
NOTES

RECASTING THE U.S. INTERNATIONAL TRADE COMMISSION'S ROLE IN THE PATENT SYSTEM

The problem of low patent quality has recently plagued the world of high-technology innovation.¹ Low patent quality results when the U.S. Patent and Trademark Office (PTO) issues too many bad patents — patents that in a perfect system should never have been issued (for instance, because of obviousness or lack of novelty).² When combined with the problem of patent thickets, which cause “so much overlap among the technologies developed by different companies that it is difficult to bring any product to market without potentially infringing patents held by other companies,”³ the problem of low patent quality threatens to undermine the very innovation that the patent system is supposed to foster.⁴

In an ideal world, the PTO would never issue bad patents and would instead insist that patents consistently satisfy the basic patentability requirements, in particular novelty and nonobviousness; however, the PTO can do so only if it “can, at the time of patent application, run a substantial and relatively reliable evaluative process.”⁵ In practice, the PTO’s limited budget, the nonadversarial nature of the patent application process, and the absence of third-party information mean

¹ See generally, e.g., ADAM B. JAFFE & JOSH LERNER, *INNOVATION AND ITS DISCONTENTS* 56–77 (2004).

² See, e.g., *id.* at 75. It may be instructive to note just one particularly egregious example of a bad patent that the PTO actually issued: the case of the hyperlink patent, U.S. Patent No. 4,873,662 (filed Aug. 15, 1980). See Mark A. Lemley, *Patenting Nanotechnology*, 58 STAN. L. REV. 601, 609 & n.34 (2005) (describing the case as one of a patentee “claiming to own [a] piece[] of the Internet”). The breadth of the patent, which British Telecom alleged covered all hyperlinks, was sharply limited when a court held that the patent did not cover Internet hyperlinks. *British Telecoms. PLC v. Prodigy Commc’ns Corp.*, 217 F. Supp. 2d 399, 422 (S.D.N.Y. 2002); see also Craig Bicknell, *British Telecom: We Own Linking*, WIRED (June 19, 2000), <http://www.wired.com/politics/law/news/2000/06/37095> (noting that hyperlink technology had been around since the 1960s and that “[i]f a court upheld the patent, it would have profound effects on the Web” (quoting Carl Oppedahl) (internal quotation mark omitted)).

Low patent quality and its costs on innovation remain worrisome for many people. See, e.g., Joe Nocera, Op-Ed., *Innovation Nation at War*, N.Y. TIMES (Feb. 8, 2013), <http://www.nytimes.com/2013/02/09/opinion/nocera-innovation-nation-at-war.html> (criticizing “patents that are nothing short of silly — the rounded corners on the iPhone, for instance”).

³ JAFFE & LERNER, *supra* note 1, at 59. Industries with prevalent patent thickets include the electronics and semiconductor industries. See, e.g., Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2009–10 (2007).

⁴ See generally, e.g., JAMES BESSEN & MICHAEL J. MEURER, *PATENT FAILURE* (2008) (arguing that the patent system has failed, resulting in “patents likely provid[ing] a net disincentive for innovation,” *id.* at 144).

⁵ Doug Lichtman & Mark A. Lemley, *Rethinking Patent Law’s Presumption of Validity*, 60 STAN. L. REV. 45, 53 (2007).

that “bad patents routinely slip through.”⁶ Because of the great (and constantly increasing) number of patents issued by the PTO and the considerably smaller number of patents that are litigated, “the PTO doesn’t do a very detailed job of examining patents, but we probably don’t want it to. It is ‘rationally ignorant’ of the objective validity of patents, in economics lingo, because it is too costly for the PTO to discover those facts.”⁷ An inquiry into patent reform directed at alleviating the problem of low patent quality must therefore begin from a baseline that takes for granted the PTO’s issuance of bad patents.⁸

An important question then arises: how can the various institutions of the patent system get rid of bad patents? A secondary question is who should bear the cost of having such bad patents invalidated, given that invalidating⁹ bad patents is a public good and thus presents a collective action problem.¹⁰ In answering these questions, it is important to keep in mind that, to address a problem as endemic as low patent quality, approaches to reform must be multi-institutional and must take into account how each cog in the U.S. patent system fits into a broader whole.¹¹ Notwithstanding the multi-institutional approach

⁶ *Id.*; *see id.* at 53–56. In addition, “the incentives for examiners to grant patents [are] so great[] that the PTO gives patents to the vast majority of applicants.” Mark A. Lemley & Bhaven Sampat, Essay, *Is the Patent Office a Rubber Stamp?*, 58 EMORY L.J. 181, 181 (2008).

⁷ Mark A. Lemley, Essay, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1497 (2001) (footnote omitted); *see also id.* (“[T]he overwhelming majority of patents are never litigated . . .”).

⁸ *See, e.g.*, JAFFE & LERNER, *supra* note 1, at 21 (“[I]t is important to ensure that when mistakes are inevitably made, there is a practical and balanced process for fixing them.”).

⁹ “Invalidation,” as used in this Note, refers generally to getting rid of patent claims, whether through district court invalidation, PTO cancellation, or (as proposed in this Note) International Trade Commission (ITC) invalidation.

¹⁰ *See infra* p. 2346; *see also, e.g.*, JAFFE & LERNER, *supra* note 1, at 115 (“[A] firm’s decision to fight a patent generates a ‘public good,’ from which all the firms in the industry who are potential targets benefit.”); Megan M. La Belle, *Patent Law as Public Law*, 20 GEO. MASON L. REV. 41, 42–43 (2012) (“Competitors of the patent owner and consumers of the patented product . . . benefit just like the party who successfully challenged the patent.”); Joseph Scott Miller, *Building a Better Bounty: Litigation-Stage Rewards for Defeating Patents*, 19 BERKELEY TECH. L.J. 667, 687–88 (2004) (noting that “patent invalidity judgments [are] public goods” and that “the resulting free rider problem . . . discourages patent challenges”); John R. Thomas, *Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties*, 2001 U. ILL. L. REV. 305, 333 (“[C]hallenge[s] to patent validity should also be recognized as involving collective action problems. . . . This analysis begins by recognizing that patent validity challenges exhibit the characteristics of public goods.”).

¹¹ *See* Arti K. Rai, *Engaging Facts and Policy: A Multi-Institutional Approach to Patent System Reform*, 103 COLUM. L. REV. 1035, 1039 (2003) (“[P]atent reform requires multi-institutional analysis. This multi-institutional analysis must also be comparative in nature: Only by evaluating the relative competence of the various institutions in performing the tasks required by the patent process can we hope to design a system that works reasonably well — or, at a minimum, less imperfectly than the alternatives.”); *see also* La Belle, *supra* note 10, at 43 (arguing that patent law is public law and that “[a] public law regime is most successful when a host of enforcement mechanisms are available”).

that is required by an endemic public problem, only two options for invalidating bad patents currently exist: post-grant review by the PTO and invalidation by district courts.¹²

The patent system thus neglects the “other patent agency”¹³ — the U.S. International Trade Commission (ITC or Commission), an independent, bipartisan, quasi-judicial agency created by Congress.¹⁴ The ITC, an increasingly popular forum for patent litigation,¹⁵ is not currently an option for invalidating bad patents because its patent invalidity findings are not granted collateral estoppel effect in the district courts. Reforming the ITC to give its patent findings collateral estoppel effect would recast it into a new role as an efficient forum for invalidating bad patents.

Though commentators have proposed applying collateral estoppel to ITC patent findings,¹⁶ it is the answer to the secondary question —

¹² See, e.g., Michael A. Carrier, *Post-Grant Opposition: A Proposal and a Comparison to the America Invents Act*, 45 U.C. DAVIS L. REV. 103, 109 (2011).

¹³ Sapna Kumar, *The Other Patent Agency: Congressional Regulation of the ITC*, 61 FLA. L. REV. 529, 529 (2009); see *id.* at 580 (“Congress treats the ITC as an afterthought in the patent system, and not as a powerful agency whose actions have far-reaching effects.”).

¹⁴ See 19 U.S.C. § 1330 (2006).

¹⁵ One commentator has estimated that nearly fifteen percent of all patent trials in 2010 took place at the ITC. See Colleen V. Chien, *Protecting Domestic Industries at the ITC*, 28 SANTA CLARA COMPUTER & HIGH TECH. L.J. 169, 171 (2011). While there were only an average of ten patent cases filed each year at the ITC in the 1990s, Robert W. Hahn & Hal J. Singer, *Assessing Bias in Patent Infringement Cases: A Review of International Trade Commission Decisions*, 21 HARV. J.L. & TECH. 457, 460 (2008), that number increased to over twenty-five in the 2000s and has since exceeded sixty — including a record sixty-seven cases filed in 2011. See *All 337 Investigations*, U.S. INT’L TRADE COMM’N, <http://info.usitc.gov/ouii/public/337inv.nsf/All?OpenView> (last visited May 10, 2013) (listing all section 337 investigations). These numbers are calculated by eliminating all nonpatent investigations, counting the number of remaining investigations, and averaging as necessary.

