Unraveling the USPTO's Tangled Web: An Empirical Analysis of the Complex World of Post-Issuance Patent Proceedings

Mark Consilvio
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UNRAVELING THE USPTO’S TANGLED WEB: AN EMPIRICAL ANALYSIS OF THE COMPLEX WORLD OF POST-ISSUANCE PATENT PROCEEDINGS

Mark Consilvio* & Jonathan R.K. Stroud** ***

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*** Note: All information presented here is solely for educational and scholarly purposes to contribute to the understanding of American intellectual property law. The materials reflect only the personal views of the authors and are not attributable to any law firm or its clients. It is a fixed document in a fluid, ever-changing field of law.

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I'm reasonably sure that I am the only living American who's actually read all these [public records], all the way through.... [A coworker]... proposed an analogy between the public records... and the giant solid-gold Buddhas that flanked certain temples in ancient Khmer. These priceless statues, never guarded or secured, were safe from theft not despite but because of their value—they were too huge and heavy to move. Something about this sustained me.¹

I. INTRODUCTION

On September 16, 2011, President Obama penned his name onto the America Invents Act (AIA),² and, in doing so, dramatically reshaped the patent landscape post-grant. The AIA was the most significant reform to the patent system in almost sixty years.³ Among the many changes wrought by the AIA, the Act replaces inter partes reexamination with inter partes review and adds an optional post-grant review for a time after a patent issues.⁴ When these changes went live September 16, 2012, inventors and practitioners had to quickly (and hopefully adroitly) navigate the many post-grant options they were suddenly confronted with. These options include ex parte reexamination, inter partes review, post-grant review, supplemental examination, reissue, derivation proceedings, and litigation.⁵

Many of these options are used before, concurrently, or after one another, creating a diverse and nuanced plethora of permutations.⁶ This complex procedural web leaves the individual inventor or small business at a disadvantage when enforcing his patent rights or when defending against asserted patents.

This Article investigates post-grant and inter partes review procedures and offers evidence to suggest that, on average, small entities have been disadvantaged by these procedures.⁷

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¹ DAVID FOSTER WALLACE, THE PALE KING 84 n.25 (2012).
⁴ America Invents Act § 60.
⁵ Id.
⁶ For example, a third-party requester can request ex parte reexamination at any time during the enforceability of a patent—regardless of other concurrent proceedings. See 35 U.S.C. § 302 (2012).
⁷ As used throughout this Article, a "small entity" is defined as an individual, a nonprofit, or a corporation with fewer than 500 employees, in line with the definitions found in 37 C.F.R. § 1.27 (2005) and 17 C.F.R. § 121.802 (2013).
First, the new post-issuance regime increased complexity and the cost of the review process—two factors that disproportionately affect small entities.

Second, the new post-issuance regime has so far been used as an essential component rather than an alternative to litigation. Instead of significantly reducing litigation costs or staving off endless trials, small entities involved in litigation will now likely incur additional costs at the U.S. Patent and Trademark Office (PTO).

Third, small entities may bear a disproportionate burden in managing the new regime and its costs.8 This may further discourage small entities from using the important post-issuance regime, or even from using the patent system as a whole. Thus, the PTO and Congress would be wise to mitigate the negative impact on small entities and rethink the statutory and regulatory approaches to the post-issuance regime.

We recommend that the PTO and Congress strengthen post-grant review procedures so they are true alternatives to litigation. This Article argues for the use mandatory stay provisions, reduced estoppel, and uncoupled timing deadlines. Only then will post-grant review procedures truly reflect, embody, and effect congressional intent.

II. ESSENTIAL SMALL ENTITIES, EXPLAINED

Recent economic research shows that small businesses are the primary driver of job creation in the United States.9 But, disturbingly, America's small businesses have recently generated fewer jobs than expected based on historical trends.10 Even so, a Small Business Administration report contends that firms in emerging industries will define America's industrial future.11

The patent system may be the key to securing America's future in innovation. "For innovators in the American economy, patent protection is often necessary to prevent copying and help in attracting investor capital, thereby allowing these companies to make the necessary investments to grow, build market share, and create jobs."12 Small firms are a significant source of innovation and patenting, developing more patents per employee than larger

8 See infra Part IV.B.
9 U.S. PATENT & TRADEMARK OFFICE, INTERNATIONAL PATENT PROTECTIONS FOR SMALL BUSINESSES 4 (2012) ("[Y]oung startup companies, which are by their nature small businesses, create an average of 3 million jobs per year, far more than their larger counterparts.").
10 Id.
11 ANTHONY BREITZMAN & DIANA HICKS, SMALL BUS. ADMIN., AN ANALYSIS OF SMALL BUSINESS PATENTS BY INDUSTRY AND FIRM SIZE 1 (2008).
12 U.S. PATENT & TRADEMARK OFFICE, supra note 9, at 4.
businesses and patenting more significant inventions.\textsuperscript{13} Patenting by small businesses is concentrated in "high technology"\textsuperscript{14} areas and is generally associated with superior economic performance.\textsuperscript{15} Yet the share of patents which small-entities hold continues to fall.\textsuperscript{16}

III. THE IMPETUS FOR THE REEXAMINATION REGIME

The preexisting reexamination regime consisted of two disparate proceedings: ex parte and inter partes reexaminations (reexams).\textsuperscript{17} Each shares the same general origin and purpose.\textsuperscript{18}

To appreciate the AIA's effects on the patent system, it helps to understand the pre-AIA reexamination regime, its challenges, and what Congress sought to address. First, consider the major reasons Congress created inter partes and post-grant review proceedings: speed, certainty, and efficiency.\textsuperscript{19}

In any patent examination system, imperfection inheres.\textsuperscript{20} After an inventor submits a patent application to the PTO, the patent examination process purports to have examiners search through all available prior art and apply all legal requirements quickly, accurately, exhaustively, and adroitly.\textsuperscript{21} However, in reality, patent examiners have far too little time (often just eighteen hours—and,
in many cases, less) or resources to always accurately assess patentability.22 If examiners knew everything and had less stringent deadlines, it is responsible to assume that at least some issued patents would be rejected.23

As scholars note, "excessive numbers of low-quality patents can prevent healthy rates of innovation."24 The question then is: what can we do to build a better system? Giving examiners more time could cost billions, according to one estimate,25 and would surely exacerbate the PTO's already substantial backlog. Too much examining time could bring the PTO patent prosecution process to a grinding halt, as the rate of applications received greatly exceeds the disposal rate, even with the current truncated timeline.

Conversely, patent litigators often invalidate, by clear and convincing evidence, patents that should never have issued. Parties can bring charges of invalidity as a defense to infringement suits or as a basis for declaratory judgment actions.26 Despite various acknowledged accountability gaps in the patent examination system, only 1.5% of all patents end up being litigated.27 Professor Mark Lemley argues that this imperfect system of initial review is in fact optimal, because additional resources are more efficiently allocated to those few patents that are issued and later disputed.28 Indeed, scholar John Allison posits that these litigated patents account for a significant portion of the valuable patents anyway.29 Congress has long recognized imperfections in the examination system and the need to occasionally reexamine some issued patents that are important to their owners.30 This reexamination regime originally had two main objectives: to bolster the validity of patents and to provide an alternative to litigation.31

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23 Id.
25 Lemley, supra note 22, at 1508–11.
27 Lemley, supra note 22, at 1507.
28 Id. at 1497.
31 See U.S. PATENT & TRADEMARK OFFICE, REPORT TO CONGRESS ON INTER PARTES REEXAMINATION 2 (1980), available at http://www.uspto.gov/web/offices/dcom/olia/reports/reexamreport.pdf ("Ex parte reexamination of patents, and the procedures for [the] same, were established by Congress to serve as an expedited, low-cost alternative to patent litigation for reviewing only certain aspects of patent validity, based on patents and printed publications." (citing Pub. L. No. 96-517, 94 Stat. 3016, § 1 (1980))).
A. REASON ONE: TO BOLSTER THE VALIDITY OF PATENTS

For most of the long history of the PTO, the agency had no authority to cancel an issued patent. It took almost two hundred years for Congress to eventually give the PTO the power to reexamine patents. Ex parte reexamination was designed in part to permit patentees to lend support to the patent’s validity in case prior art suffered after examination. As some have urged, “[m]ore narrowly tailored patents will enjoy heightened respect from competitors because such patents are much harder to invalidate.” In addition to prior art discovery, post-issuance modifications to relevant legal precedent may also impact patentability and give cause to reaffirm patent rights, such as in the arena of 35 U.S.C. § 101 patentable subject matter. Some argue the Supreme Court decisions, such as KSR v. Teleflex, and even Federal Circuit decisions, such as the Alice Corp. Int’l v. CLS Bank Corp. case, cast serious doubt on the validity of many hundreds of thousands of issued patents. Reexamination offers patent owners a limited opportunity to revisit validity in light of recent case law.

