

The reexamination begins after the times for filing the various responses and replies have expired, and is conducted according to the procedures for initial examination.<sup>37</sup> Once the reexamination has begun, neither party can abort it<sup>38</sup>—it concludes only when the PTO has issued a new certificate declaring the patent valid or canceling any unpatentable claims.<sup>39</sup> The decision is appealable to the Board of Patent Appeals and Interferences (“BPAI”) by the patent owner.<sup>40</sup>

## 2. *Inter Partes* Reexamination

Although many of the procedures for *inter partes* reexamination follow those of *ex parte* reexamination outlined above, the provisions differ in several key respects. First incorporated into the Patent Act through the American Inventors Protection Act in 1999, Congress intended *inter partes* reexamination to serve as an “expanded means for third parties to challenge the validity of a patent” and provide for increased involvement by the challenger during the proceedings.<sup>41</sup> As a prefatory distinction, the cost of an *inter partes* proceeding is higher, requiring that the challenger pay \$8,800 to initiate the reexamination.<sup>42</sup>

The extent of the increase in involvement is not substantial, however, and primarily takes the form of increased notice and communication with the challenging party regarding the proceedings. Specifically, the Act requires the Office to send the challenger a copy of any communication regarding the patent at issue.<sup>43</sup> In cases where the patent owner replies to the Office’s communications, the challenger may opt to respond to both the Office’s original communication and the owner’s response within thirty days.<sup>44</sup> As opposed to the *ex parte* proceedings, where the challenger was limited

---

36. 35 U.S.C. § 304 (2006).

37. 35 U.S.C. § 305 (2006).

38. See Soobert, *supra* note 2, at 96-97 (“Once the reexamination proceeding is commenced, the proceeding may not be abandoned and will always result in the issuance of a reexamination certificate.”).

39. 35 U.S.C. § 307 (2006).

40. 35 U.S.C. § 306 (2006); *accord.* 35 U.S.C. § 134 (2006).

41. Carlson, *supra* note 2.

42. 37 C.F.R. § 1.20(c)(2) (2008).

43. 35 U.S.C. § 314(b)(1) (2006).

44. See *id.* § 314(b)(2).



to a single response directly addressing the patentee's reply to the challenge, *inter partes* proceedings allow the challenger to make numerous responses stemming from any issues raised by the Office during its examination of the submitted art.<sup>45</sup>

Perhaps most importantly, an *inter partes* proceeding affords the challenging party the same right to appeal the decision to the BPAI as the patentee.<sup>46</sup> However, the tradeoff for this right of appeal is a limited estoppel against the challenging party—where the request for reexamination results in a reissued certificate, the challenger “is estopped from asserting at a later time, in any civil action . . . the invalidity of any claim determined to be valid and patentable on *any ground which the third party requester raised or could have raised during the proceedings*” (emphasis added).<sup>47</sup> While the section allows for challenges in civil litigation based on *new* grounds, the estoppel effect of section 315(c) does serve as a potential deterrent for third party challengers.

### III. Policy Interests in Reexamination

#### A. Initial Aims and Objectives

As originally contemplated by Congress, the reexamination procedure was intended to address and mitigate three central concerns regarding the strength and validity of active patents.<sup>48</sup> First, the reexamination procedure was intended to “settle validity disputes more quickly and less expensively than the often protracted litigation involved in such cases.”<sup>49</sup> Over the past three decades, the reexamination procedure has indeed proven to be far less costly than full litigation proceedings. While a reexamination proceeding can cost, on average, as little as \$55,000,<sup>50</sup> the cost of full litigation can be

---

45. See 35 U.S.C. § 314(b) (2006); and cf. § 304 (2006).

46. 35 U.S.C. § 315(b) (2006).

47. See *id.* § 315(c).

48. *Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 602 (Fed. Cir. 1985) (describing the benefits of reexamination as stated by the measure's proponents); see also *Patent Reexamination: Hearings on S. 1679 Before the Comm. on the Judiciary*, 96th Cong., 1st Sess. 1 (1979) (comments of Sen. Bayh that reexamination would permit courts to defer to the PTO for patent validity questions); 126 Cong. Rec. 29,895 (1980) (statement of Rep. Kastenmeier) (“[The bill would] “reverse the current decline in U.S. productivity by strengthening the patent and copyright systems to improve investor confidence in technology.”).

49. *Patlex Corp.*, 758 F.2d at 602.

50. Aparna Mathur, “*Courting Trouble on Patents*,” THE AMERICAN, 29 July 2008, available at <http://www.american.com/archive/2008/july-07-08/courting-trouble-on-patents>;

orders of magnitude higher—a 2003 survey found the average patent litigation suit to cost \$2 million.<sup>51</sup> This savings comes at a strategic price, with the challenger limited by the forms of evidence considered and the lack of discovery, expert witnesses, and other accoutrements of a full trial.<sup>52</sup> Although much of the cost difference stems from these very limitations, the unavailability of some forms of evidence during reexamination may have a significant effect on the potential outcome.

Second, Congress saw the reexamination procedure as a means to allow courts to “refer patent validity questions to the expertise of the Patent Office.”<sup>53</sup> District court judges are required to preside over all manner of cases, and are often unfamiliar with the highly technical and knowledge intensive aspects of high technology patents. For example, in the recent case of *LSI Industries, Inc. v. ImagePoint, Inc.*, Judge William O. Bertelsman stated “I get a patent case about every three years. In the 27 years, I’ve only had about five of them.”<sup>54</sup> In contrast, the PTO has clear experience interpreting complex technical claims and administering the strictures of the Patent Act, and so deferring preliminary questions of patentability to the Office encourages institutional efficiency.

Third, the reexamination system was intended to produce economic benefits. The modern patent system operates to protect and monetize the intellectual property of firms and individual inventors. The incidental effect of this nature is that patent portfolios, and consequentially the size, strength, and breadth of those portfolios, becomes an important indication of the firm’s market potential and worth. Thus, Congress hoped that “reexamination would reinforce ‘investor confidence in the certainty of patent rights’ by affording the PTO a broader opportunity to

---

see also Steven J. Frank, “Patent Reform Cacophony,” IEEE SPECTRUM ONLINE, Dec. 2005, <http://www.spectrum.ieee.org/dec05/2349> (last visited 18 Dec. 2008) (“A reexamination proceeding can cost each side \$10,000 to \$100,000, and oppositions will almost certainly cost more, since a much wider range of evidence will be considered.”).

51. William J. Bill Robinson, “*IP Litigation Strategies: Patents: Markman Hearings (Part 2)*,” FINDLAW.COM, <http://library.findlaw.com/2003/Sep/30/133071.html> (last visited April 28, 2009).

52. See Soobert, *supra* note 2, at 88-89 (describing the limitations on evidence considered by the PTO during reexamination proceedings).

53. *Patlex Corp.*, 758 F.2d at 602 (citing Senator Birch Bayh, *Patent Reexamination: Hearings on S. 1679 Before the Comm. on the Judiciary*, 96th Cong., 1st Sess. 1 (1979)).

