

# Michigan Telecommunications and Technology Law Review

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Volume 22 | Issue 2


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2016

## Rent-Seeking and Inter Partes Review: An Analysis of Invalidity Assertion Entities in Patent Law

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### Recommended Citation

W. M. Schuster, *Rent-Seeking and Inter Partes Review: An Analysis of Invalidity Assertion Entities in Patent Law*, 22 MICH. TELECOMM. & TECH. L. REV. 271 (2016).

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# RENT-SEEKING AND INTER PARTES REVIEW: AN ANALYSIS OF INVALIDITY ASSERTION ENTITIES IN PATENT LAW

W. Michael Schuster\*

Cite as: W. Michael Schuster, *Rent-Seeking and Inter Partes Review: An Analysis of Invalidity Assertion Entities in Patent Law*, 22 MICH. TELECOMM. & TECH. L. REV. \_\_\_\_ (2016).

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## ABSTRACT

*This Essay is the first analysis of a recent entrant on the patent landscape: the Invalidity Assertion Entity (IAE). IAEs engage in rent-seeking by demanding payment from patent holders in exchange for not attempting to invalidate their patents through administrative action before the U.S. Patent and Trademark Office.*

*The response to IAEs has been uniformly negative. Reflexive proposals have been raised in Congress (unsurprisingly) to terminate the IAE business model. In contrast to the common response to IAEs, this Essay discusses how profit-driven IAEs may generate socially beneficial externalities and why legislating to end the IAE business model is imprudent.*

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#### I. INTRODUCTION: PATENT LAW AND UNINTENDED CONSEQUENCES

The Law of Unintended Consequences posits that any purposive activity will have unexpected results.<sup>1</sup> Consistent with this rule, all legislation brings about effects the drafters did not foresee. It does not follow, however, that a law’s unintended consequences are inherently negative.<sup>2</sup> This Essay calls for legislative restraint as Congress reflexively “corrects” the patent laws to eliminate unintended results, even though the law may produce unexpected social benefits.

Invalidity Assertion Entities (“IAEs”) were an unforeseen response to recent amendments to the Patent Act.<sup>3</sup> IAEs are private rent-seeking entities that attempt to invalidate a patent if the patent-holder refuses to pay them a demanded consideration. To this end, IAEs utilize a recently-introduced administrative process called *Inter Partes* Review (“IPR”), which provides a procedure to invalidate certain improperly issued patents. IPR was predicted to be used by parties with business interests in the subject patent,<sup>4</sup> so the use of the process by IAEs—who have no business interest in the patent beyond securing a settlement—was unexpected.

The public response to IAEs has been uniformly negative, ranging from cries of “extortion!” to lawsuits alleging RICO violations.<sup>5</sup> Given the general

1. See Margaret Howard, *The Law of Unintended Consequences*, 31 S. ILL. U. L.J. 451 (2007); William C. Rooklidge & Russell B. Hill, *The Law of Unintended Consequences: The On Sale Bar After Pfaff v. Wells Electronics*, 82 J. PAT. & TRADEMARK OFF. SOC’Y 163, 164 (2000) (“Historians have oft observed the law of unintended consequences, that is, that every action will have at least one unintended consequence.”); Tom Jerman, *The Law of Unintended Consequences: Judicial Review of NMB Decisions under the APA*, in AIRLINE AND RAILROAD LABOR AND EMPLOYMENT LAW: A COMPREHENSIVE ANALYSIS (A.L.I. ed., 2014) (“The law of unintended consequences is a theory in social science that actions, particularly governmental actions, always have effects that are unanticipated or unintended – sometimes negative consequences, and sometimes positive.”).

2. Robert K. Merton, *The Unanticipated Consequences of Purposive Social Action*, 1 AM. SOC. REV. 894, 895 (1936) (“[U]ndesired effects are not always undesirable effects.”).

3. See Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284, 285 (Sept. 16, 2011).

4. *Universal Elecs. v. Universal Remote Control*, 943 F. Supp. 2d 1028, 1029 (C.D. Cal. 2013) (quoting Changes to Implement Inter Partes Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents, 77 Fed. Reg. 48,680 (Aug. 14, 2012) (codified at 37 C.F.R. §§ 42.100 et seq.)) (calling IPR an alternative to litigation).

5. First Amended Complaint at 10-17, *Chinook Licensing DE LLC v. RozMed LLC*, (No. 14-00598), (D. Del. June 13, 2014), ECF No. 9; Michael Rosen, *Patent “Trolls” Claiming extortion? Not So Fast*, TECHPOLICYDAILY.COM, (Dec. 23, 2013, 6:00 AM), <http://www.techpolicydaily.com/technology/patent-trolls-claiming-extortion-not-fast>; Patience Haggin, *Judge Dismisses NPE’s Extortion Claims*, LAW.COM (Dec. 18, 2014), <http://www.law.com/sites/articles/2014/12/18/judge-dismisses-npes-extortion-claims/>.

disdain for the rent-seeking activities of “patent trolls,”<sup>6</sup> this reaction is not surprising. Nor are the recent Congressional proposals to end the viability of the IAE business model unexpected. However, IAEs may create significant unappreciated benefits, and therefore it is imprudent to legislatively end IAE activity before these entities are fully vetted in the literature and marketplace.