32 McCormick Harvesting Mach. Co. v. C. Aultman & Co., 169 U.S. 606, 608 (1898) (“It has been settled by repeated decisions of this court that when a patent has received the signature of the secretary of the interior, countersigned by the commissioner of patents, and has had affixed to it the seal of the patent office, it has passed beyond the control and jurisdiction of that office . . . .”).

33 See Paugh, supra note 30, at 181–88 (recounting the history of examination producers).

34 See H.R. REP. No. 112-98, at 45 (2011) (showing congressional intent behind enacting ex parte re-examination).


38 717 F.3d 2169 (Fed. Cir. 2013).

39 Robert Greene Sterne et al., Reexamination Practice with Concurrent District Court Patent Litigation, 9 SEDONA CONF. J. 53, 53 (2008) (referring to the change to the CAFC’s approach to obviousness in KSR v. Teleflex). The PTO actually refers to KSR as a “clarification” that “does not alter the legal standard for determining whether a substantial new question of patentability exists.” MPEP,
In addition to patentee requests, third parties may challenge the validity of a patent. Third parties often do so when threatened with an infringement suit. Third-party requesters represent the bulk of reexamination requesters. Reexamination thus provides "a less costly way of removing or restricting patents that should not have been granted or that were granted too broadly, to permit such challenge even before litigation-inducing controversy has arisen ...." Reexamination would eliminate or simplify a significant amount of patent litigation. In some cases, the PTO would conclude as a result of reexamination that a patent should not have issued. A certain amount of litigation over validity and infringement thus would be completely avoided. Challenges to patents increase the certainty of validity of those patents that survive the reexamination process, improve the credibility of the patent system as a whole and, in theory, reduce the incidence of contentious litigation.

B. REASON TWO: TO PROVIDE AN ALTERNATIVE TO LITIGATION

The initial ex parte reexamination process was also created as an alternative to litigation. Congress stated in 1980 that:

Reexamination will permit efficient resolution of questions about the validity of issued patents without recourse to expensive and lengthy infringement litigation.... The reexamination of issued patents could be conducted with a fraction of the time and cost

40 See 35 U.S.C. § 302 ("Any person at any time may file a request for reexamination ....").
41 See MATTHEW A. SMITH, Inter Partes Reexamination (1st ed., Jan. 31, 2009), available at http://www.ipo.org/wp-content/uploads/2013/03/Inter_Partes_Reexamination.pdf ("An examination of the first two hundred inter partes reexaminations conducted by the author shows that over one hundred were directed to patents involved in co-pending litigation.").
of formal legal proceedings and would help restore confidence in the effectiveness of our patent system. . . . It is anticipated that these measures provide a useful and necessary alternative for challengers and for patent owners to test the validity of United States patents in an efficient and relatively inexpensive manner.45

In particular, reexamination was thought to “be of great benefit to small businesses for defending their patents.”46 Likewise, one senator pointed to the reduced burden placed on small businesses and independent inventors.47 In 1982, Congress initially created only ex parte reexamination, which includes the PTO and the patentee.48 But Congressmen purportedly came to believe that greater involvement of a third-party requester in the reexamination process would allow for a cheaper expedited means of resolving patent disputes.49

Some critics of ex parte reexamination argued that the procedure was too limited because of the minimal involvement of third parties. After the initial request, the PTO allowed a third-party requester a maximum of one written response. Thus, third parties had little involvement or control and the controversy generally continued apace.50

In response to a general desire for a better patent litigation alternative, Congress created inter partes reexamination in 1999.51 Inter partes involved both parties in the dispute and a large number of prior art challenges, although parties were initially shy about utilizing inter partes reexaminations,52 since the lack of page limits had led to the practice of petitions that were hundreds (perhaps thousands) of pages long.53

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50 See S. 1070, 141 CONG. REC. S10655–S10659 (1995) (enacted) (“Many critics of our system argue the existing reexamination process offers only an illusory remedy for inventors because of the limits imposed on these third parties and similarly, the issues that can be considered in reexamination.”).
52 See infra FIGURE 3.
IV. THE IMPETUS FOR THE POST-ISSUANCE REGIME OF THE AMERICA INVENTS ACT

A. CONGRESS’S REASONING

In the early years of inter partes reexamination, parties filed few such cases, and the movement to reform the nascent procedure quickly gained traction.54 The inter partes reexamination process, in particular, was initially underutilized. Only twenty-seven total requests were filed in the first four years, when 600 requests have been projected during that time.55 Thus, Congressional representatives had plenty of fodder for floor statements addressing their perceived flaws of the old system:

The object of the patent law today must remain true to the constitutional command, but its form needs to change, both to correct flaws in the system that have become unbearable, and to accommodate changes in the economy and the litigation practices in the patent realm. The need to update our patent laws has been meticulously documented in [fifteen] hearings before the Committee or its Subcommittee on Courts, the Internet, and Intellectual Property, as well as eight hearings before the United States Senate Committee on the Judiciary. In addition, these legislative findings are augmented by the Federal Trade Commission and the National Academy of Sciences, both of which published authoritative reports on patent reform, and a plethora of academic commentary.56

More recently, Congress declared that the AIA “is designed to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.”57 “Patents of dubious probity only invite legal challenges that divert money and other resources from

56 Id. at 38–39 (citations omitted).
57 Id. at 40.
more productive purposes, purposes such as raising venture capital, commercializing inventions and creating jobs.\textsuperscript{58}

Congress expressed concern that the reexamination length had grown excessive.\textsuperscript{59} The director of the PTO in 2005 pointed to cases lasting several years and their associated costs as evidence that the reexamination process was not working.\textsuperscript{60} Despite the fact that the PTO should treat reexamination proceedings with “special dispatch,” the director testified that “a large number of reexamination proceedings have been pending before the USPTO for more than four years without resolution.”\textsuperscript{61} In addition, Congress recognized that the appeal system also added to the overall length of the process.\textsuperscript{62}

Congress also sought to balance the role of patent owners and third-party requesters. Some argued that reexamination does not provide a viable alternative to litigation because “these procedures do not provide third parties with a fair and balanced degree of participation.”\textsuperscript{63} Thus, the new inter partes and post-grant review proceedings are intended to expand and balance the role of both parties in a fashion similar to litigation.

Congress pointed to a few motivating factors not addressed by the legislation. First, Congress seemed concerned that, at the time, a third-party requester had no right to appeal a final PTO decision.\textsuperscript{64} While the PTO eventually changed the rules regarding reexamination to permit the appeal of final decisions, an initial determination of whether to institute inter partes review or post-grant review is still not appealable.\textsuperscript{65} Second, Congress was concerned with “inconsistent damage awards.”\textsuperscript{66} However, damages are not addressed by the AIA, presumably because the issue was too contentious for bipartisan agreement. Third, Congress identified limitations of reexamination such as the fact that requests cannot be based on prior public use or prior sales.\textsuperscript{67} The AIA does not expand


\textsuperscript{59} H.R. REP. No. 112-98, at 45.