54. *LSI Industries, Inc. v. Image Point, Inc.*, Nos. 2007-1292,-1293,-1294,-1295, *slip op. at 5* (Fed. Cir. 2008), <http://www.cafc.uscourts.gov/opinions/07-1292.pdf>.

review ‘doubtful patents.’”<sup>55</sup> By increasing the ease with which weak patents could be challenged and invalidated, those patents that remained in effect could be afforded a stronger presumption of validity by investors and could be relied on to a greater extent by firms in the development of business models, resulting in increased predictability in the market and greater investment.

At the same time, however, reexamination must balance the interests in increasing the ease with which weak patents could be narrowed or invalidated with the interest in protecting the rights afforded to valid patents. In drafting the modern schema, Congress “recognized that [these policy interests in reexamination] must be balanced against the potential for abuse, whereby unwarranted reexaminations can harass the patentee and waste the patent life.”<sup>56</sup> If the standards for opposition reexamination were set too low, such proceedings could be used to harass patent owners, to coerce them into unfavorable cross-licensing agreements, discourage investment in new high-technology startups by casting a pall over their nascent portfolio, or driving small companies completely out of business.

The current code includes safeguards against such vexatious behavior, including most notably the requirement that the submitted prior art raise substantial new questions of patentability.<sup>57</sup> This requirement serves to “protect patentees from having to respond to or participate in unjustified reexaminations.”<sup>58</sup> Additionally, the provisions that limit the forms of evidence considered to prior patent art and publications, as well as limitations on the grounds for reexamination to considerations of invalidity for lack of novelty and non-obviousness,<sup>59</sup> serve a similar gatekeeping function. By restricting the scope of the proceedings to evidence and subject matter that the PTO deals with on a procedural basis, a patent owner can opt to forego participation—though, perhaps to its detriment in some cases—relying instead on the strength of its patent to overcome any submitted prior art. The prohibition on participation by the challenger unless the patent owner files a response to the submitted art, both in *ex parte* and *inter partes* proceedings, furthers this

---

55. *Patlex Corp.*, 758 F.2d at 602 (citing 126 Cong. Rec. 29,895 (1980) (statement of Rep. Kastenmeier)).

56. *In re Recreative Techs. Corp.*, 83 F.3d at 1397.

57. 35 U.S.C. § 304 (2006).

58. *Id.* at 1397 (citing H.R. Rep. No. 96-1307, 96th Cong., 2d Sess. 3 (1980), *reprinted in* 1980 U.S.C.C.A.N. 6460, 6462).

59. *Id.* (“No grounds of reexamination were to be permitted other than based on new prior art and sections 102 and 103”).

mechanism by allowing the patent owner to completely forego participation in the reexamination. For small companies, this can substantially lessen the impact of vexatious challenges, and any proposed reforms must keep the effect of such mechanisms in mind.

### **B. The Policy Goals of Reform**

Over the years, numerous measures for reforming the patent reexamination process have been proposed.<sup>60</sup> Many such proposals have often focused, at least in large part, on one perceived shortcoming of the current reexamination system: the restrictions on allowable evidence considered by the PTO during the proceedings.<sup>61</sup> While such reforms may prove a significant benefit in reexamination proceedings, they also affect the cost of the proceeding. Expanding the scope of evidence considered by the PTO may improve the odds of a successful administrative challenge, but it would also increase the cost of the proceeding by requiring additional research and analysis of sources—especially the use of experts and discovery, even if in a limited capacity—currently restricted to invalidity actions. Thus, while proposals to expand the scope of evidence may encourage increased utilization of reexamination proceedings, they do so by creating a petty trial, administered by the PTO.

Even assuming that such broad traditional reforms were implemented at the PTO, firms may still be unlikely to opt for administrative revocation proceedings. Thus, the proposal outlined in this Note seeks to encourage greater use of reexamination proceedings by considering non-traditional incentives. As a threshold goal, any reform should seek to preserve at minimum, and increase if possible, the three policy interests sought by the original implementation of the reexamination procedure—reducing the expense of validity disputes, deference to the PTO on difficult questions, and increasing investor confidence in the system. To be successful, a reexamination reform should accomplish two additional

---

60. See generally Soobert, *supra* note 2; Janis, *supra* note 1; Carlson, *supra* note 2; Kesan, *supra* note 2; Baughman, *supra* note 21. Please note that while these sources contain a number of interesting proposals for reform of administrative proceedings, consideration of these additional measures exceeds the scope of this Note.

61. See, e.g., Soobert, *supra* note 2, at 68, 113-19 (calling for consideration of evidence on all statutory bases for invalidity, including non-documentary sources such as evidence of prior use, knowledge or invention); Carlson, *supra* note 2, at 312 (proposing expansion of the scope of considered evidence in inter partes proceedings to include additional written documents, interviews, limited discovery tools, expert affidavits, and oral hearings of parties, witnesses, and experts).

interests: increasing participation in administrative opposition proceedings and increased reading of patents.

1. *Increased Participation in Administrative Opposition Proceedings*

The current system has in many ways accomplished, at least in part, the initial intentions of Congress. However, in the years since reexamination became an option for third parties, it has yet to prove itself a *viable* and attractive option for challenging the validity of a patent. With the number of active patents currently involved in litigation estimated at 1.9 percent,<sup>62</sup> with “valuable” patents subject to substantially higher rates of litigation,<sup>63</sup> the utilization of the reexamination process is insignificant at best. In 2008, a mere 316 out of only 680 requests for *ex parte* reexamination filed (about 46-PERCENT) were known to have related litigation.<sup>64</sup> Conversely, out of 168 requests for *inter partes* reexamination, 115 (roughly 68-percent) were known to have related litigation.<sup>65</sup> During the same period, the Office issued a total of 182,556 patents and accepted applications for 495,095 patents.<sup>66</sup> Regardless of the measure, it is clear that the number of reexamination requests is an almost inconsequential share of the total number of patents involved in litigation. The impact is clear—both potential and defendant infringers are unlikely to utilize the reexamination system, opting instead to forego administrative proceedings in favor of invalidity litigation.

---

62. Mathur, *supra* note 50.

63. “Characteristics of patent litigation: A window on competition,” RAND Journal of Economics, (SPRING 2001), available at <https://www.entrepreneur.com/tradejournals/article/73891265.html> (“For the most “valuable” drugs and health patents, the estimated probability of litigation during the lifetime of the patent is more than 25-percent, and more than 10-percent in the other technology fields. As a percentage of utilized patents, these litigation rates would be even higher”).

64. UNITED STATES PATENT AND TRADEMARK OFFICE, PERFORMANCE AND ACCOUNTABILITY REPORT FISCAL YEAR 2008, 127 (2008), available at <http://www.uspto.gov/web/offices/com/annual/2008/2008annualreport.pdf>.