¹⁶ See Kumar, *supra* note 13, at 561–65 (arguing in favor of collateral estoppel); Eric B. Cheng, Note, *Alternatives to District Court Patent Litigation: Reform by Enhancing the Existing Administrative Options*, 83 S. CAL. L. REV. 1135, 1172–73 (2010) (same); J. Brian Kopp, Note, *In re Convertible Rowing Exerciser Patent Litigation: Should ITC Patent Decisions Be Given Preclusive Effect in the District Courts?*, 24 CORNELL INT’L L.J. 357, 375–78 (1991) (arguing in favor of preclusion in order to equalize the treatment of ITC findings in patent and nonpatent section 337 investigations); Douglas P. Martin, Comment, *Preclusive Effect of Factual Determinations of the International Trade Commission with Regard to Patent Matters*, 62 U. CHI. L. REV. 885, 918 (1995) (concluding that preclusion is warranted as to the ITC’s factual determinations but not as to its legal determinations); Thomas R. Rouse, Note, *The Preclusive Effect of ITC Patent Fact Findings on Federal District Courts: A New Twist on In re Convertible Rowing Exerciser Patent Litigation*, 27 LOY. L.A. L. REV. 1417, 1461–63 (1994) (broadly arguing in favor of preclusion). But see Colleen V. Chien, *Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission*, 50 WM. & MARY L. REV. 63, 110–11 (2008) (declining to advocate for preclusion “given the questions surrounding bias” at the ITC “and the substantial differences in procedures used by” the ITC and district courts, *id.* at 110, but acknowledging that, “[i]f such concerns could be resolved,” *id.* at 110–11, preclusion “would benefit parties and the public at large in that party exposure to inconsistent decisions and duplicative litigation would be reduced and patents invalidated at the ITC could not be reasserted,” *id.* at 111).

who bears the burden of invalidating bad patents? — that suggests *why* the ITC, with its findings given collateral estoppel effect, would be a better forum for invalidating bad patents than the current options: there is an underappreciated but significant collective action problem in both the PTO and the district courts that is not as pronounced at the ITC. Combined with the ITC's inherent benefits, including an accelerated timetable and expert decisionmakers, the ITC's ability to minimize collective action problems makes it a prime candidate for becoming an efficient forum for invalidating bad patents.

This Note thus argues that reforming the ITC to equip its patent findings with collateral estoppel effect is a change that would potentially make the ITC, in at least some cases, more effective than the PTO and the district courts at invalidating bad patents. Part I sets the stage by providing a brief description of patent litigation as it currently stands in the district courts, the PTO, and the ITC, with an emphasis on the ITC. Part II outlines the problems with districts courts and the PTO, focusing on the significant but underappreciated collective action problems in those forums. Part III first surveys the ITC's comparative advantages — in particular, its ability to mitigate the collective action problems presented by litigating patent validity. It then proposes a set of reforms centered on granting collateral estoppel effect to the ITC's patent findings in district court proceedings — reforms designed to transform the ITC from an efficient forum for patentees to obtain injunctions to an efficient forum for invalidating bad patents.

I. THREE FORUMS FOR PATENT LITIGATION

A. *The District Courts*

As a forum for patent litigation, district courts are the most familiar option. District court patent litigation may be divided into two categories: litigation initiated by patentees and litigation initiated by potential infringers. The former is the prototypical case of patent litigation, whereby a patentee files a complaint alleging that a defendant infringed the patent.¹⁷ The accused infringer then usually defends itself not just by arguing noninfringement, but also by counterclaiming for a declaratory judgment of invalidity.¹⁸ Joinder rules are very restrictive, limiting the number of infringers that may be sued in a single action.¹⁹ Alternatively, a potential infringer may initiate an

¹⁷ See, e.g., FED. R. CIV. P. Form 18.

¹⁸ See, e.g., La Belle, *supra* note 10, at 52.

¹⁹ See 35 U.S.C. § 299(b) (Supp. V 2011) (“[A]ccused infringers may not be joined in one action as defendants . . . based solely on allegations that they each have infringed the patent or patents in suit.”).

action under the Declaratory Judgment Act²⁰ (DJA), seeking to have a patent declared invalid. Importantly, however, a district court's jurisdiction is limited to resolving Article III cases or controversies.²¹

If the patentee proves his infringement claims and defeats the accused infringer's invalidity claims, the district court may award him monetary damages and/or injunctive relief.²² Although injunctive relief used to be automatic, that has not been the case since the 2006 Supreme Court decision in *eBay Inc. v. MercExchange, L.L.C.*;²³ instead, a court may only issue injunctions in accordance with *eBay*'s four-factor test.²⁴ If, however, the accused infringer proves the asserted patent claims' invalidity, the claims are declared invalid and may never be asserted against any other party, following the doctrine of collateral estoppel.²⁵

B. The PTO

The 2011 enactment of the Leahy-Smith America Invents Act²⁶ (AIA) overhauled opposition proceedings at the PTO (the form adversarial patent litigation takes in that forum). Any third party may initiate PTO oppositions.²⁷ The previous incarnation of opposition proceedings (inter partes reexaminations) had been little used²⁸ despite

²⁰ 28 U.S.C. §§ 2201–2202 (2006 & Supp. V 2011).

²¹ See, e.g., *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 120 (2007); see also *infra* p. 2348.

²² See 35 U.S.C. §§ 283–284 (2006 & Supp. V 2011).

²³ 547 U.S. 388 (2006).

²⁴ *Id.* at 391. The four-factor test, based on traditional equitable principles, is satisfied when the patentee shows:

- (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.

Id. District courts now have the authority to deny injunctions “[w]hen the patented invention is but a small component of the product the companies seek to produce” as a result of the severe hardship an infringer in such a situation would suffer. *Id.* at 396 (Kennedy, J., concurring).

²⁵ See, e.g., *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313 (1971).

²⁶ Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

²⁷ See 35 U.S.C. §§ 311(a), 321(a) (Supp. V 2011). The patentee himself may not initiate oppositions. See *id.*

²⁸ During the nearly twelve years after inter partes reexaminations became an option in 1999, there were only 1659 requests for reexamination filed with the PTO, of which only 377 resulted in a final decision in the form of issuance of an inter partes reexamination certificate. U.S. PATENT & TRADEMARK OFFICE, *INTER PARTES REEXAMINATION FILING DATA — JUNE 30, 2012* (2012), available at http://www.uspto.gov/patents/stats/IP_quarterly_report_June_30_2012.pdf. By contrast, there were more than 30,000 patent cases filed in the district courts in a comparable time period. See, e.g., Jason Rantanen, *Patent Suit Filings for 2010 Show a Slight Rise*, PATENTLY-O (Jan. 27, 2011, 11:57 PM), <http://www.patentlyo.com/patent/2011/01/patent-suit-filings-for-2010-show-a-slight-raise.html>. The broad estoppel effect of inter partes reexaminations (not much different from the broad estoppel the new opposition proceedings carry under the AIA, see *infra* p. 2342) was likely the key reason for the underuse of these proceedings. See Carrier, *supra* note 12, at 114.

being orders of magnitude cheaper than district court litigation.²⁹ The AIA overhaul was expressly designed to address the endemic problem of low patent quality outlined in the introduction to this Note by better empowering the PTO as a forum for invalidating bad patents.³⁰

The AIA's overhaul of opposition proceedings established the Patent Trial and Appeal Board, an adjudicatory body within the PTO composed of expert administrative patent judges, and empowered it to resolve opposition proceedings between the patentee and third-party petitioners at the PTO.³¹ Opposition proceedings are limited to the issue of validity, but the PTO has the option to require patent claim amendments in addition to claim cancellation (the practical equivalent of invalidation in a district court).³² Notably, the PTO may review any settlement between the parties and may proceed to a final decision notwithstanding the parties' settlement agreement.³³ Finally, the PTO's opposition proceedings carry a broad form of estoppel effect in other forums, since the AIA provides that:

The petitioner in an inter partes review . . . that results in a final written decision . . . may not assert either in a civil action [in district court] or in [an ITC section 337 investigation] that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during that inter partes review.³⁴

²⁹ A 2011 survey found that the median cost of an inter partes reexamination (including the cost of an appeal to the Federal Circuit) was \$200,000 per side; for patent litigation, the median ranged from \$650,000 (for cases with less than \$1 million at stake) to \$5 million (for cases with more than \$25 million at stake) per side. See STEVEN M. AUVIL & DAVID A. DIVINE, AM. INTELLECTUAL PROP. LAW ASS'N, REPORT OF THE ECONOMIC SURVEY 2011, at 35–36 (2011).