\textsuperscript{60} \textit{Testimony of Mr. Jon Dudas, U.S. SENATE COMM. ON THE JUDICIARY} (Apr. 25, 2005), \url{http://www.idiciary.senate.gov/hearings/testimony.cfm?id=e655f9e2809e5476862f735da104aa60&hit_it=e655f9e2809e5476862f735da104aa60-1-1}.

\textsuperscript{61} Id.

\textsuperscript{62} H.R. REP. No. 112-98, at 45.


\textsuperscript{64} H.R. REP. No. 112-98, at 45.

\textsuperscript{65} \textit{Id.}


\textsuperscript{67} H.R. REP. No. 119-98, at 45.

\textsuperscript{68} Id. at 45.
reexamination to permit such a basis of request. Fourth, Congress referred to a recent trend of Supreme Court cases reversing rulings of the Court of Appeals for the Federal Circuit (CAFC). As discussed below, the issues raised by these cases are largely not addressed by the AIA.

Congress created the CAFC in part to harmonize U.S. patent law and handle all appeals for patent cases. Reversals by the CAFC can send significant ripples throughout the pond of patent law. As noted in Section III.A supra, reversals in precedent raise questions of the validity of vast numbers of issued patents. Congress referred to six such recent reversals that "reflect[ed] a growing sense that questionable patents are too easily obtained and are too difficult to challenge." Interestingly, neither the post-issuance regime nor the AIA in general impact most of the cases referenced. The six are:

(1) *Bilski v. Kappos*, 130 S. Ct. 3218 (2010) ("reversing the Federal Circuit and holding that the machine-or-transformation test is not the sole test for determining the patent eligibility of a process");

(2) *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008) ("reversing the Federal Circuit and holding that patent exhaustion applies to method patents when the essential or inventive feature of the invention is embodied in the product");

(3) *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437 (2007) ("reversing the Federal Circuit and limiting the extraterritorial reach of section 271(f), which imposes liability on a party which supplies from the U.S. components of a patented invention for combination outside the U.S.");

(4) *KSR Int'l Co. v. Teleflex, Inc.* (KSR), 550 U.S. 398 (2007) ("reversing the Federal Circuit and strengthening the standard for determining when an invention is obvious under section 103");

(5) *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007) ("reversing the Federal Circuit and holding that the threat of a private enforcement action is sufficient to confirm standing under the Constitution");

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68 Id. at 39.
70 Id.
Of these six cases, only KSR (which dealt with obviousness) directly applied to the old reexamination regime, as reexamination permitted questions of validity based only on issues of novelty and obviousness. However, even that decision had little bearing on the reexamination process, for the reasons articulated below.

Did KSR fundamentally alter the examination or reexamination regime? The PTO itself refers to KSR as a mere "clarification" that did "not alter the legal standard for determining whether a substantial new question of patentability exists." (Sound familiar? The PTO has written a memo indicating the same thing about the recent CLS Bank decision.) Hence, post-KSR, a reexamination requester could not base a request solely on the possibility that the examiners misapplied pre-KSR standards. As a result, despite the disturbing trend of Supreme Court reversals of Federal Circuit decisions, the switch to inter partes review will not actually have much effect on the issues at the heart of these cases.

Importantly, in Bilski (a § 101 subject-matter inquiry), the CAFC was not reversed, even though the Supreme Court did not rely on the well-regarded machine-or-transformation test of the CAFC. Nonetheless, Congress addressed the future post-issuance questions of patent eligibility in Bilski. Though inter partes review—expected to be the majority of post-issuance proceedings—does not extend to such questions, the new post-grant review (PGR) proceeding and the new transitional covered business method patent (CBM) proceeding open the door to review questions of eligibility, utility, enablement, written description, and indefiniteness. However, parties can only file a request shortly after a patent issues (for PGR) or under very specific circumstances (for CBM). Congress—apparently unwilling to expand the range of grounds for challenges to the entire

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71 H.R. REP. No. 112-98, at 93 n.7.
73 MPEP, supra note 17, § 2216.
76 See 37 C.F.R. § 42.202(a) (post-grant review time for filing), and §§ 32.303, 42.300 (transitional covered business method post-grant review time for filing and other requirements).
life of potentially problematic patents—greatly limited the possibility of addressing the precedential changes it had in mind.

B. THE UNFAIRNESS OF THE REEXAMINATION REGIME: AVAILABLE EVIDENCE

1. Cost of Litigation. Patent litigation is expensive, even compared to general litigation. Total average costs range from $916,000 to just over $6 million. Generally, the cost of litigation rises dramatically with the amount in controversy. Notably, the preliminary stages of litigation contribute substantially to overall cost. The period through discovery accounts for over 50% of overall cost. Yet even regardless of the amount in controversy, litigation costs often prevent patentees from enforcing their rights and can disadvantage alleged infringers by denying them an opportunity for a proper defense. Unsurprisingly, the majority of patent suits settle before trial.

![Cost of Litigation](Figure 1: The Costs of Litigation)

2. Who Owns Litigated Patents? Who litigates? In light of the preceding evidence, readers probably expect that small entities represent the minority of

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77 American Intellectual Property Law Association (AIPLA), AIPLA Report of the Economic Survey 2011, at I-153 to I-154 (2011); see infra Figure 1.
78 See infra Figure 1.
79 Id.
80 Id.
patent litigants—that albeit to their great advantage. One might rationally presume small entities have less capital available to absorb litigation expenses and would, therefore, be less likely to litigate. Indeed, small businesses are often cash-constrained, which limits their ability to obtain patent protection.

Not so. According to one influential study, while less than one-third of all non-litigated patents were issued to small entities, two-thirds of litigated patents belonged to small entities.

![Non-Litigated Patents](image1)

![Litigated Patents](image2)

**Figure 2: Litigated and Non-Litigated Patents, Compared**

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81 Allison et al., *supra* note 29, at 435.
82 U.S. PATENT & TRADEMARK OFFICE, *supra* note 9, at 19.
83 Allison et al., *supra* note 29, at 466.
The trend continues. Reexamination costs have averaged $128,000 through the close of prosecution,84 far lower than for litigation. One can expect IPR, PGR, and CBM proceedings, while far more expensive and (at least in the short-term) time-consuming, to be similarly cost-effective (in relation to litigation). Yet given the fact that fewer small entities have instituted inter partes review, as shown infra, and given the above trend between litigated and non-litigated patents, cost alone does not appear to dictate the choice of forum.

One frequent theory behind this imbalance posits that small and large entities have asymmetric stakes in litigation.85 Small entities may have more to gain or less to lose, two factors that may encourage litigation.

Further, because large entities can have vast patent portfolios, and because the scope of patent coverage may be difficult to ascertain, large entities may seek to cross-license rather than litigate. Conversely, small entities, likely having relatively few patents, may not be similarly situated, and thus may seek an all-or-nothing approach, or take advantage of the leverage associated with litigation defense costs. Additionally, there is some evidence that small entities make more significant innovations86 and may, therefore, be more likely to find conflicts with potential competitors.

3. The Link Between Reexamination and Litigation. In spite of patent litigation’s substantial costs, data from the PTO shows that reexamination—especially inter partes reexamination—is used primarily as an additional supplement to litigation.87 If a patentee were settling disputes solely through the reexamination process and settlement, one would expect very few of those patents to be involved in litigation. Likewise, because a substantial number of patents are cancelled through the inter partes reexamination process, one would expect there to be less patents available to provide a basis for bringing a suit. But, in fact, about 70% of inter partes reexamination requests are related to litigation.88 So far, roughly 80%-90% of IPRs have related litigation89—so the changes appear to accelerate the trend, rather than counteract it.