65. *Id.* While the percentage of *inter partes* proceedings with attendant litigation is higher than that of *ex parte* requests, given the relatively small number of overall requests it seems likely that parties opt for *inter partes* proceedings when they are already subject to estoppel issues—i.e. when they are already involved in litigation—rather than opting for *inter partes* proceedings on the basis of the prospect for increased involvement. This, combined with instances of self-submission of an *ex parte* reexamination request by patent owners to refine patent claims, should largely resolve the differences in the observed utilization.

66. *Id.* at 62.

Given the substantial difference in cost, and assuming that the participants in the system are rational actors, the most likely explanation is that potential and defendant infringers are choosing full invalidity litigation because it allows them presentation of additional forms of evidence, discovery, expert witnesses, and broader means for invalidating a patent beyond the anticipation and non-obviousness criterion allowed under in the process. Under the current system, parties already involved in litigation appear reticent to initiate *inter partes* proceedings, and parties not so involved appear unwilling to initiate either form of challenge. Although statistics and motives to explain such behavior are unavailable, it seems imminently likely that on the part of *inter partes* litigation, parties already faced with the effect of estoppel and the cost of full litigation would see little benefit in initiating duplicative proceedings that afforded a narrower prospect for invalidating the patent claims at issue.

Conversely, parties not involved in litigation would face a *significant* risk bringing either manner of opposition given the requirement that the challenger's name become part of the patent's official record. The parties with the most knowledge regarding the potential invalidity of a patent are likely those with commercial interests at stake in the outcome of that validity determination. As a result, the parties most likely to succeed and have some motivation to bring a reexamination challenge are the same parties with the greatest disincentive to do so—initiating the proceeding, and thereby making itself known to the patent owner, exposes the party to a costly infringement lawsuit.

## 2. *Increased Patent Reading and Review*

Ostensibly, one of the primary purposes of the patent system is to contribute knowledge and technology to the public domain.<sup>67</sup> Even if a patent applicant has made an invention that is truly new, useful, and non-obvious, the patent will be denied (or can be invalidated if granted) if the patent does not properly enable others to practice the subject matter.<sup>68</sup> The monopoly granted to the inventor is therefore a trade: a period of exclusivity granted in exchange for the knowledge needed to practice the invention. When the patent term expires, the

---

67. See John M. Olin, Note, *The Disclosure Function of the Patent System (or Lack Thereof)*, 118 HARV. L. REV. 2007, 2008 (2005) (introducing the “twin purposes” of the patent system).

68. 35 U.S.C. § 112 (2006).

knowledge is ceded back to the public domain for use by other inventors and firms.

However, knowledge can sometimes be a liability: if an infringer is found to have known about a valid patent, and acted without a reasonable basis for believing the patent invalid, they can be subject to enhanced damages.<sup>69</sup> As a general rule, treble damages are only granted when the fact-finder determines the infringement was willful—that is, that the infringing party knew of the patent and had no reasonable basis to believe its actions were not infringing.<sup>70</sup> This heightened liability has a perverse effect, discouraging companies from reading—and thereby learning from—the patents of their competitors, eliminating the purported benefit of the disclosure function of the patent system.<sup>71</sup> A primary concern for any new reexamination reform procedure must therefore be the mitigation of this institutional impetus and the incentivization of both reexamination processes in order to increase third party participation, while preserving and furthering the original aims and objectives enumerated by Congress.

#### IV. The Unexamined Patent Is Not Worth Litigating . . .

Most analyses of and proposals for the current reexamination system have focused on several central aspects of the process, such as the extent of third-party participation and involvement in examination,<sup>72</sup> the forms of evidence considered during reexamination,<sup>73</sup> and the estoppel effect of reexamination validity determinations on third parties in subsequent litigation and appeals.<sup>74</sup>

While adjusting these aspects of the system may increase third-party utilization of the procedure, there is a limit to the extent they can be modified without undercutting the administrative nature of the

---

69. 35 U.S.C. § 284 (2006).

70. See Joshua Stowell, *Willful Infringement and the Evidentiary Value of Opinion Letters after Knorr-Bremse v. Dana*, 2005 DUKE L. & TECH. REV. 5 ¶ 1 (2005); see also Andrew M. Newton, *Encouraging Willful Infringement? Knorr-Bremse Leaves Due Care in Patent Litigation in a State of Flux*, 15 TEX. INTELL. PROP. L.J. 91, 93-94 (2006) (introducing willful damages for infringement).

71. See Lemley, *supra* note 3, at 1087-88.

72. See Soobert, *supra* note 2, at 108-13 (criticizing the current system as unduly limiting third party participation); *id.* at 125-27 (arguing the need to expand grounds for validity challenges).

73. See *id.* at 113-15 (arguing that “nondocumentary evidence of prior art, such as evidence of prior use” may prove persuasive in new technology areas).

74. See Janis, *supra* note 1, at 81-86 (discussing the effects of issue preclusion in the current system).

reexamination procedure. Allowing greater third-party involvement in *ex parte* proceedings, for example, would conflate the process with *inter partes* proceedings, which already afford greater involvement by the challenger.<sup>75</sup> Similarly, while expanding the evidence that challengers could cite to the PTO and allowing consideration of additional grounds of invalidity—such as lack of enablement under section 112—holds promise, to expand the scope of such allowances too significantly would exceed the administrative scope of the proceeding. One of the principal benefits of the reexamination process is the relatively low cost of the proceeding. Allowing parties to engage in citation of non-documentary evidence akin to that allowed during litigation, including expert witnesses or evidence gained through extensive discovery, would drastically increase the cost of reexamination and thereby nullify the benefits of the administrative action.

Finally, while third parties involved in an *ex parte* challenge are not estopped by the Act from asserting invalidity challenges based on cited prior art—as they are in *inter partes* proceedings—the art would likely have less import in subsequent invalidity litigation once the patent has survived a reexamination proceeding and the art has become part of the patent's official file. Modifying the effects of the statutory estoppel for participants in an *inter partes* proceeding, where the parties are able to appeal the results of such proceedings to the BPAI, would discourage challengers from appealing adverse validity determinations through the proper channels.

#### A. Incentivizing Reexamination

Even assuming that the sources of evidence considered were expanded to include other documentary and limited non-documentary sources not requiring discovery, the participation of third parties was increased, and the estoppel effect of both *ex parte* and *inter partes* proceedings were limited so as to encourage administrative invalidity actions over litigation, these measures are unlikely to have a drastic impact. Patentees and potential challengers, knowing the relative costs, benefits, and risks of both processes, most often choose to determine invalidity issues in full litigation.<sup>76</sup> Where the cost of infringement can be tens, if not

---

75. See text accompanying notes 43-45.

76. See notes 62 to 66 and accompanying text.



hundreds, of millions of dollars,<sup>77</sup> it is likely that potential infringers would in many cases still opt for litigation which, while more expensive than the reexamination proceeding, still costs far less than a finding of infringement.