To date, no thorough scholarly analysis of IAEs has been conducted. This Essay engages in a novel review of this business model and discusses how profit-driven IAEs may effect socially beneficial externalities. To begin, Section II describes the IPR process, the operation of IPR and its patent-invalidating procedures, the IAE business strategy, and the recent legislative proposals to end IAE activity. This Section lays the groundwork for evaluating behaviors from rationally behaving IAEs and the influence that these entities may have on the patent system.

Section III discusses the current state of knowledge regarding IAEs and why legislative action at this time is imprudent, lest Congress undercut the potential for socially beneficial behavior. It specifically details the available information (or the lack thereof) regarding the current scope of IAE activities and how this information influences the appropriateness of newly proposed amendments to the Patent Act. Section III further argues that IAEs may have additional benefits including disincentivizing abusive litigation, invalidating improperly granted patents, and reducing the high cost of defending patent lawsuits. This Section concludes by highlighting further research that needs to be undertaken and additional information that must be ascertained.

Section IV addresses the current overbreadth of proposed legislation and primary drawbacks associated with IAEs. The Section explains why attempts to use IPR to influence stock prices is not a drawback attributable to IAEs and how the use of IPRs to influence stock prices can be legislatively addressed without disturbing the IAE business model. Section IV also discusses the problematic potential for IAEs to seek nuisance-value settlements, and how this hazard can be avoided by the proper functioning of the U.S. Patent and Trademark Office (the “USPTO” or “Patent Office”).

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6. This sentiment was described in Alan Devlin’s *Revisiting the Presumption of Patent Validity*, 37 Sw. U.L. REV. 323, 348 (2008) (“‘Patent trolls’ are entities that engage in objectionable rent-seeking behavior by accumulating and enforcing patent portfolios against unsuspecting firms that have actually marketed a technology to consumers. Little, if any, redeeming virtue is associated with the practice—trolls do not contribute to society by marketing their inventions and, indeed, many trolls never invented the relevant patented technology at all.”) (citations omitted). See also Chrystal Mancuso-Smith et. al., *Patent Troll Legislation—Swinging Too Far?*, 28 UTAH B.J. 21, 21 (2015) (discussing more neutral terms to describe patent trolls) (“Patent law, as you might imagine, is a field replete with acronyms. Examples relevant to this article include the terms NPE (a non-practicing entity) and PAE (a patent assertion entity). NPEs and PAEs are less pejorative terms to describe patent trolls.”).

## II. THE “PROBLEM” OF INVALIDITY ASSERTION ENTITIES

This Section introduces the IPR system and discusses how IAEs allegedly misuse this process by engaging in their rent-seeking behavior. The final subsection describes current Congressional hostility towards IAEs and specifically describes how proposed legislation would outlaw the IAE business model.

### A. *Inter Partes* Review

The IPR process provides a means for challenging the validity of previously-issued patents. IPRs can be filed by almost anyone, including parties with no immediate interest in the patent’s subject matter.<sup>7</sup> If an IPR is successful, the challenged patent claims are invalidated. This Essay analyzes unforeseen consequences arising from the initiation of IPR in 2012,<sup>8</sup> and this Section describes how this process is conducted.

An IPR begins with a petition to the Patent Office (an “IPR petition” or a “petition”) alleging that a patent’s claims are not valid because they were disclosed in an earlier publication.<sup>9</sup> A successful petition initiates an IPR in earnest. To be granted, a petition must establish that “there is a reasonable likelihood that [the petitioner] will prevail with respect to at least one of the claims challenged in the request.”<sup>10</sup> The patent-holder is afforded a written response to the petition,<sup>11</sup> and within a matter of months a determination is made regarding whether to initiate an IPR.<sup>12</sup>

If an IPR is instituted, a trial-like proceeding<sup>13</sup> is conducted by the USPTO’s Patent Trial and Appeal Board wherein the petitioner has the burden of proving that the relevant claims are not patentable by a preponder-

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7. 35 U.S.C. § 311(b) (2012). IPR is unavailable to patent infringement defendants (and parties in privity thereto) against whom the subject patent has been asserted in a lawsuit filed more than one year before filing of the petition. 37 C.F.R. § 42.101 (2015).

8. Jason Scott Tiedeman et al., *Declaratory Judgment Actions, Covenants Not to Sue, and Bad Patents: A Call to Allow the Judiciary to Weed Out Bad Patents While Adhering to the “Case or Controversy” Requirement*, 13 J. HIGH TECH. L. 1 (2012) (IPR became available on September 16, 2012.).

9. 35 U.S.C. § 311(a–b) (2012); Christopher C. Kennedy, *Rethinking Obviousness*, 2015 WIS. L. REV. 665, 726 n.176 (2015) (“Because bases for invalidity are limited to § 102 and § 103, inter partes reviews generally involve allegations that a patented invention is either anticipated by, or would have been obvious in light of, the prior art. Other bases of invalidity, such as those found in § 112 (indefiniteness, lack of written description, etc.), are unavailable.”).

10. 36 U.S.C. § 314(a) (2012).