84 AIPLA, supra note 77, at I-173.
85 Allison et al., supra note 29, at 435.
86 BREITZMAN & HICKS, supra note 11, at 21.
87 See Paugh, supra note 30, at 181–88 (arguing that Congress never intended reexamination to supplement litigation).
The link between ex parte reexamination and litigation is lower (33%) than for inter partes reexamination. This is to be expected, since a third of ex parte requesters are patent owners. Obviously, patent owners cannot file suits against themselves. While a patent owner can file an ex parte reexamination request while simultaneously involved in an infringement suit, presumably many requests are made preemptively—possibly short-circuiting any potential dispute. It should be noted that the numbers of related litigation cases listed in those references are “minimums” according to “known” data. One can reasonably assume that even for inter partes requests, some requests predate future litigation or act, effectively, as declaratory judgment actions—preemptive strikes to known or anticipated pending litigation disputes. Therefore, the correlation is likely to be even higher than those numbers reported to the PTO.

90 See U.S. PATENT & TRADEMARK OFFICE, supra note 42, at 5.
91 Thus, the low number—33%—is deceptive because some unknowable number of “prevented” litigations never come to pass and are therefore not counted.
4. **Reexamination Filing Data.** Yet, things always change. Since 2004, the reexaminations request trend tells a different story (see FIGURE 4 “Reexamination Filing Data,” below).92 Reexamination is now considered the leading mechanism for challenging patent validity in the United States.93 Like ex parte reexamination requests, inter partes reexamination requests have been on the rise.94 Although it is difficult to identify with any certainty the factors driving the increase in requests, it can be reasonably assumed that requesters have become more familiar with the procedure. Similarly, as more inter partes reexaminations come to completion, the surrounding substance and procedure should become more predictable.

![Reexamination Filing Data](image)

**FIGURE 4: PTO FILING INFORMATION FOR REEXAMINATIONS**

Inter partes reviews, however, have not been so slow to start, as public USPTO statistics show. As of shortly after the eighteen-month anniversary of

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93 Gardella & Berger, supra note 35, at 381.
94 See infra FIGURE 4.
the new proceedings, nearly 1,000 petitions had been filed in the first year-and-a-half alone.95

Small entities historically make up about one-third of all inter partes requesters.96 The data pool is too small to draw firm statistical conclusions from this evidence. The numbers do, however, raise some interesting questions: How many small entities have been drawn into inter partes reexamination by large entity requesters? What percentage of reexamination proceedings are involved in related litigation? Answers to these questions would paint a clearer picture of the role of small entities in the reexamination regime.

It is important to note that small entities may be comprised, in part, of non-practicing entities (NPEs). NPEs are entities that own patents, but do not produce or manufacture any products. It is difficult to assess the role of NPEs in this area. Limited available data allows only limited inferences about NPEs.97 Some studies, however, have indicated that NPEs account for a small percentage of litigation, and when they do litigate, they fare poorly.98 Notably, the non-joinder provisions of the AIA are likely to skew any future statistics—for instance, if one stay issues in twelve co-pending litigations in a single district with a single NPE plaintiff, the numbers may over-represent NPE presence and influence. Nonetheless, arguments against the perceived abuses of NPEs have clearly influenced legislative policymakers.99

5. Reexamination Pendency. The average inter partes reexamination runs about thirty-six months.100 The average ex parte reexamination pendency comes in at approximately 25.6 months.101 By comparison, proceedings outside the PTO are generally far less time-consuming, particularly if one takes into account the circumstances. Section 337 investigations at the International Trade Commission

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97 Sannu K. Shrestha, Trolls or Market-Makers? An Empirical Analysis of Nonpracticing Entities, 110 COLUM. L. REV. 114, 117 (2010) (“An empirical analysis of patent and litigation data cannot provide a definitive answer about the benefits and drawbacks of NPEs, but it can serve as a helpful starting point for policymakers weighing the arguments made by opposing sides of the NPE debate.”)
99 Id.
100 U.S. PATENT & TRADEMARK OFFICE, supra note 88, at 3.
typically range from fifteen to eighteen months.\textsuperscript{102} Infringement litigation in district court usually takes between two and three years.\textsuperscript{103} These latter proceedings are full-blown trials that cover a much larger breadth of issues than the prior art patentability determination of reexamination. Additionally, so-called “rocket dockets” have increased the speed of resolution in some district courts. The District of Delaware and the Eastern District of Texas are famous for their large and disproportionate number of patent suits that attract litigants seeking fast judicial review.\textsuperscript{104}

6. Abusive Challenges. The standard for initiating reexamination permits too many challenges. The data bears this out. The current standard results in 95\% of all requests being granted.\textsuperscript{105} This sham petitioning could be used strategically to pull some defendants into costly and protracted disputes. A small but visible number of abusive requests may have a disproportionate impact on perception. Almost 90\% of reexaminations amend or cancel the claims.\textsuperscript{106} If a request had suspect merits, it seems unlikely that requesters would have had such a high rate of success. Presumably, at least the majority of the requests filed were bona fide questions of patentability and not simply abusive ones.

V. AIA REFORMS TO THE POST-ISSUANCE REGIME

Words which he did not understand he said over and over to himself till he had learnt them by heart: and through them he had glimpses of the real world about them. The hour when he too would take part in the life of that world seemed drawing near and in secret he began to make ready for the great part which he felt awaited him the nature of which he only dimly apprehended.\textsuperscript{107}


\textsuperscript{103} Id.


\textsuperscript{105} U.S. Patent & Trademark Office, supra note 88, at 3.

\textsuperscript{106} Id.

\textsuperscript{107} James Joyce, Portrait of the Artist as a Young Man, at Ch. 2, Loc. 754 (Kindle ed. 2014).
Dubbed “a patent system for the 21st century,” the new patent regime enacted a host of changes very welcome to the savvy patent practitioner. The AIA implements myriad new procedural and substantive rules. It switches from a first-to-invent system to a first-to-file system, bringing invention priority treatment in line with virtually every other country.108 The AIA abolishes inter partes reexamination in favor of inter partes review and expands post-issuance options to include a separate post-grant review proceeding to settle disputes over a granted patent.109 It also creates the transitional program for covered business method patents (CBMs).110 However, ex parte reexamination remains almost exactly the same.111

A. INTER PARTES REVIEW

<table>
<thead>
<tr>
<th>Overview of Major Differences</th>
<th>IP Reexamination</th>
<th>IP Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducted by</td>
<td>Central Reexamination Unit</td>
<td>Patent Trial &amp; Appeal Board</td>
</tr>
<tr>
<td>Discovery</td>
<td>No</td>
<td>“Limited”</td>
</tr>
<tr>
<td>Cross-examination</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Time to Completion</td>
<td>“Special Dispatch” [Average: 36.2 Months]</td>
<td>12 Months [6 Month Extension]</td>
</tr>
<tr>
<td>Threshold</td>
<td>Substantial New Question</td>
<td>Reasonable Likelihood to Prevail</td>
</tr>
</tbody>
</table>

**Figure 5: Inter Partes Review and Reexamination, Compared**

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108 Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3, 125 Stat. 284, 285–93 (2011). How these other changes will affect small entities is beyond the scope of this Article.

109 Id. § 6, 125 Stat. at 299–313.

110 Id. § 18, 125 Stat. at 329–30.

111 The advent of “Supplemental Reexamination” may have changed the proceeding somewhat, but that is also beyond the scope of this Article. For more information, see 35 U.S.C. §§ 257(c)(2)(A), (B) (2012).
1. From Examination to Administrative Trials. Reexamination is an examination proceeding before the PTO whereby an examiner reopens a case file and reexamines an issued patent in light of new evidence relevant to the patent's validity. A specialized Central Reexamination Unit (CRU) handles requests from patent owners or third parties and conducts reexaminations. Current and former reexamination proceedings are conducted on paper.

Inter partes review itself limits third-party involvement. First, the procedure does not permit discovery. As a result, litigation may be the only way to obtain important evidence. Second, the procedure does not permit cross-examination. Cross-examination may be particularly important in disputing expert witness affiants. Third, there is no opportunity for the examiner to interview either party. This drawback may cause the examiner to err on a point that could otherwise be clarified by a simple phone call.