Perhaps more importantly, the proposed reforms do little to encourage *active* use of the reexamination system in cases where the challenger is not threatened by or involved in civil litigation. Currently willful infringement, where a firm discovers that its products read on another's patents, can incur enhanced damages on the infringer.<sup>78</sup> Paired with the relatively minimal benefit created by the disclosure of the patent itself—even if the patent discloses new technology or techniques, the firm is still barred from practicing that technology without a license—the system creates a perverse incentive to discourage firms from reading patents.<sup>79</sup> This dynamic makes it unlikely that a firm, even where the prospect of invalidating a patent is high, would even know of the patent's existence.

Herein lies the primary issue with the proposals that focus principally on expanding the species of evidence considered by the PTO in reexamination proceedings. In cases where the challenger is already known to the patentee, and is either at risk for or involved in infringement litigation, even broad reforms would do little to encourage extensive use of an administrative reexamination proceeding: faced with the cost of litigation regardless, the infringing firm is more likely to broach the invalidity issue as part of the litigation, where it benefits from more extensive discovery and an expanded evidentiary scope not available in reexamination. Alternatively, in cases where a party is not involved or threatened with litigation, it will be unlikely to read patents for fear of enhanced damages, and therefore unlikely to bring challenges at all.

---

77. See, e.g., *Polaroid Corp. v. Eastman Kodak Co.*, 16 U.S.P.Q.2D (BNA) 1481, 1541 (finding award of \$909,457,567); *City of Hope National Medical Center v. Genentech, Inc.*, 123 Cal. App. 4th 306, 313 (Cal. App. 2d Dist. 2004) (affirming award of \$500,164,030); see also "Settlement Reached in BlackBerry Patent Case: Research in Motion Pays NTP \$612.5 million; Devices Stay On," MSNBC.COM, 3 Mar. 2006, <http://www.msnbc.msn.com/id/11659304/wid/11915829> (last visited Mar. 9, 2009) (describing a \$612.5 million settlement in the patent infringement case between RIM and NTP over the BlackBerry system).

78. See 35 U.S.C. § 284 (2006); see also Louis L. Wu, *Comment: Enhanced Damages for Willful Patent Infringement – An Issue for Judge or Jury?*, 33 U.S.F. L. Rev. 435, 435 (1999) (discussing liability for treble damages for willful patent infringement).

79. See Olin, *supra* note 67, at 2023 (weighing the "low benefits and high expected costs of investigating patent applications"); see also Lemley, *supra* note 3' (arguing that willful blindness can serve as a defense against willful infringement).

A successful modification of the reexamination system must do more than merely increase the appeal of administrative challenges once a party is threatened with litigation. Such improvements would have *de minimis* impact on utilization, at least relative to the number of patents involved in litigation. A truly powerful administrative option must overcome the perverse incentive for “willful blindness” by parties, and encourage them to actively read and challenge the patents.<sup>80</sup>

### **B. The Hatch-Waxman Act<sup>81</sup>**

In 1984, Congress passed the Drug Price Competition and Patent Term Restoration Act (Hatch-Waxman Act), which created a powerful provision for encouraging invalidation of pharmaceutical patents.<sup>82</sup> Intended to encourage the development of generic pharmaceuticals on the market, the Hatch-Waxman Act dealt with the unique issues that generic drug makers faced in bringing their products to market.<sup>83</sup> Specifically, all pharmaceutical drugs must obtain approval by the Food and Drug Administration (“FDA”) before they can be brought to market.<sup>84</sup> This process is expensive and time consuming, and as a result few manufacturers sought approval to produce generic versions of patented drugs.<sup>85</sup> Those that did could only begin the process at the conclusion of the drug’s patent term, which gave a *de facto* artificial extension to the life of the patent.

---

80. See Lemley, *supra* note 3, at 1102 (noting that “experienced patent lawyers often advise their clients to avoid reading patents in order to avoid liability for willfulness”).

81. For an excellent introduction into the Hatch-Waxman Act and the issues with potential collusive dealing, please see C. Scott. Hemphill, *Paying for Delay – Pharmaceutical Patent Settlement as a Regulatory Design Problem*, 81 N.Y.U.L. Rev. 1553 (2006).

82. Drug Price Competition and Patent Term Restoration Act of 1984 [hereinafter Hatch-Waxman Act], Pub. L. No. 98-417, 98 Stat. 1585 (1984) (codified at 21 U.S.C. § 355 and 35 U.S.C. § 271(d)-(h) (2003)).

83. Natalie M. Derzko, *The Impact of Recent Reforms of the Hatch-Waxman Scheme on Orange Book Strategic Behavior and Pharmaceutical Innovation*, 45 IDEA 165, 166 (2005) (stating that the Hatch-Waxman Act was intended to facilitate generic drug entry into the market).

84. *Id.* (discussing the introduction of a pre-market drug approval process requiring demonstration of drug effectiveness and drug safety through the passage of the Drug Amendments of 1962).

85. Douglas A. Robinson, *Note: Recent Administrative Reforms of the Hatch-Waxman Act: Lower Prices Now in Exchange for Less Pharmaceutical Innovation Later?*, 81 WASH. U. L. Q. 829, 831 (2003) (discussing the issues drug manufacturers face in bringing generic versions to market).

In order to redress this issue, Congress passed the Hatch-Waxman Act, which allowed generic firms to “rely on the safety and efficacy data compiled by the brand-name companies during the FDA approval process” in the form of an Abbreviated New Drug Application (“ANDA”), thereby reducing the cost of obtaining FDA approval for the generic version.<sup>86</sup> The Act allows for the filing of four certification options, including a claim that the relevant patent is invalid or, in the alternative, that the generic version does not infringe the patent.<sup>87</sup> This option, known as an ANDA paragraph IV certification (“ANDA-IV”), is categorized by statute as a technical act of infringement, and the patentee can prevent the certification of the generic by filing an infringement suit within 45 days.<sup>88</sup> The first generic applicant who successfully files an ANDA-IV is granted 180 days of market exclusivity, effectively creating a duopoly.<sup>89</sup>

As a general mechanism, the Hatch-Waxman Act serves as a powerful incentive to challenge the validity of a pharmaceutical patent. In cases where the patent owner brings suit in response to the ANDA-IV filing and the patent is declared invalid, the provisions exclude other generic manufacturers from the certification process for six months *despite* this invalidity.<sup>90</sup> The Act thereby sets an interesting statutory precedent: where the interest of public policy is to increase the number of challenges to a patent, Congress can create a time-limited duopoly for the patentee and challenger even though the fact that a finding of invalidity means that no monopoly should have existed in the first place.

### C. Applying Hatch-Waxman Incentivization

The incentive scheme provided by the Hatch-Waxman Act illustrates the power of non-traditional solutions to encouraging reexamination, and suggests one potential incentive scheme for product and method patents. Namely, Hatch-Waxman

---

86. *Id.* at 834. Under the ANDA filing scheme, generic pharmaceutical manufacturers must prove that the generic version uses the “same active ingredient, route of administration, dosage form and strength . . . [and show] that the generic drug is ‘bioequivalent’ to the relevant brand-name product.” *Id.*

87. *Id.* at 835.

88. *Id.* at 835-36.