11. *E.g.*, *Universal Elecs. v. Universal Remote Control*, 943 F. Supp. 2d 1028, 1030 (C.D. Cal. 2013) (“After a party has filed a petition requesting inter partes review, the patent owner has three months to file a preliminary response opposing the request. 35 U.S.C. § 313; 37 C.F.R. § 42.107(b).”).

12. 36 U.S.C. § 314(b) (2012).

13. *See* 37 C.F.R. § 42.100(a) (2015) (“An inter partes review is a trial subject to the procedures set forth in subpart A of this part.”).

ance of the evidence.<sup>14</sup> The PTAB must issue a final determination on the validity of the disputed claims within one year of the PTO granting the IPR petition.<sup>15</sup>

### B. Invalidity Assertion Entities

The formation of IAEs was an unintended consequence arising from the IPR regime. Despite being the subject of some media coverage,<sup>16</sup> little public information exists regarding how widespread their business model is and how successful those who follow this model have been. No rigorous analysis of IAEs exists in the publicly-available literature.

One of the first publicly recognized IAEs was Iron Dome, LLC. It garnered attention by threatening to file an IPR against a patent owned by PAE Chinook Licensing DE, LLC (“Chinook”) unless it was given consideration.<sup>17</sup> Iron Dome included a copy of the threatened IPR petition with its demand letter, such that the strength of its position could be analyzed by the patent holder.<sup>18</sup> Chinook rebuffed the demand, and Iron Dome filed the petition.<sup>19</sup>

Chinook responded by suing Iron Dome, asserting various causes of action, including tortious interference with business relations and Racketeering Influenced and Corrupt Organizations Act claims.<sup>20</sup> The court eventually held in Iron Dome’s favor, finding that the IAE’s communications were settlement offers that could not lead to liability.<sup>21</sup>

This ruling disappointed some, including Robert Stoll—a former commissioner of patents at the USPTO—who argued that IAEs are using the IPR process in a manner inconsistent with the intent of the law.<sup>22</sup> Further, one former USPTO administrative patent judge expects that the Iron Dome ruling will incentivize the entry of more IAEs into the market.<sup>23</sup> Assuming that these concerns are valid, the question remains: *Is the existence of IAEs necessarily a bad thing for the patent system and the economy as a whole?* Some legislators seem to think so.

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14. 35 U.S.C. § 316 (2012).

15. ACQIS, LLC v. EMC Corp., 109 F. Supp. 3d 352, 355 (D. Mass. 2015). This period may be extended “by not more than 6 months” for good cause. 35 U.S.C. § 316 (2012).

16. Patience Haggin, *Trolls Taste Own Medicine*, THE RECORDER (Dec. 12, 2014), <http://www.therecorder.com/id=1202678962497/Trolls-Taste-Own-Medicine?slreturn=20141128202429>.

17. First Amended Complaint, *supra* note 5, at 4-6, Exhibits C & D.

18. *Id.*

19. *Id.*

20. First Amended Complaint, *supra* note 5, at 10-17.

21. Oral Argument Hearing Transcript at 44-47, Chinook Licensing DE LLC v. RozMed LLC, (No. 14-00598).

22. Haggin, *supra* note 16.

23. *Id.*

### C. Proposed Revisions to the Inter Partes Review System

In 2015, Congress considered several proposals for patent reform. The two primary bills included new limitations on IPR practice: the Innovation Act of 2015<sup>24</sup> and the STRONG Patents Act of 2015.<sup>25</sup> Both bills would eliminate the IAE business model.

Under the Innovation Act of 2015, which is still under consideration, an IPR petitioner must certify that it has “not demanded payment, monetary or otherwise, from the patent owner or an affiliate of the patent owner in exchange for a commitment not to file a petition,” unless the petitioner has been sued for infringement of the patent.<sup>26</sup> Similarly, the proposed STRONG Patents Act of 2015 provided that a petitioner must aver that a “real and substantial controversy” exists regarding whether it infringes the subject patent.<sup>27</sup> Each of these proposals would end the IAE business model.

As stated by Senator Chris Coons, these proposed revisions to the patent laws were intended to “ensur[e] that a petitioner has a business or financial reason to bring a case before the PTAB” and “to reduce incentives for privateering or extortion of nuisance settlements.”<sup>28</sup> It is not clear, however, that these goals are laudable if the alleged “fix” actually disincentives socially beneficial behavior. The following Section describes various possible social benefits and legislative concerns associated with IAEs that must be addressed before appropriate patent reform can be passed.

## III. IAEs IN PRACTICE – A BASIS FOR CONGRESSIONAL RESTRAINT

This Section argues for Congressional restraint as it considers making IAE activity illegal. The first subsection discusses the base of knowledge (or lack thereof) about the present scope of IAE activity and why this militates against legislating against IAEs. The following subsections describe possible social benefits arising from IAE activity, including a reduction in abusive litigation, the invalidation of ill-granted patents, and diminishment in the cost of patent litigation. Each subsection discusses how these benefits arise and why these considerations weigh against legislatively ending IAE activity in its infancy.

### A. The Scope of Invalidity Assertion Entity Activity

This sub-section discusses why it is necessary to ascertain whether there is a relevant number of entities engaging in this business model before legislating on the topic of IAEs. Currently, the scope of IAE activity is not abso-

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24. The Innovation Act of 2015, H.R. 9, 114th Cong. § 9(b)(1) (2015).