The most substantial modification to the inter partes procedure is that inter partes review replaces the paper administrative procedure of reexamination with a mini-trial conducted by a panel of three administrative patent judges—complete with discovery and depositions. The Board of Patent Appeals and Interferences (BPAI) has been renamed the Patent Trial and Appeal Board (PTAB) and will be responsible for handling the inter partes review. These new proceedings balance the power between patent owners and third parties, whether they are small or large entities.

The proceedings, however, may have several additional advantages for large entities. First, in addition to the fee increase, discovery could be a significant financial burden to small entities. As noted in Section IV.B.1, the cost of litigation from initiation through discovery is a significant percentage of the overall cost of the litigation itself. Technical expert declarants and the need for skilled legal representation could also add to the overall cost. Though the PTAB can admit attorneys pro hac vice, the PTAB generally requires attorneys to

112 Gardella & Berger, supra note 35, at 382.
113 Id. at 391–92. The Commissioner of Patents can also order reexamination sua sponte.
114 Id.
115 See MPEP § 2616 (Rev. 7, 2008) ("Congress has not provided the Office with subpoena power or discovery tools and has not provided the Office with the ability to conduct hearings for eliciting testimony and cross-examination."); see also Abbott Labs. v. Cordis Corp., 710 F.3d 1318 (Fed. Cir. 2013) (discussing reexamination procedures).
116 See Gardella & Berger, supra note 35 (discussing inter partes review procedures).
117 Id.
119 Id. § 7, 125 Stat. at 313–15.
be admitted to the patent bar. As a result, a party involved in concurrent litigation may need to hire additional representation solely for the inter partes review proceeding.

2. Time to Completion. The AIA requires that the final determination be issued no later than one year post-institution. The PTAB may extend the timeframe by six months for good cause. In addition to the statutory time limits, the switch from the CRU to the PTAB also eliminates a step in the appeals process. The new statutory scheme also has a safety valve, should the PTAB receive more cases than they can timely handle: the PTAB need not institute a review—even if the request is legally sufficient to institute a review—for the first four years inter partes reviews are in effect, if the number of cases equals or exceeds the number of inter partes reexamination requests in the last year of their availability.

The AIA gives the director of the PTO explicit authority to limit the number of reviews in the first four years of implementation. In addition to this authority, there is an out. Unlike the old inter partes reexamination statute, which required the director to institute a proceeding if the threshold was met, the inter partes review statute permits the Director to institute a proceeding if the threshold is met. Therefore, if the number of requests for review exceeds an acceptable number, the director has the authority to simply refuse additional requests.

The new inter partes review time frame has greatly sped up proceedings compared to inter partes reexamination. This increased speed to final disposition should attract small and large entities alike. And foreign entities with familiarity with other patent systems may feel more comfortable than U.S. parties when using these proceedings.

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120 See 37 C.F.R. § 42.10(c) ("The Board may recognize counsel pro hac vice during a proceeding upon a showing of good cause, subject to the condition that lead counsel be a registered practitioner and to any other conditions as the Board may impose.").
121 Leahy-Smith America Invents Act § 6, 125 Stat. at 302.
122 Id.
123 Id. § 6(c)(B), 125 Stat. at 304.
124 Id.
125 35 U.S.C. § 314(a) ("The Director may not authorize an inter partes review to be instituted unless . . . " (emphasis added)).
126 Id.
3. **Threshold.** Requests for reexamination involve prior patents or printed publications that present a "substantial new question of patentability."\(^{128}\) Congress has expanded the definition of "new" to include new arguments based on "old" art, i.e., art that was applied or cited during the initial prosecution of the patent:

It must first be demonstrated that a patent or printed publication that is relied upon in a proposed rejection presents a new, non-cumulative technological teaching that was not previously considered and discussed on the record during the prosecution of the application that resulted in the patent for which reexamination is requested, and during the prosecution of any other prior proceeding involving the patent for which reexamination is requested.

After the enactment of the Patent and Trademark Office Authorization Act of 2002 ("the 2002 Act"), a substantial new question of patentability can be raised by patents and printed publications "previously cited by or to the Office or considered by the Office" ("old art"). The revision permits raising a substantial new question of patentability based solely on old art, but only if the old art is "presented/viewed in a new light, or in a different way, as compared with its use in the earlier concluded examination(s), in view of a material new argument or interpretation presented in the request."\(^{129}\)

The AIA expands the body of challengeable patents,\(^{130}\) but raises the bar for granting a request. For inter partes review, the requester must demonstrate a "reasonable likelihood that the petitioner would prevail with respect to at least [one] of the claims challenged in the petition."\(^{131}\) The new threshold raises many questions. For example, what is the relationship between the reexamination threshold and the review threshold? Also, does the new standard

\(^{129}\) MPEP, supra note 17, § 2216.
\(^{130}\) The current system precludes reexamination of patents filed before Nov. 1, 1999. See MPEP § 2611 (rev. 7, 2008) ("An inter partes reexamination can be filed for a patent issued from an original application filed on or after November 29, 1999. For a patent which issued from an original application filed prior to November 29, 1999, the statutory inter partes reexamination option is not available, only the ex parte reexamination is available.").
allow parties to make the same arguments they articulated during examination? During reexamination?

The answer appears to be yes to each of these questions. There is no requirement that the grounds be "new." Indeed, § 325(d) indicates the PTO Director "may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the office."\(^{132}\) The Board also "may take into account" to "not require the Director, in deciding whether to institute [IPR], to defer to a prior determination in the Patent and Trademark Office, even one which considered the same prior art and argument."\(^{133}\)

If grounds are not required to be "new," the change in threshold may backfire in practice. This threshold was intended to prevent abusive challenges, but it has opened the door to revisiting rejections applied during examination.\(^{134}\) Such an opening makes it easy in some instances to simply rely on an examiner's rejection that may meet the new "reasonable likelihood" threshold—perhaps bolstered by expert testing and a litigator's resources.\(^{135}\)

In many instances, that is what parties have done.\(^{136}\) And it is not only art and grounds that the Board may reconsider, apparently—in K-40 Electronics, LLC v. Escort, Inc., the Board reviewed a 37 C.F.R. § 1.131 declaration (swearing to prior invention by the applicant), held it defective, and reapplied the prior art the declaration had antedated, instituting the IPR.\(^{137}\) And in Polaris Wireless, Inc. v. TruePosition, Inc., the Board effectively overruled the examiner's reasoning that "one of ordinary skill would not combine" references teaching certain things.\(^{138}\)

Uncertainty may cause small parties to hesitate to use the review process. Denials are not appealable and are, therefore, unlikely to generate precedent that would quickly clear ambiguity in this area.\(^{139}\) Fortunately, the estoppel provisions do not attach based solely on a petition for review, or a denial

\(^{132}\) Id. § 325(d).


\(^{134}\) See Corning Inc. v. DSM IP Assets B.V., IPR2013-00043, Paper 14 (May 13, 2013) (ID) (and nine other related IPRs 00044–53). There, the Board instituted based on inherency arguments on art the examiner had previously considered. This is only one example of many early IPRs that have been instituted on art and arguments considered by the examiner and overcome during prosecution.

\(^{135}\) Contrast the "reasonable likelihood" threshold with the "more likely than not" standard, discussed infra.

\(^{136}\) 35 U.S.C. § 325(d).


The PTAB must issue a “final written decision” for the estoppel provisions to apply.\textsuperscript{141}

Such uncertainty is likely most beneficial to the litigation team with the most resources, technical ability, and experience. In general, this could be disadvantageous for small entities.