89. Hemphill, *supra* note 81, at 1566.

90. See Hemphill, *supra* note 81, at 1560 (stating that “[i]n the case of a determination of invalidity or noninfringement, the generic firm enjoys a 180-day exclusive right to market a generic version of the drug in competition with the innovator, effectively a duopoly during that period, before other generic firms are permitted to enter the market”).

incentivization could serve as a powerful incentive to competing firms to challenge patents via reexamination. By granting a limited period of exclusivity to the first firm to file a reexamination request, Congress could encourage firms to actively read patents, analyze them for weaknesses, and challenge their validity. However, if applied to letters patent as a whole, the policy interest of the Hatch-Waxman incentive structure must be modified. There are no regulatory delays or costs concomitant with normal letters patent, which served as the initial impetus for the Hatch-Waxman Act, but the policy structure can be applied by analogy and suitably limited in scope and duration. Perhaps most significantly, the very structure of the already existent reexamination system serves to prevent the manner of collusive agreements seen in *In re Ciprofloxacin Hydrochloride Antitrust Litigation* (hereinafter *In re Cipro*).

### 1. *Pre-Litigation Restriction*

In keeping with the general goals of reform outlined in Section 0, *supra*, Hatch-Waxman incentives must be more carefully constrained if applied to normative letters patent in order to encourage use of reexamination challenges without allowing challengers to harass patent owners. As an incentive structure aimed at encouraging firms to actively read and challenge patents, the duopoly grant should not be available for potential infringers who are involved in—or under threat of—infringement litigation. Thus, in cases where an infringement lawsuit has been filed, is pending, or is threatened,<sup>91</sup> the alleged infringer would be barred from filing a request for reexamination under the proposed incentive structure. Instead, the alleged infringer would be restricted to challenges under the standard reexamination procedures, and if the patent were found invalid, the infringer would gain no duopoly interest but could freely practice the claims of the patent. In such situations, the reexamination system would still provide an attractive alternative to full litigation, especially if enhanced with some of the possible reforms discussed in Section 0, *supra*.

---

91. See *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1381 (2007) (holding that “where the patentee takes a position that puts the declaratory judgment plaintiff in the position of either pursuing arguably illegal behavior or abandoning that which he claims a right to do” the Article III case or controversy requirement would be met). The SanDisk standard would be a possible means to gauge whether a challenger’s request for reexamination was brought prior to actual or threatened litigation.

## 2. *Early Challenges*

Similarly, given the strength of such an incentive structure, the reward schema should be structured to encourage active reading and early challenges of invalid patents. A reexamination proceeding initiated at the conclusion of a patent's term does relatively little public good, with the effect of the resulting duopoly serving primarily to allow a second firm to establish a strong market position rather than prevent market entrenchment by the patentee via the ceding of the patent to the public domain. Clearly, at minimum, a challenge initiated at the very end of a patent term should not allow a duopoly that might extend the life of a patent beyond the original term.

Even if the relevant market becomes competitive after a patent is declared invalid, a lengthy monopoly gained through an improperly granted patent affords significant benefits to the firm even after the patent is revoked.<sup>92</sup> Restricting the duopoly grants to instances where the challenger initiates proceedings during the earliest years of a patent term—for example, the first 5 or 10 years after issuance—would encourage early challenges before a firm holding an invalid patent is able to substantially entrench its market position. In order to encourage these early challenges to patent validity, the duopoly reward should only be available for challenges brought during the early years of a patent term.

### **D. Duopoly Rights & Remedies**

Related to this point is the need for a properly limited term for any duopoly resulting from a successful invalidity challenge. Notwithstanding the foregoing discussion, there are notable shortcomings in the application of the Hatch-Waxman Act that must be included in any application of the Act's concepts to the current discussion. Under the Hatch-Waxman Act's provisions, a generic firm filing a successful ANDA-IV certification is granted a 180-day exclusivity period wherein the FDA will delay approval of any other firm's ANDA-IV.<sup>93</sup> Importantly, the market exclusivity period is granted as a result of the filing of the ANDA-IV certification, *not* as a result of a successful invalidation of the underlying patent in litigation following the certification request.<sup>94</sup> Thus, a first-to-file generic

---

92. See generally Rajshree Agarwal, *First-Mover Advantage and the Speed of Competitive Entry*, 1887-1986, 44 J. LAW & ECON. 161 (2001) (discussing patents and the effects of market entrenchment on subsequent firms' entry into the market).

93. See Hemphill, *supra* note 81, at 1578.

94. See *id.* at 1578-79.

manufacturer can still gain the 180-day market exclusivity if the patent owner declines to bring suit for infringement.<sup>95</sup> The *de facto* duopoly is therefore created by a regulatory delay, rather than a statutory grant of such market power—a significant characteristic that will affect any application to normative letters patents. However, regardless of the source of authority, it is a grant of significant market power.

1. *The Right to Exclude*

This leads to the ultimate question: what remedies should be available to the duopoly firms following a successful reexamination challenge under this schema? Since, in most industries, there is no functional public regulatory equivalent to the FDA that could bar entry to the market by subsequent firms by delayed approval, the enforcement mechanism for use of the invention during the duopoly period must be private—that is, a cause of action for infringement. The central issue, of course, becomes that an invalid patent cannot be infringed, at least as the patent system is construed and organized under current law. But that law stems from legislative action, based on the guiding principle of the Patents and Copyright Clause of the Constitution, which states simply that “[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>96</sup> For letters patent, the intent of the Patent Act is to promote the disclosure of new inventions—and the concomitant scientific and technical knowledge behind their creation—by granting a temporally limited monopoly.

In the context of the proposal outlined here, the invalidation of the invention serves a parallel function, even if it represents a paradigm shift from the current system. The relinquishment of the monopoly, first in the form of a duopoly and then in the form of full invalidation, returns the scientific and technical knowledge circumscribed by the patent to the public domain. Once the technology is free of the patent monopoly, other inventors are free to use the products and methods to create derivative, improved inventions. Therefore, even though such an exception to the normative requirements of patentability, and allowing a limited duopoly for invalidated patents, may initially seem antithetical to the patent system, it serves to further promote innovation and invention

---

95. *Id.*

96. U.S. CONST. art I, § 8.

by accelerating the return of knowledge to the public domain, where it can be utilized more effectively.

Even if allowing infringement actions during the duopoly period is warranted and constitutional, the question of what remedies should be available remains. A threshold issue, however, is which parties would have standing to practice the patent and exclude others from such practice during the term of the duopoly. While the patentee's right to exclude would clearly be reduced by the proposal, as it would have no right to exclude the challenger from practicing the patent, determining what remedies would be available during the duopoly term is contingent on each party's respective rights during the period.

Although a period of joint ownership and power to exclude, albeit brief, does potentially complicate the full exercise of rights afforded by a patent, such complications are not unprecedented.<sup>97</sup> The duopoly period might be properly analogized to situations of joint inventorship, which presents many of the same issues and illustrates surprising benefits of such a dynamic. Both the (former) patentee and the successful challenger would necessarily have the right to file causes of action for infringement during the duopoly period, without which there would be no means to enforce the duopoly right. Ironically, in such causes of actions the very complications caused by a right to exclude held jointly would further serve to facilitate market entry by additional firms, even during the duopoly period.