25. STRONG Patents Act of 2015, S. 632, 114th Cong. § 102 (2015).

26. The Innovation Act of 2015, H.R. 9, 114th Cong. § 9(b)(1) (2015).

27. STRONG Patents Act of 2015, S. 632, 114th Cong. § 102 (2015).

28. U.S. Senator Christopher Coons of Delaware, *A Patent System that Works for All Innovators*, <http://www.coons.senate.gov/patents>.

lutely clear. The availability of information relating to particular IAE interactions depends on into which of two categories it falls: those IAE interactions that lead to the filing of an IPR petition and those IAE interactions that settle beforehand. As discussed below, some quantitative data are available on the former category, but due to rational interests in keeping IAE settlements nonpublic, little data are available on the latter.

There are two parties to any IAE interaction: the IAE and the targeted patent holder. These parties' interests in publicizing their relationship sometimes diverge, causing the aforementioned inconsistent distribution of information on the subject. The IAE's financial success depends upon its reputation as a threat to invalidate patents. This perceived hazard encourages patent owners to pay to avoid the filing of a threatened petition. IAEs' attempts to cultivate a threatening reputation are publicly-available in the USPTO records of filed IPR petitions.<sup>29</sup>

Relying on this publicly-available information, a recent study found that approximately 2.5% of petitions are filed by "third parties," which neither use nor manufacture the subject technology.<sup>30</sup> IAEs are a subset of this group, and thus, represent less than 2.5% of all filed IPR petitions. Looking to specific examples of third party filers, the study cited three exemplary organizations: RPX Corporation, Unified Patents, Inc., and Iron Dome, LLC.<sup>31</sup> These companies have respectively filed seventeen petitions (against six distinct patent holders), twenty-three petitions, and three petitions.<sup>32</sup> To the extent that these entities were proffered as examples of third-party IPR practice, the limited scope of their activities suggests that IAE activity is not presently widespread. A full empirical analysis of publicly available IAE data is warranted, however, before legislative action on the issue would be appropriate.

Significantly less data are available regarding IAE interactions leading to pre-filing settlement. This is due to a patent holder's rational emphasis on secrecy regarding settlements it pays to IAEs. The reasons for this secrecy are two-fold. Public recognition that a patent holder has complied with an IAE encourages future IAE demand letters.<sup>33</sup> Further, if the threatened IPR petition became public, a later IAE could use the threat of filing it as leverage to extract a second settlement. Accordingly, no rational patent holder

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29. 37 C.F.R. § 42.14 (2015) ("The record of [an IPR], including documents and things, shall be made available to the public, except as otherwise ordered.").

30. Brian J. Love, *Inter Partes Review as a Shield for Technology Purchasers: A Response to Gaia Bernstein's the Rise of the End-User in Patent Litigation*, 56 B.C. L. REV. 1075, 1082 n.1 (2015).

31. *Id.* at 1085.

32. Lexmachina.com (searched for each party as a "Lead Petitioner" on September 18, 2015).

33. *Cf.* Brian J. Love et al., *Expanding Patent Law's Customer Suit Exception*, 93 B.U. L. REV. 1605, 1625 (2013) (describing how settling with one rent-seeking "patent troll" may encourage attacks from other rent-seekers who see the settling party as an easy settlement).



would settle with an IAE without the inclusion of a confidentiality agreement regarding the threatened petition and the existence of the settlement. And as such, little data regarding IAE/patent holder settlements are available.

Because little information is available about IAE activity, it is difficult to assess the extent of IAE activity. The little information available regarding IPR petitions filed by third parties (including IAEs) suggests that the business model has not been widely adopted, but the data are not conclusive. Such inconclusiveness raises a series of problems for legislators considering proposed reforms to the IPR system.

Should the data be understood to mean that the IAE business model is not widespread, then the legislature is solving a problem that doesn't exist. Beyond being an unnecessary use of limited legislative resources, the proposed amendments create an entirely new set of unknowns. All laws have unforeseen consequences<sup>34</sup> (e.g., IAEs arising after passage of the IPR laws), and if the scope of these consequences is minimal under the current IPR regime, prudence favors not introducing new unknowns through further legislation. At minimum, patience should be exercised so that it can be determined if IAE activity will grow, and if so, whether it will have a positive or negative societal effect.

Conversely, if the scope of IAE activity is significantly wider than the publicly available information leads one to believe, this represents a different legislative problem. It is the height of folly for laws to be passed without understanding all relevant information,<sup>35</sup> yet that appears to be what is happening with IPR reform. If Congress is unaware of how many and what type of patent holders are being targeted by IAEs, it cannot craft an appropriate remedy to the perceived problem or determine if a social cost even exists. Regardless of how one interprets the data regarding the scope of IAE activity, it is advisable for further research into the scope and nature of IAE activity to be conducted before legislation addresses the issue.

### B. *Abusive Litigation*

In recent years, abusive patent litigation has been a primary concern in the intellectual property realm. Scholars and politicians have recognized that questionable allegations of infringement of weak patents undermine the basic goal of patent laws.<sup>36</sup> This subsection describes how IAE activity may

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34. Howard, *supra* note 1, at 452.