4. Other Notable Changes (Estoppel, Amendment).\textsuperscript{42} The AIA also expands the permitted use of estoppel to subsequent proceedings in front of the PTO and precludes anyone who has filed for declaratory judgment on invalidity or has been served with a complaint of infringement more than a year prior from requesting review.\textsuperscript{143} This estoppel provision, coupled with the PTO’s discretion to stay, transfer, consolidate, or terminate additional concurrent proceedings before the PTO, may complicate litigation strategy.\textsuperscript{144} These provisions appear to be intended to curb abusive use of the post-issuance regime that extends over multiple proceedings. The proceedings probably do not favor either small or large entities, though they do add some uncertainty to the process and, as we have established, uncertainty generally favors the larger party.

Surprising to some, the Board denied nearly all Motions to Amend in inter partes reviews in the proceedings’ first eighteen months, causing many parties to question the propriety of the broadest reasonable interpretations standard (which is at least in part premised on the opportunity to amend).\textsuperscript{145} The Board has indicated a desire to educate the bar about Amendment practice—noting that parties must respond not only to the grounds of unpatentability involved in the trial,\textsuperscript{146} but must also distinguish between all known art, “anywhere, in whatever setting”\textsuperscript{147} that they must show 35 U.S.C. § 112 written description

140 Id. § 315(e).
141 Id.
142 We do not discuss the broadest reasonable claim interpretation (BRI) in this Article, as reexamination also applied BRI.
144 Id. § 315(d).
145 See, e.g., THE COALITION FOR 21ST CENTURY PATENT REFORM, WHY THE PTO'S PROPOSED USE OF THE BROADEST REASONABLE INTERPRETATION OF PATENT CLAIMS IN POST-GRANT AND INTER PARTES REVIEWS IS INAPPROPRIATE UNDER THE AMERICA INVENTS ACT (2014), available at http://www.patentsmatter.com/issue/pdfs/Why_the_PTOs_Proposed_Use_of_BRI_is_Inappropriate_19July2012.pdf (“The use of BRI in PGR and IPR is inappropriate because a major premise for allowing the PTO to use BRI—that patent owners will not be harmed because there is a sufficient opportunity for patent owners to amend their claims as needed in response to adverse PTO rulings on patentability—is lacking in PGR and IPR.”).
147 Toyota Motor Corp. v. Am. Vehicular Scis. LLC, IPR 2013-00419, Paper 32, at 4 (P.T.A.B. Mar. 7, 2014) (“[I]t should be revealed whether the feature was previously known anywhere, in
support and construe the claims; \(148\) that they can only narrow claims; and that they can only cancel a challenged claim or propose a reasonable number of substitute claims. \(149\) The patent owner has the burden of proof, \(150\) and in fifteen pages, they face difficulty in getting even one amended claim approved. \(151\)

5. THINGS LEFT UNCHANGED.

<table>
<thead>
<tr>
<th>NOTABLE SIMILARITIES</th>
<th>IP REEXAM</th>
<th>IP REVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requester</td>
<td>Non-patentee</td>
<td>Non-patentee</td>
</tr>
<tr>
<td>Estoppel</td>
<td>Issues raised or could have been raised</td>
<td>Issues raised or could have been raised</td>
</tr>
<tr>
<td>Basis of Challenge</td>
<td>Patents and other printed publications</td>
<td>Patents and other printed publications</td>
</tr>
<tr>
<td>Scope of Challenge</td>
<td>35 U.S.C. §§ 102, 103</td>
<td>35 U.S.C. §§ 102, 103</td>
</tr>
</tbody>
</table>

**FIGURE 6: SIMILARITIES BETWEEN IPR AND REEXAMINATION**

With all of the substantial changes to the post-issuance regime, it is fortunate that some things remain the same. The requester of the review will still need to identify all real parties in interest, adding transparency to the process. \(152\) Also, estoppel still applies to all issues that were raised or could have been raised. \(153\) However, the AIA balances estoppel in both avenues, i.e., it applies to both proceedings in district court and in other proceedings in front

\(148\) See id. at 5 (requiring a showing of compliance with the written description requirement).

\(149\) 37 C.F.R. §§ 42.121(a)(3), 42.221(a)(3) (2013).

\(150\) 37 C.F.R. § 42.20(e) (2013).

\(151\) Note that the Motion is not an "amendment" per se, but rather are proposed substitute claims—claims that won’t be further examined, but will go directly to issue if granted. Note also that further discussion on motions to amend is beyond the scope of this Article.


of the PTO.\textsuperscript{154} Again, it is unclear how all of this will affect parties in review, though it may again discourage the use of this mechanism.

\section*{B. POST-GRANT REVIEW\textsuperscript{155}}

\begin{tabular}{|c|c|c|}
\hline
\textbf{OVERVIEW OF MAJOR DIFFERENCES} & \textbf{POST-GRANT REVIEW} & \textbf{IP REVIEW} \\
\hline
\textbf{WINDOW TO FILE} & UP TO NINE MONTHS AFTER ISSUE & AT LEAST NINE MONTHS AFTER ISSUE OR AFTER POST-GRANT REVIEW AND NO MORE THAN ONE YEAR AFTER INFRINGEMENT COMPLAINT \\
\hline
\hline
\textbf{THRESHOLD} & MORE LIKELY THAN NOT & REASONABLE LIKELIHOOD TO PREVAIL \\
\hline
\end{tabular}

\textbf{FIGURE 7: POST-GRANT REVIEW, COMPARED}

Post-grant review can be viewed as a variation on or as an older sibling to inter partes review. The two proceedings are similar in most respects, but have a few notable differences. For example, a requester must petition for post-grant review within a limited window post-grant.\textsuperscript{156} This puts substantial pressure on stakeholders to quickly review issued patents in their fields. This shortened period favors those who have the means and experience to know where to look and what to look for. Small entities less familiar with the patent landscape will be disadvantaged by this time limit compared to savvier large entities.

For a post-grant review, the petitioner must demonstrate that it is more likely than not that at least one of the claims challenged is unpatentable.\textsuperscript{157} Additionally, for a post-grant review, the petitioner may base a request on a

\footnotesize{\textsuperscript{154} Compare id. § 315(e)(1) ("[P]roceedings before the Office.") with id. § 315(e)(2) ("[C]ivil actions and other proceedings.").}

\footnotesize{\textsuperscript{155} A notable feature of post-grant review is the "Transitional Post-Grant Review of Business Methods" proceeding. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 18, 125 Stat. 284, 329–31 (2011). This proceeding has several additional exceptions and rules that apply to only business method patents. Little data exists in this area and is beyond the scope of this Article.}

\footnotesize{\textsuperscript{156} 35 U.S.C. § 321(c) (2013).}

\footnotesize{\textsuperscript{157} Id. § 324(a).}
novel or unsettled legal question that is important to other patents or patent applications.158

Comparing the two standards, the “reasonable likelihood” standard is lower than the “more likely than not” standard. The reasonable likelihood standard allows for the exercise of discretion but encompasses a 50/50 chance whereas the more likely than not standard requires greater than a 50% chance of prevailing.

Petitioners are encouraged to clearly set forth the best ground of unpatentability as to each challenged claim[ ] [sic] to facilitate early resolution of the issues. In instituting an IPR or PGR, the Board may take into account whether the same or substantially same prior art or arguments previously were presented to the Office. Additionally, the Board may also go forward on challenged claims that are unpatentable based on obviousness where challenge is based on anticipation.159

The differences in these thresholds add to the uncertainty in the process, which will likely disadvantage small entities.

Parties can also bring challenges over 35 U.S.C. §§ 101 and 112, rather than only on §§ 102 and 103, and are not limited to patents or printed publications.160

C. TRANSITIONAL COVERED BUSINESS METHODS POST-GRANT REVIEW

The transitional program for covered business method patents post-grant review is a special type of post-grant review that can only be filed more than nine months post-issuance, but only in certain circumstances and only for certain patents. A discussion of that provision is beyond the scope of this Article.161

158 Id. § 324(b).
D. OVERALL EFFECT ON SMALL ENTITIES

Though Congress made some changes that even the solo petitioner will appreciate, the AIA has stratified an already convoluted and complex patent landscape. The new system mirrors the complexity of the technology it seeks to manage, and unfortunately, the data and assumptions based on the available evidence are disheartening for small entities.