³⁰ See 157 CONG. REC. S5326 (daily ed. Sept. 6, 2011) (statement of Sen. Patrick Leahy) (emphasizing the AIA's creation of "a postgrant review process to weed out . . . issued patents that should not have been issued in the first place"). See generally Carrier, *supra* note 12 (arguing in favor of post-grant opposition proceedings along the lines of those established by the AIA as a response to the problem of "invalid patents threaten[ing] to increase prices and limit competition without any countervailing benefits," *id.* at 105).

³¹ See 35 U.S.C. § 6(a), (b)(4). The AIA established two forms of opposition proceedings — inter partes review, *id.* §§ 311–19, and post-grant review, *id.* §§ 321–29 — both involving third parties adversarial to the patentee in the proceedings. One difference between the two is timing: inter partes review can be initiated only nine months after the patent is issued or after post-grant review concludes, whichever is later, *id.* § 311(c), while post-grant review can be instituted only within the first nine months after the patent issue date, *id.* § 321(c).

In addition to these new opposition proceedings, the PTO continues to hold ex parte review proceedings, known as ex parte reexaminations, which are conducted without the participation of any third parties. See 35 U.S.C. §§ 301–07 (2006 & Supp. V 2011). Ex parte reexamination is not considered in this Note because of its complete dissimilarity with litigation and because of its rather limited use. See, e.g., Carrier, *supra* note 12, at 113.

³² See 35 U.S.C. §§ 318, 328 (Supp. V 2011).

³³ See *id.* §§ 317, 327.

³⁴ *Id.* § 315(e)(2); see also *id.* § 325(e)(2) (providing for the same estoppel effect in post-grant review).

C. *The ITC*

Under section 337 of the Tariff Act of 1930,³⁵ the ITC has authority to investigate unfair trade practices, including importation of products that infringe valid U.S. patents,³⁶ and to order exclusion of such products from entry into the United States.³⁷ Section 337 investigations thus amount to a form of patent litigation, with unique jurisdictional, procedural, and remedial features.³⁸ This section outlines the most salient of these features, roughly following the steps that a section 337 investigation would take.³⁹

The first salient feature of the ITC is that its jurisdiction is purely in rem: in effect, a complainant brings suit against the allegedly infringing imported articles themselves, not the allegedly infringing party.⁴⁰ In the absence of importation, the ITC thus lacks jurisdiction.⁴¹

Provided that the ITC has jurisdiction, it initiates an investigation upon receiving a complaint alleging patent infringement by imported products.⁴² Notably, a complaint filed at the ITC may allege patent infringement by any number of products manufactured and imported by any number of companies based solely on their independent infringement of common patents.⁴³ The investigation initiated by the

³⁵ 19 U.S.C. § 1337 (2006).

³⁶ *Id.* § 1337(a)(1)(B).

³⁷ *Id.* § 1337(d).

³⁸ See Kumar, *supra* note 13, at 534–40.

³⁹ Though more detailed than the previous two sections, this section is still only an outline and is not meant to be an exhaustive summary of section 337 investigations. For more detail on section 337 investigations, see generally A LAWYER'S GUIDE TO SECTION 337 INVESTIGATIONS BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION (Tom M. Schaumberg ed., 2d ed. 2012) [hereinafter A LAWYER'S GUIDE]; for detail accompanied by a historical background of section 337, see generally Kumar, *supra* note 13, at 534–74.

⁴⁰ See, e.g., Sealed Air Corp. v. ITC, 645 F.2d 976, 985 (C.C.P.A. 1981) (holding that the ITC's power to grant relief "operates against goods, not parties" and is thus "not contingent upon a determination of personal or 'in personam' jurisdiction").

⁴¹ The ITC's jurisdiction is also constrained by section 337's domestic industry requirement, which limits investigations to cases in which a domestic industry "relating to the articles protected by the patent . . . exists or is in the process of being established." 19 U.S.C. § 1337(a)(2).

⁴² See U.S. INT'L TRADE COMM'N, PUB. NO. 4105, SECTION 337 INVESTIGATIONS: ANSWERS TO FREQUENTLY ASKED QUESTIONS 1 (2009), available at http://www.usitc.gov/intellectual_property/documents/337_faqs.pdf. The ITC initiates investigations only after determining that the complaint "complies with the Commission's Rules." *Id.*

⁴³ See, e.g., Certain Automotive GPS Navigation Systems, Components Thereof, & Products Containing Same, Inv. No. 337-TA-814, 76 Fed. Reg. 72,442, 72,443–44 (U.S. Int'l Trade Comm'n Nov. 23, 2011) (Institution of Investigation) (listing forty-eight car manufacturer respondents, including eighteen independent manufacturers); Certain Semiconductor Chips & Products Containing Same, Inv. No. 337-TA-753, 2012 WL 927056, at *4 (U.S. Int'l Trade Comm'n Mar. 2, 2012) (Initial Determination) (listing thirty-four respondents, including seven "Supplier Respondents," manufacturers of the accused chips — Freescale Semiconductor, Inc.; Broadcom Corp.; LSI Corp.; MediaTek, Inc.; nVidia Corp.; STMicroelectronics NV; and STMicroelectronics Inc. — and twenty-seven of their customers).

ITC in response to a complaint is overseen by one of the ITC's Administrative Law Judges (ALJs). There are three parties to the investigation: the complainant, the respondents (the importers of the allegedly infringing products), and an ITC staff attorney.⁴⁴

Discovery then proceeds quickly, often lasting less than five months.⁴⁵ Trial follows, taking the form of a formal hearing in accordance with the Administrative Procedure Act⁴⁶ — for all intents and purposes a bench trial with the ALJ presiding. Trial typically takes place six or seven months after the investigation begins.⁴⁷ The ALJ issues a decision on the merits, the Initial Determination,⁴⁸ which the Commission has sixty days to begin reviewing at a party's request or of its own initiative.⁴⁹ Upon review, the Commission can adopt or modify the ALJ's decision, ultimately issuing a Final Determination.⁵⁰

Overall, from filing the complaint to issuance of a Final Determination, the entire process takes around fourteen to sixteen months.⁵¹ Final Determinations are not necessarily final, as they can be appealed to the U.S. Court of Appeals for the Federal Circuit.⁵² One of the most salient procedural quirks of ITC section 337 investigations only comes into play in *future* proceedings: the ITC's findings regarding "patent issues" carry no preclusive effect in later district court proceedings or at the PTO.⁵³ In other words, a district court cannot employ

⁴⁴ See U.S. INT'L TRADE COMM'N, *supra* note 42, at 1–2. The complainant and respondents would be known as plaintiff and defendants, respectively, in a typical district court proceeding. The ITC staff attorney is a unique third-party litigant whose role is to represent the public interest in the investigation. *Id.* at 2.

⁴⁵ Kumar, *supra* note 13, at 536.

⁴⁶ 5 U.S.C. §§ 554, 556 (2012); see 19 U.S.C. § 1337(c).

⁴⁷ See Kumar, *supra* note 13, at 536.

⁴⁸ See U.S. INT'L TRADE COMM'N, *supra* note 42, at 20 & n.17.

⁴⁹ *Id.* at 23.

⁵⁰ *Id.* (citing 19 C.F.R. §§ 210.43–45 (2012)).

⁵¹ See A LAWYER'S GUIDE, *supra* note 39, at 15–16. Section 337 used to mandate time limits for investigations (of "12 months, or, if deemed 'more complicated,' 18 months," *id.* at 5), but these limits were repealed in 1994, see Uruguay Round Agreements Act, Pub. L. No. 103-465, § 321(a)(1)(A)–(B), 108 Stat. 4809, 4943 (1994). Section 337 nevertheless still requires investigations to be completed "at the earliest practicable time." 19 U.S.C. § 1337(b)(1); see also A LAWYER'S GUIDE, *supra* note 39, at 15 (noting that the ITC "adheres strictly to this requirement"). Indeed, ALJs normally have unreviewable discretion to set target dates for completion of section 337 investigations, but if an ALJ wants to set a target date beyond sixteen months, the Commission may conduct an interlocutory review of the ALJ's scheduling order. See 19 C.F.R. § 210.51(a).

⁵² 19 U.S.C. § 1337(c).

⁵³ *Tex. Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1569 (Fed. Cir. 1996) (reaffirming "the rule that decisions of the ITC involving patent issues have no preclusive effect in other forums"); see also S. REP. NO. 93-1298, at 196 (1974) ("[A]ny disposition of a Commission action by a Federal Court should not have a res judicata or collateral estoppel effect in cases before such courts.").

the doctrines of collateral estoppel or res judicata based on an ITC Final Determination finding regarding patent validity or infringement.