35. See James Preston Schuck, *Returning the "One" to Ohio's "One-Subject" Rule*, 28 CAP. U.L. REV. 899, 903 (2000) ("[L]egislators must be well-informed as to the contents of a bill and its effect in order to produce quality legislation.").

36. See, e.g., Megan M. La Belle, *The Local Rules of Patent Procedure*, 47 ARIZ. ST. L.J. 63, 63 (2015) ("Over the past two years, Congress proposed nearly a dozen bills aimed at curbing patent litigation abuse."); Mohamed Elfarra, *Intersection of American Law and Technology: The Innovation Act's Fight Against Patent Trolls*, B.C. INTELL. PROP. & TECH. FORUM 1, 1 (2015) ("The economic and social burdens of frivolous litigation have led 'academics,

disincentivize the filing of lawsuits alleging infringement of weak patents and why that favors not legislatively ending IAE activity at this time.

Profit-driven IAEs will target parties that are most likely to pay them a settlement, and as discussed below, plaintiffs asserting weak patents (e.g., patents on inventions that were previously disclosed in the prior art<sup>37</sup>) have significant incentives to settle with an IAE. Invalidation of an asserted patent ends an infringement lawsuit; plaintiffs obviously want to avoid the end of their case. Concerns about patent invalidation (and the associated end of an infringement lawsuit) are heightened when the asserted patent is weak and therefore unlikely to survive an IPR. Accordingly, plaintiffs asserting weak patents have the greatest motivation to avoid IPR and in result, have the greatest motivation to pay an IAE to not file a threatened petition.

As referenced above, a profit-driven IAE will target parties that are most likely to pay them a settlement. It thus follows that IAEs are likely to demand settlements from patent plaintiffs currently asserting weak patents. The potential to be targeted by an IAE disincentivizes the filing of lawsuits alleging infringement of weak patents and furthers the policy goal of limiting the abusive assertion of patents that are likely invalid.

While no empirical study or exhaustive analysis has been conducted regarding these expectations, they are consistent with an economically rational behavior. It is not unlikely that IAEs and patent plaintiffs would behave in these manners to pursue their profit-driven goals. Accordingly, it makes little sense for legislators to terminate the nascent IAE business model when it might serve as a tool for reducing abusive patent litigation, a goal which Congress has targeted for several years. At minimum, the legislature should allow for a thorough analysis of whether IAEs target weak patents used in abusive litigation before it takes action.

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policy-makers, and even judges to suggest that patent law[s] may have overleaped its proper bounds, or at least become too likely to frustrate, rather than to fulfill, its constitutional purpose of “promot[ing] the progress of science and useful arts.””) (citing John M. Golden, “Patent Trolls” and Patent Remedies, 85 TEXAS L.J. 2011, 2112 (2007)); see also Dana M. Muir et. al., *Justice Sotomayor on the Supreme Court: A Boon for Business?*, 4 VA. L. & BUS. REV. 187, 228 (2009) (noting that patent law has recently been “the subject of severe criticism and reform efforts”).

37. For current purposes, the term “weak” is meant to embody patents that are likely invalid because the claimed invention was previously disclosed in the prior art, such that the patent is likely invalid under 35 U.S.C. § 102 or 103. This is a slightly narrower definition of “weak” than some academics may proffer, though it has no influence on the present discussion. See Michael F. Werno, *More Questions Than Answers? The Uncertainties Surrounding Reverse Payment Settlements in the Post-Actavis World*, 21 B.U. J. SCI. & TECH. L. 200, 204 n.33 (2015) (“One law professor describes a weak patent as one that ‘(i) is likely to be found or held invalid; or (ii) even if valid, its claims are so narrow that they are not likely to encompass many potentially competing products.’”) (citing Glynn S. Lunney, Jr., *FTC v. Actavis: The Patent-Antitrust Intersection Revisited* (Tulane Univ. Sch. of Law Pub. Law and Legal Theory Working Paper Series, Working Paper No. 13-19 (2013))).

### C. Invalidation of Patents

While IAEs' primary goals are securing settlement payments, one socially beneficial externality may arise: the invalidation of ill-granted patents. In order to coerce patent-holders to pay an IAE to not file IPR petitions, IAEs must present a credible threat to actually invalidate the subject patent. This perception is primarily cultivated by invalidating (or fully attempting to invalidate) patents belonging to non-compliant parties. While invalidation of ill-granted patents is simply a cost of doing business for IAEs, it presents a positive externality to society at large.

All patents generate a deadweight economic loss<sup>38</sup> by creating a limited monopoly during the patent's term.<sup>39</sup> Valid patents justify this loss by having (presumably) incentivized innovative behavior. Invalid patents do not have such a redeeming quality to justify the deadweight loss attributable to their associated monopoly.<sup>40</sup> These losses show themselves in multiple ways.