In cases of joint inventorship, proper adjudication of an infringement action requires that all owners of the patent be named parties.<sup>98</sup> While patents are granted in the form of a personal property right, patents held jointly have typically been treated as a form of common property and each owner treated as an indispensable party under Rule 19.<sup>99</sup> Where a joint owner of a patent refuses to join an infringement action, courts will consequently dismiss the action in equity and in good conscience.<sup>100</sup> Applying these standards to the

---

97. See, e.g., *Waterman v. MacKenzie*, 138 U.S. 252, 255 (1891) (requiring all owners of a patent be named in a suit for it to proceed); *Ethicon, Inc. v. United States Surgical Corp.*, 135 F.3d 1456, 1466 (Fed. Cir. 1998) (holding that a license granted by a co-inventor of the patent at issue was proper and allowed the licensee to practice the invention despite having no license from the other co-inventor).

98. See *Waterman v. MacKenzie*, 138 U.S. 252, 255 (1891) (requiring that a suit for infringement be brought in the patent owner's name).

99. Richard F. Cahaly, Note: *At Each Other's Mercy: Do Courts Fairly Apply Rule 19 of the Federal Rules of Civil Procedure to Protect Patent Co-Owner's Rights?*, 35 SUFFOLK U. L. REV. 671, 671, 686 (2001).

100. See *id.* at 686.

duopoly at issue here, both the patentee and the challenger would have equal interests in the enforcement of the right to exclude others during the duopoly period. As such, courts would hold both parties as indispensable parties until the expiration of the duopoly period, and joinder would be required in order for either party to file an infringement action against a third-party practitioner. If either party refused to join the action, this structure would further encourage the dissolution of the initial monopoly. Where the patentee and challenger were unwilling, or unable, to join suit to enforce their mutual right to exclude others, additional firms could enter the market.

## 2. *The Right to License*

Related to and deriving from the parties' mutual right to exclude others from practicing the invalidated patent is the right to license the subject matter to others. Drawing once again upon the framework provided by joint inventorship, courts have long held that any co-inventors can properly license the invention for practice by a third party irrespective of the wishes of the other inventors.<sup>101</sup> Once the PTO concluded the reexamination process, found the patent invalid, and initiated the duopoly period, either party would be free to license the subject matter to third parties.<sup>102</sup> Empowering both parties to freely license the patent would improve competition in the market, by both increasing the likelihood that licenses would be granted in the first place and decreasing the resultant cost of such licenses. Many third-party firms may opt to wait until the expiration of the duopoly to enter the market, but the cost of the duopoly licenses would likely be low due to their limited term and would allow competitors to begin immediate commercialization of the subject matter. Market forces would shape the costs and structure of any duopoly licenses, in most cases facilitating the entry of additional firms into the market even before the expiration of the duopoly.

---

101. *See id.*; *see also generally* Dale L. Carlson & James R. Barney, *The Division of Rights Among Joint Inventors: Public Policy Concerns After Ethicon v. U.S. Surgical*, 39 IDEA 251 (1999); Cahaly, *supra* note 99, at 683 (“[P]atent co-owners’ licensing independence can preclude use of the involuntary plaintiff rule because a third party cannot infringe a patent if that party holds a lawful license from one of the co-owners.”).

102. *Cf. Ethicon*, 135 F.3d at 1466; *see also* Cahaly, *supra* note 99, at 679 (stating that “[a]bsent a private contract, patent co-owners may act independently regarding patent licensing”).



### 3. *Royalties*

Having determined that both the patentee and challenger have shared rights of exclusion and licensing for successfully invalidated patents, the question becomes what remedies should be afforded the parties in an infringement action against an unlicensed practitioner of the subject matter. In cases of nominal infringement of valid patents, the Patent Act provides that a patentee is entitled to no less than a reasonable royalty for the use made of the invention.<sup>103</sup> This amount mimics the amount the patentee could have obtained from the infringing party if it had licensed the patent.<sup>104</sup> Courts consider 15 factors, stemming from Second Circuit's opinion in *Georgia-Pacific v. United States Plywood*, that focus on three principal concerns: "the significance of the patented invention to the product and to market demand, the royalty rates people have been willing to pay for this or other similar inventions in the industry, and expert testimony as to the value of the patent."<sup>105</sup> This analysis aims to determine what value the parties would have initially placed on the license for the patent.<sup>106</sup>

Royalty payments would be just as valuable a remedy during the duopoly as they currently are for patentees, and given the limited term might present fewer issues. Even assuming the court properly calculates the royalty rate, the royalty determination in nominal cases of infringement necessarily assume that the parties would have been willing to negotiate a license in the first instance.<sup>107</sup> By virtue of this assumption, the court ignores a variety of factors that could have, or may have in fact, prevented a license agreement before the infringement, such "competition between the parties, the effect of the deal on other licensees, disagreements over the merits of the claim, or—most significantly—the possibility that the patentee stood to lose more than the defendant had to gain from licensing, so that no deal was rational."<sup>108</sup> In the context of a term-limited duopoly, however,

---

103. 35 U.S.C. § 284 (2006). Courts may also award interest and costs to this amount. *Id.*

104. See Mark A. Lemley & Carl Shapiro, *Frontiers of Intellectual Property Patent Holdup and Royalty Stacking*, 85 Tex. L. Rev. 1991, 2017-18 (2007) (discussing the computation of a reasonable royalty).

105. Lemley, *supra* note 104, at 2018. See also *Georgia-Pacific v. United States Plywood*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (listing the factors to be considered in determining a reasonable royalty).

106. See *id.*

107. See *id.* at 2019-2020 (discussing the issues with royalty calculations).

108. See *id.* at 2019.

the exclusion of these considerations is less problematic. Since the purpose of the invalidation process is to break up improperly granted monopolies, the interests of the patentee and challenger to exclude others from competing in the market, or only allowing entry under high royalty rates, should be given less weight. Instead, reasonable royalty rates would provide fair compensation for the successful reexamination proceeding, without unduly hampering other potential market entrants.

#### 4. *Injunctive Relief*

Courts also have latitude to grant injunctions according to “the principles of equity to prevent the violation of any right secured by patent,” as long as the terms of such an injunction are reasonable.<sup>109</sup> The grant of permanent injunctive relief is an act of equitable discretion by the court,<sup>110</sup> and a court must weigh a variety of factors before granting such relief and should do so “only where the intervention of a court of equity ‘is essential in order to effectually protect property rights against injuries otherwise irremediable.’”<sup>111</sup> Given the equitable nature of injunctive relief, it is especially appropriate for application as remedy for duopoly infringement.

In order to obtain injunctive relief against duopoly infringement, the court should consider the same factors as for normative infringement. Namely, it should require the plaintiff 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>112</sup> Case law is clear that there is no automatic right to injunctive relief stemming from the statutory rights afforded by the Patent Act’s prohibition of use, manufacture, sale, or offers to sell during the patent term,<sup>113</sup> but under the scope of the

---

109. 35 U.S.C. § 283 (2006).