Notwithstanding this limitation, the ITC itself has remedial authority: at the conclusion of a section 337 investigation, the ITC may order injunctive relief if it finds in favor of the complainant. Notably, however, monetary damages are not available at the ITC.⁵⁴ Injunctive relief typically takes the form of an exclusion order that bars importation of the infringing products and that is enforced by U.S. Customs and Border Protection.⁵⁵ Section 337 provides that the ITC shall issue exclusion orders “unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry.”⁵⁶ In practice, however, injunctive relief is virtually automatic;⁵⁷ in particular, the ITC does not apply the *eBay* test for injunctive relief.⁵⁸ Finally, the President may countermand an exclusion order within sixty days “for policy reasons;”⁵⁹ in the meantime, the respondent may post bond to stay the exclusion order for those sixty days.⁶⁰

⁵⁴ U.S. INT’L TRADE COMM’N, *supra* note 42, at 24.

⁵⁵ *See id.* at 3; *see also* 19 U.S.C. § 1337(d). The ITC may also issue cease-and-desist orders, *id.* § 1337(f), and, pending a section 337 investigation, temporary exclusion orders, *see id.* § 1337(e).

⁵⁶ 19 U.S.C. § 1337(d)(1). Despite the enumeration of these public interest factors, the Federal Circuit has held that “Congress intended injunctive relief to be the normal remedy for a Section 337 violation.” *Spansion, Inc. v. ITC*, 629 F.3d 1331, 1358 (Fed. Cir. 2010).

⁵⁷ *See, e.g., Hahn & Singer, supra* note 15, at 483. To be precise, the injunctive relief that is virtually automatic comes in the form of *limited* exclusion orders that bar importation of infringing products *only by the named respondents*. *See Kyocera Wireless Corp. v. ITC*, 545 F.3d 1340, 1358 (Fed. Cir. 2008). A *general* exclusion order also bars importation by nonrespondents — typically downstream users of the infringing products (for example, a consumer electronics company that imports products that include a chip found to be infringing by the ITC in an investigation against the chip manufacturer and importer but not against downstream users) — but specific heightened requirements must be satisfied before the ITC may issue such an exclusion order. *See* 19 U.S.C. § 1337(d)(2) (allowing the ITC to issue general exclusion orders only where “a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to products of named persons” or where “there is a pattern of violation of [section 337] and it is difficult to identify the source of infringing products”).

⁵⁸ *Spansion*, 629 F.3d at 1359.

⁵⁹ 19 U.S.C. § 1337(j)(2). The President has delegated his authority under section 337 to the U.S. Trade Representative. *See* Assignment of Certain Functions Under Section 337 of the Tariff Act of 1930, 70 Fed. Reg. 43,251 (July 26, 2005).

⁶⁰ *See* 19 U.S.C. § 1337(e)(1); *see also* Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 34, 38 (2012). Aside from the jurisdictional, procedural, and remedial features of section 337 investigations outlined in this Part, the substantive patent law applied at the ITC generally follows the Patent Act, 35 U.S.C. §§ 1–376 (2006 & Supp. V 2011). *See* Joel W. Rogers & Joseph P. Whitlock, *Is Section 337 Consistent with the GATT and the TRIPs Agreement?*, 17 AM. U. INT’L L. REV. 459, 471 (2002) (“Section 337 cases apply the same substantive patent law as a federal district court would . . .”). However, the sub-

II. COLLECTIVE ACTION PROBLEMS IN THE DISTRICT COURTS AND AT THE PTO

To understand why the ITC is a prime candidate for becoming a tool in the battle against low patent quality, it is crucial to understand the public-good nature of challenges to patent validity. Invalidation is “the death knell for a patent”⁶¹: an invalid patent is worthless since it prevents a patentee from ever again suing anyone for patent infringement, thereby relieving *all* potential infringers from having to bear the risk of litigation or having to pay license fees. Therefore, as with any public good, challenges to patent validity present a collective action problem: Collectively, all potential infringers (and even the public at large⁶²) would benefit from challenging the patent’s validity; however, no single potential infringer can capture the full benefits of such a challenge. To the contrary, benefits that would flow to competitors represent costs to the potential infringer contemplating challenging a patent’s validity — costs that he will strive to avoid. Therefore, each individual potential infringer lacks an incentive to institute the challenge in the first place.⁶³ This problem is particularly pronounced with bad patents and in industries with patent thickets: bad patents can more easily be used to extract license fees or settlements from potential infringers, as the holder of a bad patent will likely demand but a small settlement while the potential cost of litigation is comparatively significant — especially due to the potential cost of an injunction.⁶⁴ This Note has already established that there will inevitably be bad patents — in other words, that there will be successful challenges to patent validity.⁶⁵ Given the collective action problem, the costs of patent validity challenges in different forums become crucially important. It is in comparatively analyzing these costs that the ITC’s strengths come to light.

stantive law applied at the ITC sometimes departs from the Patent Act, in particular as to some affirmative defenses. *See Kinik Co. v. ITC*, 362 F.3d 1359, 1363 (Fed. Cir. 2004) (holding that the statutory defense to infringement of process patents provided by § 271(g) of the Patent Act does not apply at the ITC). The breadth of this substantive departure from the Patent Act remains unclear, as *Kinik* has since been limited to § 271(g). *See Amgen, Inc. v. ITC*, 565 F.3d 846, 851–52 (Fed. Cir. 2009) (per curiam) (holding that the § 271(e)(1) defense — similar in language to § 271(g) — applied at the ITC notwithstanding *Kinik*).

⁶¹ John R. Allison et al., *Patent Quality and Settlement Among Repeat Patent Litigants*, 99 GEO. L.J. 677, 678 (2011).

⁶² *See generally* La Belle, *supra* note 10 (analogizing patent law to public law).

⁶³ *See sources cited supra* note 10.

⁶⁴ *See generally* Lemley & Shapiro, *supra* note 3 (outlining the problems of royalty stacking, patent thickets, and the threat of holdup due to injunctions posed by, among others, “improperly issued patents,” *id.* at 2044).

⁶⁵ *See supra* pp. 2337–38. Empirically, “[a] significant percentage of litigated patents are held invalid.” Allison et al., *supra* note 61, at 678.

A. Patent Validity Challenges in the District Courts

The Supreme Court itself has long acknowledged the important role that district courts play in invalidating bad patents. For example, the Court established district courts as the final arbiters of patent validity in *Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation*.⁶⁶ Additionally, in *Cardinal Chemical Co. v. Morton International, Inc.*,⁶⁷ the Supreme Court rejected the Federal Circuit's regular practice of vacating declaratory judgments of invalidity where a finding of noninfringement was also made.⁶⁸ In so doing, the Supreme Court emphasized both the defendant's interest in retaining "the value of the judgment [of invalidity] that it has obtained" and "the importance to the public at large of resolving questions of patent validity."⁶⁹ The Supreme Court thus rejected the Federal Circuit's practice, arguing that it "prolongs the life of invalid patents, encourages endless litigation (or at least uncertainty) over the validity of outstanding patents, and thereby vitiates the rule announced in *Blonder-Tongue*."⁷⁰

And so district courts are options for invalidating bad patents — but how good are they at avoiding the collective action problem? In a potential infringer-initiated DJA action, it is the potential infringers who bear the burden of the validity challenge — a huge burden given the massive cost of patent litigation in the district courts⁷¹ and the likely counterclaim for patent infringement to which potential infringers will be exposed. DJA actions thus fail to overcome the basic collective action problem.⁷² Furthermore, the lay judge or jury deciding the issue of validity lacks any patent expertise.⁷³ Indeed, instead of being used with the proactive goal of eliminating bad patents, DJA ac-

⁶⁶ 402 U.S. 313, 330–50 (1971); see also *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996) (noting that "principles of issue preclusion . . . ordinarily foster uniformity"). One commentator has thus accurately noted that it is *Blonder-Tongue* that "changed [district courts'] patent invalidity judgments from private to public goods." Miller, *supra* note 10, at 677.

⁶⁷ 508 U.S. 83 (1993).

⁶⁸ *Id.* at 102–03; see *Vieau v. Japax, Inc.*, 823 F.2d 1510, 1517 (Fed. Cir. 1987) (vacating as moot the judgment of invalidity after affirming a finding of noninfringement, thereby adopting the practice later rejected by the Supreme Court in *Cardinal Chemical*); see also *Cardinal Chemical*, 508 U.S. at 92 n.12 (collecting Federal Circuit cases applying the practice of *Vieau*).