Firstly, the existence of bad patents (*i.e.*, patents that should not have been granted) harms consumers by directly driving up prices. If a bad patent's owner litigates the patent, many manufacturers will rationally choose to purchase a license instead of incurring the expense of challenging the patent's validity.<sup>41</sup> This licensing cost will be passed on to consumers,<sup>42</sup> even though the patent should never have been granted. Alternatively, if the patent holder chooses not to license their patent, they can extract supra-competitive prices from consumers due to their ill-gotten monopoly.<sup>43</sup>

Further, the existence of bad patents inhibits the working of an efficient market. In the face of a bad patent, manufacturers may forego development of products that arguably practice the patented invention,<sup>44</sup> which limits mar-

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38. Deadweight losses have been described as such:

A deadweight loss arises whenever goods are priced in excess of marginal cost. When price exceeds marginal cost, some consumers who value the good at more than its marginal cost, but less than its market price, will not buy it. The deadweight loss consists of the loss in consumer and producer surplus attributable to such lost sales.

Glynn S. Lunney, Jr., *Copyright's Price Discrimination Panacea*, 21 HARV. J.L. & TECH. 387, 456 (2008) (citing William W. Fisher III, *Reconstructing the Fair Use Doctrine*, 101 HARV. L. REV. 1659, 1702 (1988)).

39. Bronwyn Hall et al., *Prospects for Improving U.S. Patent Quality via Postgrant Opposition*, 4 INNOVATION POLICY AND THE ECON. 115, 118 (2004); Jay P. Kesan & Andres Gallo, *Why "Bad" Patents Survive in the Market and How Should We Change?—The Private and Social Costs Of Patents*, 55 EMORY L.J. 61, 63–64 (2006).

40. William Hubbard, *The Competitive Advantage of Weak Patents*, 54 B.C. L. REV. 1909, 1948 (2013).

41. Shubha Ghosh & Jay Kesan, *What Do Patents Purchase? In Search of Optimal Ignorance in the Patent Office*, 40 Hous. L. REV. 1219, 1229 (2004).

42. Kesan & Gallo, *supra* note 39, at 77.

43. Jay P. Kesan, *Carrots and Sticks to Create a Better Patent System*, 17 BERKELEY TECH. L.J. 763, 767–68 (2002).

44. Hall, *supra* note 39, at 120.

ket competition. Similarly, where manufacturers choose to compete with a bad patent by designing non-infringing alternatives to introduce to the market, the manufacturer is at a competitive disadvantage for having incurred the research and development cost to circumvent the bad patent.<sup>45</sup>

Lastly, ill-granted patents cause misallocation of funds within the innovation marketplace. Similar to any patent holder, owners of bad patents compete for capital investment to build a business based on the invalid patent; this causes misallocation of capital in two ways. The venture capitalist that invests in a company premised on a bad patent makes a bad investment, as future invalidation of the patent may undermine any value in the investment.<sup>46</sup> Similarly, investment in a bad patent limits the possibility of investment in companies with valid patents, thus removing future products and competitors from the marketplace.<sup>47</sup>

One scholar has proposed to avoid these social ills by creating a patent bounty system, by which the public can interact with the Patent Office to avoid the issuance of bad patents.<sup>48</sup> It appears that the IPR process has potentially (if inadvertently) implemented such an incentivization system to invalidate bad patents post-issuance. It would seem foolhardy to amend the IPR laws to eliminate this patent-invalidity bounty before it is given a chance to establish whether it represents a benefit to society.

#### D. *Limiting the Scope of Patent Litigation*

One of the goals of the IPR system was to reduce costs associated with patent litigation.<sup>49</sup> This goal is achieved when bad patents that are currently being litigated are invalidated through IPR. Parties need not defend themselves against allegations that they infringe an invalid patent. To the extent the IAE business model necessitates invalidating bad patents, these entities serve the goal of reducing litigation costs.

As previously explained, vigorous attempts to invalidate patents are a necessary facet of the IAE business model. Absent this pursuit, an IAE presents no threat to a patent holder, and the IAE has no power to negotiate a settlement. This incentive to invalidate patents gives rise to a positive externality, namely the reduction in attorneys' fees associated with the termination of patent lawsuits (or a portion of a multi-patent case) when ill-granted patents are invalidated.

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45. Kesan, *supra* note 43, at 767.

46. Ian David McClure, *Commoditizing Intellectual Property Rights: The Practicability of A Commercialized and Transparent International IPR Market and the Need for International Standards*, 6 BUFF. INTELL. PROP. L.J. 13, 26 (2008).

47. Kesan, *supra* note 43, at 767.

48. John R. Thomas, *Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties*, 2001 U. ILL. L. REV. 305 (2001).

49. Gregory Dolin, *Dubious Patent Reform*, 56 B.C. L. REV. 881, 881 (2015).

Likewise, an IAE's threat to seek IPR exerts additional pressures on a patent plaintiff to settle existing cases. The possibility of taking nothing from litigation after an asserted patent is invalidated by an IAE must be taken into consideration by plaintiffs considering settlement of their lawsuits. This possibility is of particular concern for patent holders asserting particularly weak patents. This incentive to settle can be expected to shorten the life cycle of patent cases and reduce legal costs associated with defending them.

While the exact scope of these considerations has not been fully analyzed in the literature (either empirically or from a strategic perspective), the expected shortening of patent lawsuits and associated reduction in legal costs is consistent with economically rational behavior. Future research needs to be conducted on this issue to determine to what extent the policy goal of litigation-cost reduction is served by IAEs. Until such studies have been conducted, it seems self-defeating to legislatively end IAE activity that may bring about this social benefit.