110. See *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

111. *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (U.S. 1982) (citing *Cavanaugh v. Looney*, 248 U.S. 453, 456 (1919)).

112. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. at 391.

113. See *eBay*, 547 U.S. at 393 (drawing a parallel between relief for patent and copyright infringement, and observing that “this Court has consistently rejected invitations to replace traditional equitable considerations with a rule that an injunction automatically follows a determination that a copyright has been infringed”).

proposal there would be a strong basis for granting a temporary injunction for the term of the duopoly.

While all injunctions must be considered on a case-by-case basis, certain elements would be present in any case of duopoly infringement. The first prong, which requires the plaintiff demonstrate irreparable injury, creates perhaps the biggest obstacle to injunctive relief against duopoly infringement.<sup>114</sup> In *Smith International, Inc. v. Hughes Tool Co.*, the Federal Circuit created a presumption of irreparable harm provided the patentee makes a clear showing that the patent at issue is valid and infringed.<sup>115</sup> Clearly, where the PTO has determined a patent invalid in the course of a reexamination proceeding, courts could not rely on a “strong showings of validity and infringement . . . [to establish] irreparable harm from continued infringement of the patent.”<sup>116</sup> However, if there were a statutory basis for the continuation of patent rights during the duopoly period, then a similar analysis would apply and irreparable harm presumed.<sup>117</sup>

The second prong, the inadequacy of monetary damages, presents an interesting situation that is highly dependant on the timing of the challenge. The underlying purpose behind the proposed reexamination structure is the abolition of improper monopolies. As such, the adequacy of monetary damages in the form of royalty payments by third-party firms practicing the patent would fluctuate based on the structure of the market. When the patent term has just begun, and the patentee has little or no entrenchment in the market, an injunction may be more appropriate than royalties. However, as the period for special, incentivized challenges draws to a close, there is a heightened need to break up the patentee’s market entrenchment. Thus as the patent matures, the court should be more likely to find that royalty payments—which would allow the proliferation of firms in the market and increase competition, while still granting a reward to the challenger—would be an adequate remedy.

---

114. *See id.* at 391 (requiring the plaintiff show irreparable injury).

115. 718 F.2d 1573 (Fed. Cir. 1983); *see also* Roy H. Wepner & Richard W. Ellis, *The Federal Circuit’s Presumptively Erroneous Presumption of Irreparable Harm*, 6 TUL. J. TECH. & INTELL. PROP. 147, 148 (2004) (discussing the presumption established by *Smith International v. Hughes Tool*).

116. *See Smith International*, 718 F.2d at 1581.

117. *Cf. id.* at 1581 (discussing the policy behind holding that there is a presumption of irreparable harm).

In cases for infringement of a valid patent, evaluation of the balance of hardships between the parties is typically fact-dependant.<sup>118</sup> Courts will consider the impact of an injunction on the various parties before granting extraordinary relief.<sup>119</sup> While the balance of hardship might not always weigh in favor of an injunction, and instead may indicate another remedy is more appropriate, the temporal limits of the duopoly period suggest that the hardship imposed on a third-party infringer would be minimal.

Finally, public interest in the enforcement of the challenger's short-term rights to limited exclusivity would weigh in favor of the grant of a short-term injunction. If the duopoly schema were implemented, it would codify and establish a clear public interest in encouraging reexamination challenges, an incentive that would be nullified if the resulting duopoly were unenforceable. In sum, the short duration and nature of injunctions for the term of the duopoly would make such extraordinary relief a suitable remedy.

##### 5. *Enhanced Damages*

Given the structure of the proposed reform, it seems enhanced damages would be exceedingly unfair in most cases.<sup>120</sup> Such damages in nominal cases of infringement require a showing of deliberate or intentional infringement, and the Federal Circuit has treated willfulness as a form of *mens rea*.<sup>121</sup> The very nature of a successful invalidation proceeding establishes a reasonable basis for any party to believe its use non-infringing, and thus destroys the requisite *mens rea*. While awarding enhanced damages in cases of duopoly infringement might further incentivize firms to initiate reexamination challenges by exposing them to greater liability, such a remedy unfairly penalizes parties practicing what is, after all, an invalid patent. The allowance of treble damages would thereby both discourage the utilization of the subject matter and vitiate what would have been a valid defense against an infringement action absent the reexamination proceeding. Thus, as a general rule, enhanced damages should not be allowed.

---

118. See, e.g., *TiVo Inc. v. Echostar Communications Corp.*, 446 F. Supp. 2d 664 (E.D. Tex. 2006) (taking the relative size of the firms into consideration when finding the balance of hardship weighed in favor of a permanent injunction against the larger firm's continued practice of the patented subject matter).

119. See *id.*

120. For an overview of enhanced damages, see discussion *supra* Part 0

121. See Stowell, *supra* note 70, at ¶ 26.

### E. Defenses to Duopoly Infringement

Similar to the discussion on willful infringement damages, *supra*, the temporary grant of a duopoly should not be construed to introduce third parties to any additional liabilities beyond that needed to incentivize reexamination challenges. Allowing alleged infringers to assert many of the traditional bases of invalidity—e.g., prior art, obviousness, and failure to describe best mode or enable use of the subject matter<sup>122</sup>—would eviscerate the duopoly award. Once the reexamination had determined the initial patent invalid, an alleged duopoly infringer would need only to reassert the invalidity claims of the initial challenger, and thereby avoid liability.

Consequently, defending against a claim of duopoly infringement must differ from nominal infringement defenses. The structure of the proposal requires that arguments on the traditional grounds of invalidity in the absolute—i.e., the assertion of *any* prior art, evidence of obviousness, etc. that proved invalidity—be barred, but it does not preclude the specific assertion of such arguments. That is, if the accused duopoly infringer can demonstrate that its own use, knowledge, or publication of the relevant subject matter preceded the issuance of the invalid patent—or, perhaps, preceded the knowledge of the existence of the patent or its invalidation—then it should not be prohibited from further practice of the patent, nor subjected to new royalties.

### F. Issues and Effects of the Proposal

#### 1. Prevention of Collusive Arrangements

As applied to pharmaceutical patent challenges, the Hatch-Waxman Act created a perverse incentive for the patent owner and the first-to-file generic firm to reach collusive agreements that circumvent the spirit of the Act.<sup>123</sup> In the recent decision *In re Cipro*, the generic firm reached an agreement with the patentee pharmaceutical firm to withdraw its ANDA-IV certification request, in exchange for “exclusion payments” by the patentee to the generic firm and a six-month exclusive license arrangement at the end of the patent term.<sup>124</sup> Through the arrangement, the generic manufacturer still enjoyed the six-month duopoly promised by the Hatch-Waxman

---

122. See 35 U.S.C. §§ 102, 103, 112 (2006).

123. See, e.g., *In re Ciprofloxacin Hydrochloride Antitrust Litigation*, 544 F.3d 1323 (Fed. Cir. 2008).

124. *Id.* at 1329.