Notably, a study on small businesses required by the AIA will be available after the post-issuance regime takes effect.162 Hopefully, it will paint a more attractive picture than that sketched here. In the meantime, this Article attempts to analyze the regime’s effect on small entities. We argue that several conservative changes to the impending regime will help mitigate the negative effects of the post-issuance regime on small entities.

VI. EARLY EVIDENCE: ANALYZING THE FIRST EIGHT AND THE FIRST EIGHTEEN MONTHS

When it is said that we are too much occupied with the means of living to live, I answer that the chief worth of civilization is just that it makes the means of living more complex; that it calls for great and combined intellectual efforts, instead of simple, uncoordinated ones . . . . Because more complex and intense intellectual efforts mean a fuller and richer life. They mean more life. Life is an end in itself, and the only question as to whether it is worth living is whether you have enough of it.163

So far, roughly 80% to 90% of all IPRs filed have copending litigation at the time of filing—a number that may actually be higher in light of possible declaratory judgment actions filed on behalf of patent owners.164 The number (and all statistics) may deceive, however, so we explain our methodology.165

164 Statistics in this section compiled from public documents; on file with author.
165 The old adage “Lies, damned lies, and statistics” seems an appropriate warning. See MARK TWAIN, CHAPTERS FROM MY AUTOBIOGRAPHY (1906).
A. SOME WORDS CONCERNING METHODOLOGY

Although there have been over 950 IPRs filed as of March 16, 2013, there are far fewer discrete “groups” of IPRs—285, by our count, although counting methodology varies. We call them “groups” because these sets of IPRs are all derived from the same litigation or controversy, so to get an accurate count of the percentage of cases stayed, the districts represented, and other numbers, we found it more appropriate to measure using copending litigations as a yardstick. Note also that identifying which litigations are related to the same general dispute is difficult after the AIA’s non-joinder provisions, and in the age of multi-district litigation, counts and statistics in this area tend to vary wildly. Note too that our count includes discrete sets of cases where there was no copending litigation identified with the petitions—so controlling for those numbers, there were 285 relevant copending litigations. But tracking the stay motions quickly became unwieldy (and has been replaced by commercially available, machine-tracked data). So we provide stay data for the first eight months below, and then provide case analysis and other statistical analysis of the early decisions.

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169 Personally compiled statistics.
B. STATISTICS SO FAR—GENERALLY (FIRST EIGHTEEN MONTHS)

Luckily, the AIA required the USPTO to publish statistics relevant to patent owners, and they have done so publicly on their website, even going so far as to provide graphical representations of the data. (That data speaks for itself, and at any rate will change weekly and remain public.)

We do, however, provide the following chart of popular forums for copending litigations, which reveals (perhaps unsurprisingly) that the Eastern District of Texas, the Central District of California, and the District of Delaware are the three most popular patent forums.

![Popular Forums for Co-pending Litigations](chart.png)

**FIGURE 8: POPULAR FORUMS FOR CO-PENDING LITIGATIONS**

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170 35 U.S.C. § 319(d) (“DATA ON LENGTH OF REVIEW.—The Office shall make available to the public data describing the length of time between the institution of, and the issuance of a final written decision under subsection (a), for each inter partes review.”).

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FIGURE 9: NUMBER OF RELATED LITIGATIONS, BY DISTRICT

<table>
<thead>
<tr>
<th>District</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Del.</td>
<td>11</td>
</tr>
<tr>
<td>C.D. Cal.</td>
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<tr>
<td>N.D. Cal.</td>
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<td>N.D. Ill.</td>
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</tbody>
</table>

FIGURE 9 shows that in the early days of IPR, the District of Delaware received the most requests for a stay, and likewise those cases influenced the growth of district court case law associated with stays. It is notable that of those eleven discrete groups of litigation in Delaware listed, most have multiple litigations (likely as a result of the AIA non-joinder provisions). So those eleven litigation groups have or could result, statistically, in the stay of over fifty

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copending litigations. (In these groups of litigation, district courts generally select a “lead case” and file one set of papers for most major orders, motions, and responses.)

Petitioners in those first eight months, on average, challenged 15.5 claims; thirty-four actions were instituted on all of the claims challenged; and the Board took an average of around 153 days to decide whether to institute.\(^{173}\)

C. EARLY IPR DENIALS (THE FIRST EIGHT MONTHS)

Of the first fifty-four cases instituted (not counting any nonmeritorious outliers), five petitions were denied on the merits. Those cases are:

- *Synopsys, Inc. v. Mentor Graphics Corp.\(^ {174}\)*
- *Denso Corp. v. Beacon Navigation GmbH\(^ {175}\)*
- *Wowza Media Systems, LLC v. Adobe Systems, Inc.\(^ {176}\)*
- *Monsanto Co. v. Pioneer Hi-Bred International, Inc. (Monsanto I)\(^ {177}\)*
- *Monsanto Co. v. Pioneer Hi-Bred International, Inc. (Monsanto II)\(^ {178}\)*

All followed a patent owner’s response.

In *Synopsys*, the PTAB construed an important claim narrowly, using the patent owner’s reasoning to avoid a prior art reference. Notably, the administrative patent judge (APJ) criticized the petition for not “clearly pointing to where each element of the claim is found” in the reference and for not “clearly explain[ing] the reasoning” behind petitioner’s invalidity arguments.\(^ {179}\)

In *Denso*, the petitioner failed to construe the claims. The PTAB, relying on its version of the “ordinary and customary meaning for all claim terms,” provided a specific construction for one important claim term.\(^ {180}\) The APJs used their own construction to show that the petitioner’s arguments failed for each reference asserted.\(^ {181}\)

\(^{173}\) Personally compiled statistics.


\(^{176}\) IPR2013-00054 (P.T.A.B. Apr. 8, 2013).

\(^{177}\) IPR2013-00022 (P.T.A.B. Apr. 11, 2013).

\(^{178}\) IPR2013-00023 (P.T.A.B. Apr. 11, 2013).

\(^{179}\) *Synopsys*, at 17–18.

\(^{180}\) *Denso*, at 8.

\(^{181}\) *Id.* at 8–28.
In *Wowza*, the APJs rejected a number of § 103 challenges. The Board panel rejected the petitioner’s proposed construction of a term and instead ruled that the claims should not be so construed.\(^{182}\)

In the *Monsanto* cases, the petition was deficient because it failed to explain why the person having ordinary skill in the art would find the claims inherent in the prior art. Notably, an expert declaration was given “little weight” for failing to “provide sufficient underlying data.”\(^{183}\) Thus the PTAB exercised its newfound discretion to discredit an expert’s sworn affidavit.\(^{184}\)

D. EXAMPLES OF EARLY INFLUENTIAL STAY DECISIONS (FIRST EIGHT MONTHS)

In *Everlight Electronics Co. v. Nichia Corp.*, a Michigan federal judge denied a stay, holding that “a stay would be unreasonably prejudicial to the [p]laintiffs in light of the procedural posture of this action,” as the case was in the late stages of litigation.\(^{185}\)

Conversely, in *Star Envirotech, Inc. v. Redline Detection, LLC*, a Central District of California judge held that, “in light of the above considerations and the liberal policy of granting motions to stay litigation pending the outcome of USPTO proceedings, the Court GRANTS Defendants’ Motion to Stay Pending Inter Partes Review.”\(^{186}\)

Amusingly, a judge in the Middle District of Florida used some colorful language while issuing an order granting a stay. In *Capriola Corp. v. LaRose Industries, LLC*, the judge wrote:

> Once again commercial interests clash over the scope of a patent. In this instance, the patent claims a child's toy, apparently an enchanting and successful toy. The defendants ask to defer the litigation pending an *inter partes* review by the PTO under a recent amendment to the patent statute. The plaintiffs request “full speed ahead” in the litigation. Because the litigation, although in the incipient stage, promises an abundance of venom and the attendant delay and expense in all events; because the PTO apparently will not consume much time unless the PTO perceives an important patent issue within the PTO’s particular expertise;

\(^{182}\) *Wowza*, at 5–7 (P.T.A.B. Apr. 8, 2013).