⁶⁹ *Cardinal Chemical*, 508 U.S. at 100.

⁷⁰ *Id.* at 102.

⁷¹ See *AUVIL & DIVINE*, *supra* note 29, at 35 (finding median litigation costs for high-stakes patent litigation to be \$5 million per side in 2011).

⁷² See, e.g., Miller, *supra* note 10, at 688 ("[P]rofit-maximizing firms will supply definitive patent challenges at a less-than-optimal rate."); Thomas, *supra* note 10, at 334 ("We can expect that patent challenges will be subject to collective action problems. The resulting consumptive externalities should result in fewer patent challenges than are socially optimal . . .").

⁷³ The decisionmakers do not even benefit from the PTO's expertise embodied in the patent prosecution history because the PTO is generally accorded no deference. See generally Stuart Minor Benjamin & Arti K. Rai, *Who's Afraid of the APA? What the Patent System Can Learn from Administrative Law*, 95 GEO. L.J. 269 (2007).

tions are used reactively as a way of forum shopping by potential infringers who believe that a patentee is about to sue them for infringement in an unfavorable forum.⁷⁴

Of course, defendants in a classic patentee-initiated infringement action often counterclaim for a declaratory judgment of invalidity. Here, the patentee thrusts alleged infringers into bearing the burden of fighting for invalidity. The collective action problem is thus alleviated by *forcing* one small subset of the group (potential infringers who happen to be sued) to litigate validity and potentially obtain benefits that inure to the entire group (all competitors who are potential infringers, even those who have not been sued) and to the public at large. But there are two problems: First, there is a certain element of unfairness in alleviating the collective action problem in this manner.⁷⁵ Second, the collective action problem is not completely eliminated. At least one commentator has recognized that “forced sharing [of benefits] undercuts an alleged infringer’s incentive to stay in the fight to the finish — especially if the patent owner offers an attractive settlement.”⁷⁶ Furthermore, the collective action problem will affect litigation strategy for defendants, resulting in their undervaluing invalidity arguments in favor of noninfringement (or other) arguments⁷⁷: a defendant who wins on noninfringement grounds but loses on validity benefits from such an outcome while nonparty potential infringers do not; however, winning on invalidity grounds benefits not just the prevailing defendant, but also all competitors who may have potentially infringed.

In addition to these collective action problems, district court invalidation of patents suffers from a further flaw that procedurally loads the dice in favor of preserving validity, thereby increasing the cost of challenging validity in the district courts⁷⁸: a patentee who has sued for infringement and who then sees himself in danger of having his patent invalidated can simply render the case moot — and thereby deprive the court of its Article III jurisdiction — by unilaterally dismissing any infringement claims and promising not to sue the defendant again.⁷⁹ A defendant then has no recourse, even if he were to have filed a counterclaim for declaratory judgment of invalidity prior to the

⁷⁴ See generally Chester S. Chuang, *Offensive Venue: The Curious Use of Declaratory Judgment to Forum Shop in Patent Litigation*, 80 GEO. WASH. L. REV. 1065 (2012).

⁷⁵ The unfairness is heightened by the AIA’s indirect limitation on the number of defendants that may be joined, see 35 U.S.C. § 299(b) (Supp. V 2011), thereby forcing a single or a small number of defendants to bear costs with positive externalities inuring to their competitors.

⁷⁶ Miller, *supra* note 10, at 668.

⁷⁷ See *infra* note 115 and accompanying text.

⁷⁸ Note that the dice are also substantively loaded in favor of validity through the presumption of validity. See generally Lichtman & Lemley, *supra* note 5.

⁷⁹ See *Super Sack Mfg. Corp. v. Chase Packaging Corp.*, 57 F.3d 1054, 1059–60 (Fed. Cir. 1995).

patentee's dismissal of its infringement claims.⁸⁰ The patent remains valid and the patentee can keep collecting royalties or threatening litigation with respect to anyone other than the defendant, defeating any efforts that the defendant had expended into invalidating the patent.

B. Patent Validity Challenges at the PTO

Although superficially an attractive alternative for eliminating bad patents,⁸¹ the new PTO opposition proceedings suffer from a catastrophic failure to address the collective action problem. Here, the parties who petition to have the patent reviewed by the PTO will bear the burden of litigating the opposition proceedings against the patentee. Like in district court, the burden is massive — but it is of a different nature. Even assuming that the financial cost of litigating opposition proceedings remains much lower than that of district court litigation,⁸² there is another major cost that petitioners will have to bear in opposition proceedings: the “estoppel costs” caused by the unduly broad preclusive effect of PTO decisions.⁸³ The petitioners must bear not only the cost of being unable to reassert grounds for an invalidity defense in the event that the patentee later sues in district court or at the ITC, but also the risk that they will be unable to assert completely new grounds for invalidity even though such grounds were never invoked at the PTO opposition proceedings. The collective action problem presented by PTO opposition proceedings is thus worse than the classic collective action problem seen in the district courts because a major part of the costs, the estoppel costs, are not constant. Rather, these costs are borne separately by each and every petitioner, even when several band together to petition the PTO.⁸⁴ The incentives to free ride are thus even *stronger* here than in a typical collective action scenario: sitting it out means not only that someone else bears all the financial costs while everyone potentially benefits, but also that the free rider avoids any estoppel costs. Opposition proceedings thus

⁸⁰ See *id.*; cf. *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013) (holding that a court must dismiss as moot a counterclaim of trademark invalidity upon the plaintiff's withdrawal of its infringement claim and its signing of a covenant not to sue defendant again).

⁸¹ See, e.g., Thomas, *supra* note 10, at 327–29 (summarizing the broad support for post-grant opposition proceedings among scholars, practicing attorneys, and industry executives).

⁸² This assumption would be based on the low cost of opposition proceedings' predecessor, inter partes reexamination. See *supra* note 29.

⁸³ One commentator has thus noted: “This threatens the exact same problem that has plagued inter partes reexamination. A preferable system would limit estoppel to those grounds that were raised and addressed in the opposition.” Carrier, *supra* note 12, at 134. This statement also highlights the dramatically broader nature of this form of estoppel as compared to the preferable collateral estoppel-like “actually litigated” standard.

⁸⁴ Therefore, banding together not only involves transaction costs, but it also increases the actual costs of opposition proceedings.

seem destined to be underused, once again leaving plenty of bad patents around.

One benefit of PTO opposition proceedings compared to district court litigation is that the PTO may decide to proceed to a decision, potentially invalidating parts of the patent, even if the patentee has settled (perhaps out of a fear of dramatic narrowing of claims or partial or even complete invalidation). Therefore, the PTO, not being subject to Article III constraints, avoids that particular flaw of district court patent validity challenges.

III. A PROPOSAL FOR REFORM AT THE ITC

Commentators' and the patent system's general focus on district courts and the PTO thus far fails to sufficiently appreciate the significant collective action problems of invalidating bad patents in those forums. Neglecting the third institution of the patent system results in an underappreciation of the way in which the ITC may help alleviate the endemic problem of low patent quality, thanks to key features that help minimize the collective action problems present in the district courts and at the PTO. The central reform proposal must thus be to enable the ITC to effectively invalidate bad patents: that is, an ITC declaration of patent invalidity must be granted collateral estoppel effect by district courts.⁸⁵ Without this central reform, the ITC is useless in the fight against low patent quality. Before outlining the reform proposal, this Part first surveys the key benefits of the ITC and how they help minimize collective action problems.

A. Benefits of the ITC

Even without the proposed reform, the ITC has several key comparative advantages over the district courts and the PTO as a forum

⁸⁵ It is important to note that district courts' application of collateral estoppel on the basis of administrative adjudication findings is nothing new. *See, e.g.,* *Univ. of Tenn. v. Elliott*, 478 U.S. 788, 797–99 (1986); *United States v. Utah Constr. & Mining Co.*, 384 U.S. 394, 422 (1966). It should also be noted that collateral estoppel applies only if “the issue decided in the prior adjudication [is] identical with the one presented in the action in question.” *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313, 323 (1971) (quoting *Bernhard v. Bank of Am. Nat'l Trust & Sav. Ass'n*, 122 P.2d 892, 895 (Cal. 1942)). Therefore, any difference between the ITC's substantive patent law and the Patent Act, *see supra* note 60, is unimportant for the proposal outlined in this Part: if the ITC's substantive patent law regarding the particular issue in question differs from the Patent Act, collateral estoppel simply does not apply to that issue. Relevantly, despite section 337's legislative history, courts of appeals other than the Federal Circuit — reviewing nonpatent district court cases with preceding nonpatent ITC section 337 investigations — have held that district courts must grant preclusive effect to ITC decisions. *See Aunyx Corp. v. Canon U.S.A., Inc.*, 978 F.2d 3, 6–8 (1st Cir. 1992) (applying *res judicata* to preclude an antitrust claim previously decided by the ITC); *Union Mfg. Co. v. Han Baek Trading Co.*, 763 F.2d 42, 44–46 (2d Cir. 1985) (same, for unfair trade practice and trademark infringement claims).

for litigating patent disputes⁸⁶: broad jurisdiction, a highly accelerated timetable and expert decisionmakers that together reduce costs and uncertainty, and liberal joinder rules.