Act in cases of a finding of invalidity, and additionally benefited from the exclusion payments. Conversely, the patent owner was able to sustain its monopoly and maintain prices high enough to offset the cost of the exclusion payments.<sup>125</sup> The court found no violation of antitrust laws, holding that the anticompetitive effects of such an arrangement were within the monopoly power granted by the patent.<sup>126</sup> The agreement, though adhering to the literal application of the Hatch-Waxman Act, thereby nullified the policy purpose of the Act.

This statutory and regulatory structure has therefore led to the risk of anticompetitive effects as implemented with pharmaceutical patents.<sup>127</sup> However, the current structure of the reexamination system functions to prevent the kind of collusive arrangements seen in *In re Cipro*. Once a reexamination procedure has been initiated, and the PTO has begun the examination, it cannot be abandoned by either party and will inevitably result in a determination by the PTO of validity or invalidity of all or some of the claims.<sup>128</sup> Thus, as opposed to the arrangement in *In re Cipro* where there was an interest in encouraging parties to settle cases without litigation, a proceeding initiated under this structure would not serve as a potential impetus for collusive arrangements.

## 2. *Philosophical Dissonance*

Notwithstanding the foregoing concerns, there is a final obstacle to implementation of anything resembling Hatch-Waxman incentives to normative letters patent: Such a proposal is in some ways dissonant with the fundamental philosophy of the patent system as it exists in the United States. Despite the potential power of such a reform to incentivize pre-litigation reexamination challenges, it would require a significant policy departure from the existing system. Modern patent

---

125. The payments made under the agreement totaled \$398.1 million. *Id.* at 1329 n.5. Considering that Cipro is one of the best selling antibiotics in the world and the first to earn Bayer \$1 billion in annual sales, the payment to Barr represented only a fraction of one year's sales, much less the potential profit enjoyed by Bayer through the remainder of the monopoly. See *In re Cipro Cases I & II*, 121 Cal. App. 4th 402, 406 (Cal. App. 4th Dist. 2004) (stating that Cipro earned Bayer \$1 billion in annual sales).

126. *Ciprofloxacin*, 544 F.3d at 1336; cf. *In re Cardizem*, 332 F.3d 896 (6th Cir. 2003) (finding an antitrust violation where the generic manufacturer did not relinquish the 180-day period after entering into a similar agreement, as such behavior delayed the entry of other manufacturers).

127. See, e.g., *In re Cardizem*, 332 F.3d 896 (2003); *In re Ciprofloxacin Hydrochloride Antitrust Litigation*, 544 F.3d 1323 (2008).

128. See text accompanying notes 37-40.

law is based on the grant of limited monopolies to parties that disclose new, useful, and nonobvious inventions.<sup>129</sup> If such reforms were implemented, and challengers granted a duopoly—even if for only a short period as in the case of the Hatch-Waxman Act—as a reward for successful challenges to product patents, it would effectively issue market exclusivity for technology or know-how that admittedly belongs to the public domain. While this is a drastic departure from the underlying philosophy of the patent system—which by its very structure aims to prevent the grant of monopolies to inventions that are duplicative, obvious, or useless—such a measure might be warranted and feasible.

First, through the passage of the Hatch-Waxman Act, Congress has already implicitly blessed such grants of exclusivity—instead of a reward for innovative disclosure, the measures would serve as a reward for challenging unwarranted monopolization. Second, the patent monopoly was initially granted by the Patent Office, and would exist but for the challenge by the third party. A limited duopoly period, granted only in exchange for early successful challenges not initiated under the threat of litigation, would therefore remove an improvident monopoly that would otherwise exist for years. Finally, the measure would have an additional positive benefit by providing an incentive for firms—often most knowledgeable regarding the weak patents and best suited to challenge them—to actively read patents, thus enhancing the public disclosure of new technologies.

Readers might find additional cognitive dissonance with the prospect of a former patentee enjoying continued royalty payments, whether via pre-established license or awarded through infringement litigation, during the duopoly period on the basis of an invalidated patent. While the discussion in this Note has erred towards limiting awards during the duopoly period and facilitating entry by third-party competitive firms, the exact balance between incentivizing reexamination and equity to the public must be more clearly delineated before any implementation, but such an “unfair” arrangement might be a reasonable social price to pay for increased utilization of the more efficient invalidation process offered by reexamination. Presumptively, any patent invalidated by the proposal of this Note would have been sufficiently strong to gain patent protection to begin with, and the patentee will inevitably rely in part on this grant in its commercialization of the subject matter and

---

129. 35 U.S.C. §§ 101-103 (2006).

its business model as a whole. Such a reliance interest would not suffice to preserve an improperly granted patent under the existing schema, but its existence does serve to minimize the seeming inequity of continued-in-part enjoyment of the monopoly by the patentee. Taken as a whole, the duopoly period would encourage an immediate increase in competition in the market—via entry by the challenger, any other prior users of the subject matter,<sup>130</sup> and additional firms through the increased competitive pressure for lower license costs and lowered infringement penalties—while allowing the patentee a transitional period to adjust their business model in accordance with the patent invalidation.

## V. Conclusion

Although reexamination provides a potentially powerful alternative to full invalidity litigation, the deficiencies of the current system have led to its underutilization. The appeal of the system as an alternative to invalidity litigation is greatly diminished by the constraints on forms of evidence considered and the grounds for invalidity available, the limited potential for participation in the process by challengers, and the significant risk a challenger—in many cases a firm with a competing product that might infringe—takes in making the citation and request for reexamination. Most proposed reforms have focused on making the procedure more effective by enlarging the procedure within the same context as originally established by Congress, whether it be by such measures as allowing additional forms of evidence to be considered or allowing invalidation on grounds beyond anticipation and nonobviousness. While such reforms may form an important component of successful reform, they fail to address the central obstacle to challenges by third parties.

The incentive structure discussed by this Note, while extremely powerful, may encourage third parties to overcome the perverse deterrent to practice willful blindness by incentivizing them to read and challenge patents. Any implementation of such an incentive scheme would doubtlessly differ from that of the Hatch-Waxman Act, which is intended primarily to address issues specific to pharmaceutical regulatory approval, but the policy concepts of the Act could be applied via analogy to normative letters patent without significant obstacles. If history is any indication, when Congress eventually returns to the question of patent reform, it will be unlikely

---

130. See discussion *supra* Part IV.e.



to implement the schema outlined in this paper. Although such reform may seem antithetical to the core philosophy of the patent system itself—granting limited monopolies limited to instances of true innovation—its consideration demonstrates that non-traditional reform and incentive schemas could mitigate many of the shortcomings of modern patent reexamination. Such an incentive structure, coupled with reforms to address the other shortcomings in patent reexamination as it exists today, would do much to encourage pre-litigation challenges and thereby increase the quality of active patents, encouraging investment and maintaining the vitality of the intellectual property market in the United States.