\(^{183}\) *Monsanto I*, at 5–7 (P.T.A.B. Apr. 8, 2013).

\(^{184}\) *Monsanto II*, at 6–8; *Monsanto II*, at 7–8.


and because an important issue that appears in the litigation also appears to fall within the PTO’s province and particular expertise, prudence commends resort to a stay until either the PTO declines review or, finding an important issue within the PTO’s special province, the PTO grants and completes review to the benefit of the parties, the court, and the public. In other words, the investment of some time at this juncture appears wise.\textsuperscript{187}

Another Central District of California court, in \textit{Semiconductor Energy Laboratory Co. v. Chimei Innolux Corp.}, granted a stay, in part “because SEL does not dispute that it has not sought a preliminary injunction and that SEL and CMI are not direct competitors.”\textsuperscript{188}

E. SMALL ENTITIES: BENEFIT OR DETRIMENT? (FIRST EIGHTEEN MONTHS)

Another early surprise has been the Board’s denial of grounds as “redundant.”\textsuperscript{189} While a full discussion of those denials is beyond the scope of this paper, here are five notable denials based on redundant grounds (where there were requests for rehearing involved, which required an explanation of those grounds): \textit{Berk-Tek, LLC v. Belden Techs., Inc.}, IPR2013-00057, Paper 21 (Mar. 14, 2013); \textit{LaRose Indus., LLC v. Capriola Corp.}, IPR2013-00120, Paper 20 (July 22, 2013); \textit{Microstrategy, Inc. v. Zillow, Inc.}, IPR2013-00034, Paper 23 (Apr. 22, 2103); \textit{Oracle Corp. v. Clouding IP, LLC}, IPR2013-00088, Paper 13 (June 13, 2013); \textit{ScentAir Techs., Inc. v. Prolitec, Inc.}, IPR2013-00180, Paper 18 (Aug. 26, 2013).

F. SMALL ENTITIES: BENEFIT OR DETRIMENT? (FIRST EIGHT MONTHS)

By our count, as of May 16, 2013, roughly 56\% of filers have been large entities, 28\% have been medium-sized entities, and only 16\% have been small entities.\textsuperscript{190} For ten months thereafter, the trend continued, with large entities filing IPRs in significant number.\textsuperscript{191} Yet, this is certainly a significant percentage—particularly when controlling for the large number of copending IPRs large entities in associated litigation generally file. However, given that

\textsuperscript{187} No. 8:12-cv-2346-7-23TBM, 2013 WL 1868344, at *3 (M.D. Fla. Mar. 11, 2013).
\textsuperscript{189} FMC Corp. and VMware, Inc. v. Personal Web Techs., LLC, IPR2013-00082, Paper 33, at 4 (P.T.A.B. June 5, 2013) (stating that counseling parties should “articulate a meaningful distinction in terms of relative strengths and weaknesses with respect to application of the prior art disclosures to one or more claim limitations” to avoid horizontal and vertical redundancy).
\textsuperscript{190} Personally compiled statistics.
\textsuperscript{191} Id.
IPRs should provide an alternative to litigation, and small entities represent the majority of litigators, the numbers so far are perplexing and show that small entities have not yet taken full advantage of the complicated procedures.

VII. PROPOSALS TO MITIGATE THE IMPACT ON SMALL ENTITIES

A. STUDY

A review of the current evidence regarding the role of small businesses in the patent system suggests that the government and stakeholders should dedicate further study to this area. The PTO records assignees, but not necessarily companies; therefore, determination of patent ownership is of critical importance. Even though small entities average about one-third of all inter partes requests, the PTO seems to downplay the impact of the AIA on small entities by referring to the miniscule percentage (0.05%) of patents in force that are owned by small entities. Such a perspective undermines the true effect on small entities and the inter partes review procedure itself. When the total number of inter partes reexamination requests is compared to the total number of patents in force, it too is a miniscule amount.

The underutilization of the inter partes reexamination procedure is a major reason for the changes made by Congress. As discussed above, Congress sought to increase the utilization of an inter partes procedure for the benefit of small entities in particular. Therefore, the PTO should make a special effort to ensure that inter partes review is accessible to small entities.

B. FEES

Treating everyone equally does not necessarily mean treating everyone fairly. Many find flat taxes unfair because they disproportionately burden the least wealthy. Likewise, flat fees charged by the PTO for inter partes review and

192 BREITZMAN & HICKS, supra note 11, at 3 ("Patents owned by General Motors and others are a mixture of names of firms, establishments, subsidiaries, and variants of firm names. Mergers and acquisitions are also constantly changing the status of firms. As an example, large firms like General Motors and Procter & Gamble patent under more than 100 names. Extreme cases of firms that have a history of mergers, such as Glaxo-SmithKline, will have patents under more than 300 names.").

193 Id.

post-grant review may disproportionately burden small businesses and individual inventors. It should be noted that being a "small business" or "individual inventor" does not necessarily equate to less overall wealth.\textsuperscript{195} Nevertheless, the PTO has given small entities a 50% discount on virtually all fees in obtaining a patent.\textsuperscript{196} The AIA has expanded this discount to even smaller businesses and individuals, dubbed "micro entities."\textsuperscript{197} Oddly, though, these discounts do not extend to reexamination fees. The PTO should reduce fees for small and micro entities for IPRs and PGRs and take into account the economic impact on those entities in deciding whether to expand discovery.\textsuperscript{198}

C. OMBUDSMAN

Recognizing the need to assist small entities in obtaining a patent, Congress mandated an ombudsman program.\textsuperscript{199} The ombudsmen would act as liaisons with the PTO to help small entities through the examination process.\textsuperscript{200} These same reasons exist to help small entities navigate the post-issuance processes. Such support can mitigate some of the harm resulting from the new complexity created by the AIA.

VIII. CONCLUSION

The AIA has not had Congress's intended effect. First, recent data shows that inter partes requests generally have a strong correlation with litigation. In actuality, however, this correlation should be stronger because the data does not necessarily include all potential related litigation—only that which has been accurately self-reported. Since a suit may be filed after a request for inter partes proceeding, a suit filed after the request was filed might not be included. Therefore, one would expect the correlation to increase if the life of a patent is taken into account. Accordingly, like inter partes reexamination, stakeholders

\textsuperscript{197} Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 10, 125 Stat. 254, 317 (2011) (micro entities receive a 75% discount).
\textsuperscript{199} Leahy-Smith America Invents Act (AIA), Pub. L. 112-29, § 28 (2010).
\textsuperscript{200} Id.
may not be using inter partes review as a true alternative to litigation. Instead, the data supports the conclusion that, like inter partes reexamination, inter partes review is used as an adjunct to litigation.

Second, although the AIA eliminates the possibility of appealing to the Board of Patent Appeals and Interference and its corresponding costs, the fee increase for inter partes review and the cost of discovery may add a substantial expense. If inter partes review is indeed a supplement to litigation, the increase in cost may be prohibitive. Third, estoppel and procedural limitations may remain a large deterrent to inter partes requests. Inter partes review may not be a viable option to some involved in litigation and the risk of estoppel will likely continue to worry practitioners. Lastly, the requirement to divulge the real party in interest will likely discourage potential infringers from filing a valid request that would identify that party to the patentee.

Many implications of the AIA are too difficult to predict for the average practitioner. Many may have taken a wait-and-see perspective until the dust settles. But inter partes review may attract others with hopes of quick resolution. Even for those already involved in concurrent litigation, review concluded well before trial. Though we should not underestimate the attraction to the speed of the procedure, every case will bring its own set of priorities and concerns. While practitioners form strategies to handle the post-grant paradigm shift, the average inventor may find himself or herself without a compass in navigating this new complex landscape.