Preliminarily, the ITC's jurisdictional limitation to importation is not nearly as restrictive as it first seems to be; to the contrary, the in rem nature of the ITC's jurisdiction results in broader jurisdiction than in the district courts.⁸⁷ While section 337 may have been designed to allow American companies to block infringing imports by foreign companies (in furtherance of protectionism), this traditional scenario is no longer common.⁸⁸ Instead, "[n]ow that most technology products are manufactured overseas[,] . . . nearly every patentee can bring an ITC complaint, and nearly every accused infringer is a potential ITC defendant, converting the ITC into a mainstream venue in which to file patent grievances."⁸⁹ As a result, the ITC's limitation to investigating cases of infringing imports has not stood in the way of the patent litigation explosion in that forum.⁹⁰ In any event, this limitation stands alongside the ITC's very broad in rem jurisdiction, which allows patentees to bring suit in the ITC even when a district court would lack personal jurisdiction over the alleged infringer.⁹¹

The ITC's second, and perhaps most important, comparative advantage consists of the highly accelerated pace of section 337 investigations⁹²

⁸⁶ These benefits are relevant because, once collateral estoppel is applied, they will translate into more efficient invalidation of bad patents.

⁸⁷ Admittedly, the PTO's jurisdiction to hear validity challenges is even broader; however, since the PTO does not hear infringement claims, it suffers from a failure to benefit from any type of joinder, *see infra* pp. 2352–53, which contributes to the severe collective action problems highlighted earlier.

⁸⁸ *See* Chien & Lemley, *supra* note 60, at 26 (“[O]nly 12% of ITC cases fit the prototypical profile of a domestic plaintiff suing a foreign defendant.”).

⁸⁹ *Id.* at 14–15. Indeed, American companies are often the targets of section 337 investigations, instigated by both foreign and domestic complainants. *See* Chien, *supra* note 16, at 89 tbl.3.

⁹⁰ *See supra* note 15.

⁹¹ *See, e.g.*, Kumar, *supra* note 13, at 535. In rem jurisdiction is so compelling a benefit that even commentators highly critical of section 337 often propose maintaining the ITC as a forum for patent litigation where an action could not otherwise be brought in district court due to a lack of personal jurisdiction. *See, e.g.*, Hahn & Singer, *supra* note 15, at 488–89; William Dolan, iBrief, *The International Trade Commission: Potential Bias, Hold-Up, and the Need for Reform*, 2009 DUKE L. & TECH. REV., no. 11, ¶¶ 27–29; *cf.* Robert E. Bugg, Note, *The International Trade Commission and Changes to United States Patent Law*, 76 BROOK. L. REV. 1093, 1110 (2011) (proposing that section 337 be abolished but that in rem jurisdiction over infringing imports be granted to district courts). An accompanying benefit is that, unlike district courts, “[t]he ITC also has nationwide jurisdiction to conduct investigations, including nationwide service of process for subpoena enforcement actions.” Kumar, *supra* note 13, at 535; *see* 19 U.S.C. § 1333(b) (2006).

⁹² A typical target schedule leaves the ALJ with twelve months from the start of the investigation to an Initial Determination. *See* U.S. INT’L TRADE COMM’N, *supra* note 42, at 20 & n.16. Note that this timing of section 337 investigations is based on the ITC's final disposition of the case in fifteen months, a schedule that has historically been followed but that has recently been lengthening due at least in part to the ITC's increasing popularity as a forum for patent litigation. *See id.* at 23. Additionally, despite the inevitably shortened discovery period, discovery is as

and the expertise of the decisionmakers.⁹³ Since litigation inevitably imposes costs on innovation, the faster and more accurately it can be resolved, the less pronounced the uncertainty of patent litigation.⁹⁴ The ITC is much faster than either the district courts or the PTO; in addition, its expert ALJs are both technical experts on par with PTO administrative patent judges (and much better than lay district judges or juries) and adjudication experts on par with district court judges (and much better than PTO administrative patent judges).⁹⁵ Speed and expertise at the ITC combine to reduce uncertainty, thereby reducing the costs on innovation imposed by litigation.⁹⁶

Finally, given the underappreciated collective action problems in the other forums, the ITC's liberal joinder rules, which allow complainants to sue a large number of respondents in a single investigation for completely unrelated infringements of a common patent,⁹⁷ may

broad, if not broader, than discovery pursuant to district court litigation. Kumar, *supra* note 13, at 536.

⁹³ See Sapna Kumar, *Expert Court, Expert Agency*, 44 U.C. DAVIS L. REV. 1547, 1586, 1590 (2011).

⁹⁴ See, e.g., Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation?*, 79 N.C. L. REV. 889, 928 (2001) (noting that uncertainty decreases the patent's value "for the patent owner, competitors, and the public[,] thereby stifling innovation and competition"). See generally BESSEN & MEURER, *supra* note 4 (faulting uncertainty as the root cause of the patent system's failure).

⁹⁵ The ITC's average time to a final decision on the merits, 14 to 16 months, handily beats the 36.1-month average pendency time of inter partes reexaminations (the old PTO opposition proceedings), U.S. PATENT & TRADEMARK OFFICE, *supra* note 28, and the time to trial of all but the two fastest "rocket docket" district courts, Mark A. Lemley, *Where to File Your Patent Case*, 38 AIPLA Q.J. 401, 416 & tbl.6 (2010).

Thus, while one may be tempted to tailor PTO opposition proceedings in order to minimize the collective action problem (for instance, by reining back their unduly broad estoppel effects), the PTO's chronic underfunding — invariably leading to extremely long pendency times — and lack of expertise presiding over adversarial proceedings makes it a weaker alternative. See, e.g., Paul R. Michel, Chief Judge, U.S. Court of Appeals for the Fed. Circuit, Keynote Address at the Federal Trade Commission Hearing on the Evolving IP Marketplace 100, 111 (Dec. 5, 2008) (transcript available at <http://www.ftc.gov/bc/workshops/ipmarketplace/dec5/081205transcript.pdf>) ("In the real world, we've got a Patent Office that struggles to keep up with its current work. What basis would we have for confidence . . . that it can run in-house what amounts to a court system with cross examination and discovery rules and a Judge presiding and making fact findings or Administrative Patent Judges even trained for this? How hard would it be to get them up to speed to function just the way District Court Judges . . . or ITC administrative judges [do] . . . ?"). In addition to these problems at the PTO, the AIA failed to narrow the broad estoppel effects to which potential infringers expose themselves upon instigating an opposition proceeding at the PTO, foreclosing any hope of again reforming PTO opposition proceedings in the near future.

⁹⁶ This reduced uncertainty may explain why litigants settle much less often at the ITC than in the district courts. See Chien, *supra* note 16, at 100 & tbl.10 (finding a forty-two percent settlement rate of ITC patent cases compared to a much higher sixty-eight percent settlement rate of district court patent cases, a number that excludes settlements at the post-liability stage).

⁹⁷ See, e.g., cases cited *supra* note 43. The Federal Circuit's limitation of the automatic limited exclusion orders to the named respondents in *Kyocera* likely further increased the incentives for complainants to name numerous respondents. See, e.g., Christopher A. Cotropia, *Strength of the*

well be a neglected but important benefit of the ITC as a forum for patent litigation.⁹⁸

B. The Reform Proposal

Commentators have proposed ITC reforms ranging from abolishing or severely curtailing section 337⁹⁹ to enhancing it in various ways;¹⁰⁰ many commentators have even included the collateral estoppel proposal that lies at the center of this Note's prescriptions.¹⁰¹ However, commentators have neglected the ITC's potential role in alleviating collective action problems presented by patent validity challenges, and have thereby cast their reforms too narrowly. This section surveys the compelling reasons for granting collateral estoppel effect in district courts to the ITC's patent findings, emphasizes the importance of collateral estoppel in the context of the underappreciated collective action problems with the other forums, and proposes additional reforms meant to preserve the ITC's benefits once the central collateral estoppel reform is implemented.