#### IV. ADDITIONAL CONCERNS RELATING TO IAE ACTIVITY

The final substantive Section addresses two points of concern regarding IAEs and their IPR activities. The first sub-section describes how Congress can act against a particularly unpopular non-IAE use of the IPR system and why such legislation need not overlap to limit IAE activity. The second sub-section describes the potential for IAEs to act in abusive manners and how such abuses would limit socially beneficial externalities that may arise from the IAE business model. This subsection concludes by describing why, in the face of a properly functioning Patent Office, these concerns are minimized.

##### A. *Inter Partes* Review and Attempts to Influence the Stock Market

There is a business model analogous to the IAE business model that has garnered significant media scrutiny and public backlash. Kyle Bass, head of Hayman Capital Management, files IPR petitions to invalidate pharmaceutical patents, while simultaneously either shorting the patent owner's stock or investing in companies that would benefit from the invalidation.<sup>50</sup> Unlike IAEs, Bass does not attempt to secure settlements directly from patent holders. This controversial strategy has been attacked as an abuse of process that

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50. Joseph Walker & Rob Copeland, *New Hedge Fund Strategy: Dispute the Patent, Short the Stock*, WALL ST. J. (Apr. 7, 2015, 7:24 PM), <http://www.wsj.com/articles/hedge-fund-manager-kyle-bass-challenges-jazz-pharmaceuticals-patent-1428417408>.

is designed to manipulate stock prices.<sup>51</sup> The allegations regarding stock market influence cannot be levied against IAEs.

Some believe that Kyle Bass' alleged abuses are what led to Congress' recent proposed changes to the IPR system.<sup>52</sup> If this is indeed the catalyst leading to the current round of reform, the proposed legislation is unnecessarily broad. For instance, under the proposed Innovation Act of 2015, an IPR petition must certify that it does "not own and will not acquire a financial instrument . . . that is designed to hedge or offset any decrease in the market value of an equity security of the patent."<sup>53</sup> This provision, or a modified version of this provision, would be sufficient to deter the Kyle Bass business model.

It is unnecessary to include additional provisions prohibiting filing of a petition by someone that has "demanded payment . . . from the patent owner or an affiliate of the patent owner in exchange for a commitment not to file a petition."<sup>54</sup> This provision is unimportant with regard to the Kyle Bass business model, but is relevant to IAEs. And as discussed throughout this article, prudence warrants the gathering of further information on IAEs before legislatively addressing them. This is true regardless of how Congress chooses to address entities pursuing the same business strategy as Kyle Bass.

### B. *Potential Drawbacks*

Heretofore, this Essay has described the potential for social gains due to the existence of IAEs and research that should be undertaken to determine the exact quantum of these benefits before passing relevant legislation. Of course, no discussion of potential benefits would be complete without addressing possible detriments. As previously described, a primary social good that may arise from IAEs is invalidation of patents that should not have been granted. This subsection evaluates when IAEs might deviate from behaviors that bring about this social benefit and what must be done to encourage IAEs to continue producing positive externalities.

As discussed below, IAEs are least-likely to bring about socially beneficial externalities if they utilize nuisance-value demand letters. This litigation strategy has long been implemented by "patent trolls" who offer to settle an infringement dispute of questionable merit for an amount less than what it

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51. Susan Decker, *Drug Makers Attack Patent Challenges*, BOSTON GLOBE (July 30, 2015), <https://www.bostonglobe.com/business/2015/07/29/drugmakers-strike-back-kyle-bass-blasted-over-patent-challenges/RyaN4QkiR5yNEbSZvDUXDM/story.html>.

52. *Acorda Fires Back at Kyle Bass's IPR Strategy*, FINALTERNATIVES (May 29, 2015, 3:01 PM), <http://www.finalternatives.com/node/30947> ("In the meantime, the pharmaceutical industry's lobbyists in Washington are pressuring Congress to amend the law to combat what it terms are 'abusive' IPR tactics.")

53. The Innovation Act of 2015, H.R. 9, 114th Cong. § 9 (2015).

54. *Id.*

would cost to defend against the allegations.<sup>55</sup> A reasonable defendant will commonly pay a nuisance settlement to avoid the cost of litigation and avoid an unlikely, but financially significant, adverse judgment.

If a nuisance-value IAE business model is viable, a rationally behaving IAE will potentially target *any* patent in litigation. In this situation, the strength of an IAE's threat is no longer the potential to invalidate a patent, but rather, in forcing the patent-holder to incur the cost of defending its patent. This would encourage rational IAEs to cease targeting weak patents and focus their attentions on patents that are valuable enough to defend. This divorces IAE activity from the social benefit of invalidating ill-granted patents (a social good). Rather, IAEs would become a socially-negative tax on all patent litigation. As discussed below, the nuisance-value model *could* viably be implemented by IAEs, but only if the Patent Office fails to apply the proper standard in deciding whether to grant IPR petitions.