1. *Applying Collateral Estoppel to ITC Patent Findings.*¹⁰² — As the Supreme Court noted in *Blonder-Tongue* and *Cardinal Chemical*, collateral estoppel is crucial in the patent context.¹⁰³ Without it, commentators have argued, section 337 investigations threaten duplicative litigation,¹⁰⁴ harm consistency and efficiency,¹⁰⁵ pose problems of conflicting decisions, waste judicial resources,¹⁰⁶ function inequitably, and waste the parties' resources.¹⁰⁷ The lack of preclusive effects seems especially puzzling when considered in light of the fact that Congress has not authorized the ITC to stay its proceedings in favor of parallel district court proceedings while simultaneously authorizing district

International Trade Commission as a Patent Venue, 20 TEX. INTELL. PROP. L.J. 1, 10 (2011). *But see id.* at 15 tbls.1, 2 (showing the mean number of respondents remaining roughly constant despite *Kyocera*, at around five or seven depending on how related corporate respondents are counted).

⁹⁸ See *infra* pp. 2354–55.

⁹⁹ See Chien, *supra* note 16, at 106–07; Hahn & Singer, *supra* note 15, at 488–89; Kumar, *supra* note 13, at 579–80; Bugg, *supra* note 91, at 1119; Dolan, *supra* note 91, ¶¶ 27–29.

¹⁰⁰ See Chien, *supra* note 16, at 108–11; Hahn & Singer, *supra* note 15, at 489; Kumar, *supra* note 13, at 575–78; Cheng, *supra* note 16, at 1172–75; Dolan, *supra* note 91, ¶¶ 24–26, 30–31.

¹⁰¹ See sources cited *supra* note 16.

¹⁰² The mechanism for implementing the change proposed in this section is beyond the scope of this Note. For an argument that section 337's legislative history does not bar the Federal Circuit (or Supreme Court) from implementing at least part of the reform proposed here, see, for example, Martin, *supra* note 16, at 895–905; for an argument that only Congress may implement this reform, see, for example, Kopp, *supra* note 16, at 371–73.

¹⁰³ See *supra* p. 2347.

¹⁰⁴ See Chien, *supra* note 16, at 103–05.

¹⁰⁵ See Kumar, *supra* note 13, at 561–63.

¹⁰⁶ See Bugg, *supra* note 91, at 1109–10.

¹⁰⁷ See Kopp, *supra* note 16, at 373–77; see also Martin, *supra* note 16, at 915–17; Rouse, *supra* note 16, at 1456–61.

courts to stay proceedings “with respect to any claim that involves the same issues involved” in an ITC section 337 investigation — regardless of whether the litigation was first instituted in the district court or in the ITC.¹⁰⁸ At the same time, the ITC must grant preclusive effect to any district court decisions.¹⁰⁹ Congress has thus provided conflicting signals: on one hand, it favors section 337 investigations over district court litigation by allowing only stays of the latter in favor of the former; on the other hand, it is content with district court findings having preclusive effects at the ITC but not the other way around, which appears to favor district courts over the ITC.¹¹⁰ If only preclusive effects were reciprocal, a clearer message favoring the ITC over district courts as a forum for patent litigation — and in particular for invalidating bad patents — would emerge.

Applying collateral estoppel to ITC patent findings would thus allow the ITC to conclusively invalidate patents; in addition, this reform, combined with certain features of section 337 investigations, minimizes the collective action problems highlighted in Part II. Given the PTO’s inability to hear infringement claims and the limitation on joinder in district courts,¹¹¹ a patentee predisposed to litigate now has incentives to choose the ITC as a forum and to sue a significant number of potential infringers in a single section 337 investigation.¹¹² (Ironically, patentees predisposed to litigate may be using bad patents to litigate.¹¹³) The collective action issues are thereby minimized: First, it is up to the patentee to file a complaint at the ITC naming a large number of respondents — and thus, like in district courts but unlike at the PTO, to thrust potential infringers into a position from which they will challenge patent validity.¹¹⁴ Second, coordination

¹⁰⁸ 28 U.S.C. § 1659(a) (2006).

¹⁰⁹ See *Young Eng’rs, Inc. v. ITC*, 721 F.2d 1305, 1316–17 (Fed. Cir. 1983) (holding that res judicata bars claims in ITC proceedings that were previously litigated in district court).

¹¹⁰ These conflicting signals — and in particular the lack of collateral estoppel effect — may have been warranted when the ITC was a tool of protectionist policy. However, “protectionis[m] . . . ha[s] fallen into disfavor,” Chien, *supra* note 16, at 66, and the ITC is now firmly established as a forum for largely domestic patent litigation, see *supra* notes 88–89 and accompanying text.

¹¹¹ See 35 U.S.C. § 299(b) (Supp. V 2011).

¹¹² See Chien & Lemley, *supra* note 60, at 15 fig.2.

¹¹³ See Allison et al., *supra* note 61, at 705–09.

¹¹⁴ The fairness concerns are lessened where the subset of potential infringers targeted is large because most companies that stand to benefit from invalidating a patent are now sharing costs. Although the financial costs of litigating at the ITC are likely roughly on par with those of litigating in district courts, see David L. Schwartz, *Courting Specialization: An Empirical Study of Claim Construction Comparing Patent Litigation Before Federal District Courts and the International Trade Commission*, 50 WM. & MARY L. REV. 1699, 1729 n.142 (2009), individual respondents stand to spend less than if they had had to defend alone — which they would likely have had to in district court — by sharing costs among many respondents in a joint defense effort, see, e.g.,

among respondents as a group means that litigation strategy will give full weight to invalidity arguments (as opposed to noninfringement arguments), given that invalidity arguments benefit all respondents while noninfringement arguments are generally product-specific.¹¹⁵

Moreover, the collective action problem is further reduced by minimizing the costs caused by uncertainty in two ways: the incredible speed with which the ITC resolves disputes and the expertise of decisionmakers who are required by the Administrative Procedure Act to provide reasons for their findings of invalidity.¹¹⁶ The reduced uncertainty appears to incentivize full litigation more than in district courts, thereby avoiding settlements that would otherwise deprive the ITC of the opportunity to invalidate patents and that would waste respondents' efforts to defeat a bad patent and worsen the collective action problem.¹¹⁷ Furthermore, the decisionmakers' expertise facilitates review of ITC decisions by the Federal Circuit, fostering uniformity across broad swaths of cases (not just uniformity across decisions on one specific patent).¹¹⁸ Any reluctance to grant the ITC the power to conclusively invalidate patents on the basis of a perceived pro-patentee bias¹¹⁹ would thus be misplaced: the Federal Circuit would be in a po-

Tracie L. Bryant, Note, *The America Invents Act: Slaying Trolls, Limiting Joinder*, 25 HARV. J.L. & TECH. 687, 705–06 (2012).

¹¹⁵ As highlighted throughout this Note, invalidity challenges are public goods; challenges to a patentee's infringement arguments, however, are not. Any given accused infringer will thus capture the full benefits of a win based on noninfringement grounds, but will fail to do so upon winning on invalidity grounds, instead providing benefits that inure to all competitors. An accused infringer is thus certain to overvalue noninfringement arguments as compared to invalidity arguments. However, if all competitors are sued in one case, the joint respondents stand to gain all benefits of winning, even on invalidity grounds.

This trade-off between invalidity and noninfringement arguments is very concrete: at the claim construction stage, respondents must decide whether to insist on narrow constructions, thereby strengthening noninfringement arguments but weakening invalidity arguments, or whether to accede to a broad construction of claims, thereby having the opposite effect. See, e.g., Mark A. Lemley, *The Changing Meaning of Patent Claim Terms*, 104 MICH. L. REV. 101, 110 (2005). Joint respondents at the ITC are thus more likely to accede to broad constructions in the hope of invalidating the asserted patent claims altogether.

¹¹⁶ See 5 U.S.C. § 557(c)(3)(A) (2012).

¹¹⁷ See *supra* note 96.

¹¹⁸ This statement holds regardless of whether deference is given to the ITC, as Professor Sapna Kumar has suggested. See Kumar, *supra* note 93, at 1609. If deference is not given, review is easier because the Federal Circuit may directly review the validity finding; in district court, where juries are common, see, e.g., ADMIN. OFFICE OF THE U.S. COURTS, JUDICIAL BUSINESS OF THE UNITED STATES COURTS: 2011 ANNUAL REPORT OF THE DIRECTOR 151 tbl.C-4 (2012), available at <http://www.uscourts.gov/uscourts/Statistics/JudicialBusiness/2011/JudicialBusiness2011.pdf> (reporting that fifty-six percent of adjudicated patent cases in 2011 were tried by a jury), the Federal Circuit's route to reversing a jury finding regarding validity must often focus on claim construction. If deference is granted, an entire administrative law framework built upon *Chevron* would guide review.

¹¹⁹ See Chien, *supra* note 16, at 110 & n.232 (citing Hahn & Singer, *supra* note 15) (declining to recommend applying collateral estoppel to ITC decisions on the basis of Robert Hahn and Hal

sition to directly police the ITC — and, if it failed to do so, the Supreme Court or Congress could step in.

An objection to this proposal based on the parties' Seventh Amendment right to a jury trial could be raised¹²⁰: making district courts respect the ITC's decisions on issues of validity and infringement deprives parties of their right to have a jury decide these issues. However, so long as legal remedies (that is, monetary damages, as opposed to equitable relief) are unavailable at the ITC, this objection is bound to fail. Indeed, the Supreme Court has held that the Seventh Amendment is not violated when a court's juryless equitable determination is granted collateral estoppel effect in a later legal action.¹²¹ Unsurprisingly, the Federal Circuit has thus held that there is no right to a jury trial in patent cases in which the patentee does not seek damages.¹²² Since damages are not an available remedy at the ITC, jury trial rights are not an obstacle to applying collateral estoppel.

2. *Preserving the ITC's Benefits in Its New Role.* — In implementing the central reform proposed above, the ITC's role will likely shift from an efficient forum for bringing infringement actions to an efficient forum for invalidating bad patents — indeed, this shift is the reason for the proposal in the first place. Some additional reforms are needed to ensure that the shift is smooth. Vestiges of too efficient a forum for bringing infringement actions must be eliminated lest respondents be incentivized to settle, and problems with making it too efficient a forum for invalidating bad patents must be addressed lest it go underused. Only then will the ITC be an optimal tool in minimizing collective action problems and helping to manage the problem of low patent quality.

As an efficient forum for bringing infringement actions, the ITC's standout feature may be its virtually automatic issuance of injunctive relief.¹²³ In particular, the ITC's deviation from the district courts'

Singer's finding of pro-patentee bias at the ITC). Furthermore, there may not actually be any such bias. *See id.* at 98 (“[T]he difference between ITC and district court win rates is more likely attributable to litigant decisions about what cases to bring in which venue than to a pro-plaintiff bias at the ITC.”).

¹²⁰ *See, e.g.,* *Tex. Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1569 n.10 (Fed. Cir. 1996) (“[A]llowing prior ITC decisions on patent infringement questions to have preclusive effect would potentially deprive the parties of their Seventh Amendment right to a jury trial on the issue of infringement.”). Moreover, a normative preference for juries could also be raised. However, in the patent context, expertise is crucial and having expert ALJs deciding cases is another benefit. *See supra* p. 2355.

¹²¹ *See* *Parklane Hosiery Co. v. Shore*, 439 U.S. 322, 335–37 (1979).

¹²² *See In re Tech. Licensing Corp.*, 423 F.3d 1286, 1288–91 (Fed. Cir. 2005); *Tegal Corp. v. Tokyo Electron Am., Inc.*, 257 F.3d 1331, 1339–41 (Fed. Cir. 2001).

¹²³ *See supra* note 57 and accompanying text; *see also* Hahn & Singer, *supra* note 15, at 483–84 (finding that, as of September 2006, the ITC had awarded injunctive relief in ninety-six percent of cases in which it had found a section 337 violation for patent infringement).

eBay test for injunctive relief is widely acknowledged to be problematic.¹²⁴ In technological areas where patent thickets are common,¹²⁵ patentees will thus be inevitably attracted to the ITC, where they will benefit from the powerful weapon of automatic injunctive relief, with an eye toward using it to extract rents in the form of undeserved settlements — settlements that will prevent the ITC from invalidating patents. It is thus necessary to weaken the injunctive relief available at the ITC in one of two ways: First, *eBay* could be applied at the ITC to make it more difficult to get injunctions,¹²⁶ especially for companies that do not practice their patents.¹²⁷ Alternatively, the ITC could be granted authority to stay the injunctive relief to allow respondents time to design around the patent, by allowing the ITC to extend the period before an exclusion order becomes effective.¹²⁸

Finally, to ensure that applying collateral estoppel at the ITC does not chase all cases away by making the ITC too efficient a forum for

¹²⁴ See, e.g., Hahn & Singer, *supra* note 15, at 489; Dolan, *supra* note 91, ¶ 30; cf. Chien, *supra* note 16, at 110 (proposing that the President “take a more activist role in reviewing injunctions” and “take into account the *eBay* factors in deciding whether or not to deny an injunction on public interest grounds”); Kumar, *supra* note 13, at 575–76 (arguing that the ITC should apply only the last two factors of the four-factor *eBay* test — “the balance of hardships between the plaintiff and defendant” and the public interest, *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006)). See generally Chien & Lemley, *supra* note 60.

¹²⁵ See, e.g., Lemley & Shapiro, *supra* note 3, at 2009–10 (electronics and semiconductor industries).

¹²⁶ Indeed, commentators have suggested applying *eBay* or some variation thereof at the ITC. See sources cited *supra* note 124. For practical reasons, the second factor — whether “remedies available at law . . . are inadequate to compensate for th[e] injury,” *eBay*, 547 U.S. at 391 — may be dropped: as Kumar persuasively argues, applying this factor would require the ITC to determine whether district courts would have personal jurisdiction over the various respondents — a determination that is practically very difficult and regarding which the ITC has no particular expertise. Kumar, *supra* note 13, at 576. In terms of implementation, applying *eBay* at the ITC is likely simpler than applying collateral estoppel to the ITC’s patent findings: section 337 has language that can easily be read as requiring application of *eBay* and in particular its key public interest factor. See 19 U.S.C. § 1337(d)(1) (2006); *supra* p. 2345.

However, applying *eBay* at the ITC may prove controversial, since *eBay* itself has engendered plenty of controversy by supplanting the pre-*eBay* property regime that provided for automatic injunctions with a post-*eBay* liability regime where prevailing patentees are often limited to monetary damages only. The scholarly controversy over whether property rules or liability rules further innovation in the intellectual property context predates *eBay*. See generally, e.g., Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CALIF. L. REV. 1293 (1996) (arguing in favor of property rules); J.H. Reichman, *Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation*, 53 VAND. L. REV. 1743 (2000) (arguing in favor of liability rules). The details of this controversy are beyond the scope of this Note.

¹²⁷ See, e.g., Mark A. Lemley, *Contracting Around Liability Rules*, 100 CALIF. L. REV. 463, 472 (2012) (noting that application of *eBay* “almost always results in nonpracticing entities . . . being denied injunctive relief”).

¹²⁸ See Chien & Lemley, *supra* note 60, at 34–36. Professors Colleen Chien and Mark Lemley suggest other alternatives, including tailoring injunction scope, bonding, and the ITC’s generally broad exercise of discretion. See *id.* at 32–33, 36–43.

invalidating bad patents, Congress should grant the ITC jurisdiction to investigate declaratory judgment–like claims initiated by potential importing infringers. Two key benefits of the ITC will thereby be preserved: First, the reduced uncertainty provided by the ITC’s speed and expert decisionmakers will still reduce costs and thereby maintain the collective action problem–minimizing benefit crucial to fighting bad patents. In effect, allowing declaratory judgment–like claims at the ITC will maintain the ITC as an option, even if the other reforms proposed in this section prove successful and thereby disincentivize patentees from suing at the ITC, by letting potential infringers come together to initiate investigations at the ITC meant to invalidate a patent.¹²⁹ Second, like at the PTO but unlike in the district courts, such a reform will make it more difficult for patentees to unilaterally terminate an ITC case to avoid having their patents invalidated. Thus, this proposal both avoids Article III limitations on district courts¹³⁰ and leaves the decision of continuing to pursue invalidation to the respondents — the parties with the best information and the most interest in the invalidation of the patent — rather than to a disinterested agency (as is the case with the PTO’s discretionary review of opposition proceeding settlements¹³¹).

CONCLUSION

The ITC’s increasing popularity as a forum for patent litigation and underappreciated benefits make it a prime candidate for combating the endemic problem of low patent quality. In order to allow the ITC to help address this problem by invalidating bad patents, reform of section 337 investigations is required. Granting the ITC the power to invalidate patents by applying collateral estoppel to its patent decisions will go a long way in combating low patent quality, especially by avoiding significant collective action problems present in the PTO and in the district courts, currently the only two institutions with the effective power to invalidate issued patents. This Note’s proposals thus serve to recast the ITC’s role in the patent system from an efficient forum for patent enforcement to an efficient forum for eliminating bad patents, hopefully leading to a better patent system.

¹²⁹ This state of affairs should only occur if the ITC has become so successful at eliminating bad patents that patentees start to avoid it. The goal of this Note’s proposals would therefore already be at least partly accomplished, even without the need for the ITC to be allowed to hear declaratory judgment–like claims.

¹³⁰ See *supra* pp. 2348–49.

¹³¹ See *supra* p. 2342.