The cost of fully defending against an IPR is estimated to be between \$300,000 and \$700,000.<sup>56</sup> This significant price allows profit-driven IAEs to spend over \$45,000 to draft a petition and still be profitable if it secures a nuisance settlement representing a portion of the cost to defend the patent.<sup>57</sup> There is, however, an impediment to implementing this strategy. If the petition, read in light of the patent owner's response, does not convince the Patent Office that there is a reasonable likelihood that the petitioner will succeed (at least in part), the petition should be denied and no IPR initiated.<sup>58</sup> This minimizes the expense of defending against meritless allegations of patent invalidity.

In light of the patent owner's ability to quickly defeat meritless petitions at an early stage, it seems that nuisance-value (and presumptively meritless) IAE activity is unlikely to be profitable, especially in light of the significant costs of drafting and filing an IPR petition.<sup>59</sup> However, this determination rests upon the significant assumption that the Patent Office will determine that meritless petitions are not reasonably likely to invalidate a patent. If the Patent Office fails in this task, nuisance-value IAE activity is a significant possibility. There is some question regarding whether the Patent Office is presently fulfilling this obligation.

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55. See Ranganath Sudarshan, *Nuisance-Value Patent Suits: An Economic Model and Proposal*, 25 SANTA CLARA COMPUTER & HIGH TECH. L.J. 159, 162 (2009).

56. Haggin, *supra* note 16.

57. 1 ECKSTROM'S LICENSING IN FOREIGN & DOMESTIC OPERATIONS 4 app. 4L. This calculus obviously oversimplifies the costs of engaging in IAE activity, but it is sufficient for current purposes.

58. 35 U.S.C. § 314(a) (2012).

59. The respective costs to draft and file an IPR petition are \$46,000 (estimated) and \$23,000 (a portion of which may be refunded if the petition is denied). ECKSTROM'S, *supra* note 57, at 9, 19.

Since IPR began in 2012, the Patent Office has granted 1,457 of 2,059 petitions (70.8%).<sup>60</sup> This high rate of success for petitioners before the Patent Office has been explained in two manners: (1) Petitioners target only particularly bad patents, and thus, it is not surprising that these patents fare poorly; and (2) The system is inherently anti-patent, which is shown through a high success rate for petitions.<sup>61</sup>

If the former explanation is correct, then there is little likelihood that nuisance IAE activity will occur. The Patent Office will not institute IPRs based on meritless petitions, and thus, the patent holder can expect that legal fees associated with such petitions (including petitions associated with nuisance-value IAEs) will be minimal. Thus, there is little incentive for a patent holder to settle a nuisance value case for an amount that would prove profitable for an IAE (*i.e.*, an amount greater than the cost to draft a petition), and no reasonable IAE would pursue the nuisance-value strategy.

If the correct explanation is that the IPR system is inherently anti-patent, then nuisance-value IAEs may profitably exist. Assuming that petitions are likely to be granted against *any* patent (due to an anti-patent bias), a targeted patent holder can expect that it will expend between \$300,000 and \$700,000 to defend a full IPR.<sup>62</sup> At this expected cost, a patent holder may rationally choose to settle a nuisance-value IPR case for a sum that is profitable to an IAE. This encourages the pursuit of a nuisance-value IAE business model.

There is currently little evidence of widespread nuisance-value IAE activity. Further, there is no conclusive study showing that the Patent Office is not rejecting low-quality petitions that could be used by nuisance-value IAEs. However, if meritless petitions can be used as a tool to collect nuisance-value settlements, then the social benefit of invalidating ill-granted patents is undermined. In that scenario, IAEs will rationally target *any* valuable patent (strong or weak) because the strength of the patent would not be relevant to whether the IAE could secure a nuisance-value payment.

If the USPTO efficiently denies meritless petitions, then the above-described benefits from IAE activity (*i.e.*, invalidation of ill-granted patents) are still possible. IAEs will not be able to engage in nuisance-value activity and will have to focus their attentions on weak (ill-granted) patents. There is, at this time, no conclusive study on this point. In light of this uncertainty and

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60. U.S. Patent and Trademark Office, Patent Trial and Appeal Board Statistics (Aug. 31, 2015), at 7 <http://www.uspto.gov/sites/default/files/documents/2015-08-31%20PTAB.pdf>. This data excludes petitions that were joined with others and petitions that settled before institution or denial. For purposes of this data, a partial grant is considered a grant.

61. Ann E. Motl, *Inter Partes Review: Ensuring Effective Patent Litigation Through Estoppel*, 99 MINN. L. REV. 1975, 1990 (2015). These positions were specifically discussing the invalidation rate during IPR at a time when the rate of invalidation was higher than it is at present, but the sentiments are still applicable to the present grant rate for IPR petitions.

62. Haggin, *supra* note 16.



as described throughout this article, further research is appropriate before Congress legislates on IAEs without access to all relevant facts.

#### V. CONCLUSION

This Essay is not the terminal work on whether IAE activity can prove socially beneficial. Rather, it is the first exposition on potential, even likely, social gains that may be attributed to the business model. As discussed herein, IAEs may undermine abusive patent litigation, reduce the costs of defending against assertions of patent infringement, and serve the public by invalidating ill-granted patents. With this in mind, it is prudent to delay judgment on IAEs while further critical analysis of these nascent business entities and their future behavior in the marketplace can be evaluated. It is therefore necessary that Congress be patient in considering legislation that would terminate IAEs as a participant on the patent landscape.