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When Can the Patent Office Intervene in its Own Cases?

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WHEN CAN THE PATENT OFFICE INTERVENE IN ITS OWN CASES?

SAURABH VISHNUBHAKAT*

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I. INTRODUCTION

Last summer, the U.S. Court of Appeals for the Federal Circuit issued an unusual *sua sponte* order. An appeal had come from the Patent Trial and Appeal Board, a tribunal within the Patent Office that reevaluates the validity of patents that the agency previously issued. The owner of the patent at issue had lost in the tribunal and sought review. The prevailing patent challenger did not defend its victory on appeal, but the Patent Office intervened to defend its tribunal's decision. The Federal Circuit asked, among other things, whether maintaining the appeal would violate the case or contro-

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versy requirement of Article III of the Constitution. Did the agency's Director have standing—indeed, was the Director even required separately to show it—in order to intervene?¹ If so, was the Director obliged to defend the agency tribunal's decision?²

Resolving these questions is appropriate and necessary, especially in the early years of a new statutory regime like the one in which patent law now finds itself. In 2011, the Leahy-Smith America Invents Act undertook the largest overhaul of U.S. patent law in nearly 60 years.³ Among the Act's most important changes was the continued reallocation, from the courts to the Patent Office, of the power to review whether issued patents are valid.⁴ The AIA created three new administrative adjudications with varying features and constraints.⁵ The Patent Office also received the statutory authority to intervene in appeals from these administrative adjudications, which were to be conducted between adverse parties.⁶ The Patent office had already intervened in scores of cases since the AIA's enactment without the Court raising questions as to the constitutionality of such intervention. If the *Knowles* order was unusual, then, it was because the Court had not raised the issue until now.

It is timely to inquire into the standing requirements for intervenors in patent cases. Just last Term, the Supreme Court in *Town of Chester v. Laroe Estates* revisited the issue, partly resolving a circuit split and offering guidance for the questions that remain.⁷ Moreover, questions regarding the nature and scope of the Patent Office's ability to intervene in appeals from administrative validity review are important for two reasons. One is that they further inform an ongoing Patent Office agenda to redefine the agency's relationship with the federal courts, particularly the Federal Circuit, as an expositor and originator of patent policy. Another is that the ability of the Patent Office to intervene as a matter of right is likely to influ-

1. *Knowles Elecs., L.L.C. v. Matal*, No. 16-1954 (Fed Cir. June 30, 2017) (per curiam) (order requesting supplemental briefing), <https://cdn.patentlyo.com/media/2017/06/KnowlesOrder.pdf> [<https://perma.cc/7VXQ-LHK2>].

2. *Id.*

3. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

4. Saurabh Vishnubhakat, Arti K. Rai & Jay P. Kesan, *Strategic Decision Making in Dual PTAB and District Court Proceedings*, 31 BERKELEY TECH. L.J. 45, 55–64 (2016) (discussing administrative post-grant opposition mechanisms prior to the AIA and under the AIA).

5. See *infra* Parts I.B–C.

6. 35 U.S.C. § 143 (2012).

7. 137 S. Ct. 1645 (2017).

ence whether, and to what extent, private intervenors may also be able to participate in the reevaluation of patent rights.

This Article explores those questions and the implications of the various answers. Part One puts the issue of Patent Office standing into context with a descriptive account of why the AIA so dramatically expanded agency adjudications of patent validity, how the new adjudicatory mechanisms work, and what constraints operate on them. Part Two gives an analytical account of how appellate jurisdiction over PTAB review is currently coalescing around a handful of contested cases and how PTAB review should be understood as a vehicle for agency policymaking. It is within this analytical account that the appellate interventions of the Patent Office must be evaluated. Part Three offers a normative perspective on constitutional requirements for the agency to intervene, drawing on recent scholarship and Supreme Court guidance. It also argues that the Patent Office is obliged under certain conditions to show standing in order to intervene, and that these conditions also constrain the substantive positions that the agency can take upon intervening. The Article concludes with thoughts on the potential impact of these agency-intervention principles upon private party intervention on appeal.

II.

AGENCY ADJUDICATIONS OF PATENT VALIDITY

This part describes the origins and features of administrative patent validity review under the AIA. Although courts have long been able to reconsider whether issued patents are valid, and although the Patent Office previously allowed for expert reevaluation, a mix of economic, institutional, and jurisprudential concerns about patent quality drove a push for even more powerful forms of review. In response, the AIA created three such proceedings.

A. Concerns Over Patent Quality

Concerns over patent quality and proposals for reform make up a rich, even dense, literature. A full survey of that literature is well beyond the scope of this discussion. Instead, what is particularly relevant and helpful for present purposes is a sense of how academic and policy debates about patent quality during the first decade of this century were crystallized through the administrative validity review proceedings of the AIA. Indeed, the legislative compromises embodied in the Act reflect persistent themes about the patent examination process, symptomatic litigation abuses, and

technology- and industry-specific effects. Likewise, the compromises also reflect a fairly stable consensus on certain economic and institutional arguments for reform, and the value of a more prominent role for the Patent Office in implementing such reform.

As an initial matter, patent quality may refer to several aspects of the patent right: technological, economic, and legal.⁸ The statutory requirements for the grant of a patent right impose certain technological standards that a prospective patentee must meet. The Patent Office must grant patents only under certain conditions. The invention must be sufficiently innovative as compared to the state of the art and sufficiently well disclosed to advance the state of the art.⁹ The invention must also be patent-eligible subject matter in the first place.¹⁰ Sufficient innovation requires that an invention be new in the sense of not having previously been described, sold, or offered for sale in the same form that the current invention takes.¹¹ It also requires that an invention be nonobvious, rather than embodying trivial combinations or extensions of existing knowledge.¹² It further requires that an invention be useful in the sense of substantially achieving a meaningful intended purpose.¹³ Sufficient disclosure requires that the invention be described with enough operational detail to enable someone to practice the invention and to identify what embodiments of the invention the inven-

8. See Saurabh Vishnubhakat, Remarks at the American University Washington College of Law Supreme Court Series – *Commil U.S.A., L.L.C. v. Cisco Sys., Inc.* [sic] (Mar. 31, 2015), <http://www.pijip.org/events/commil> [<https://perma.cc/9YFT-8AZ3>]. In a somewhat different articulation, patent quality may be understood in terms of probable validity (which corresponds with legal quality generally), clarity and faithfulness (which corresponds specifically with legal quality as to the disclosure requirements), social utility (which corresponds largely with technological quality), and commercial success (which corresponds to some extent with technological quality but largely with economic quality in the sense of private value). See generally Christi J. Guerrini, *Defining Patent Quality*, 82 *FORDHAM L. REV.* 3091 (2014).

9. Saurabh Vishnubhakat, *The Field of Invention*, 45 *HOFSTRA L. REV.* 899, 922–29 (2017).

10. 35 U.S.C. § 101 (2012).

11. § 102; see also Vishnubhakat, *supra* note 9, at 922–24 (discussing novelty).

12. § 103; see also Vishnubhakat, *supra* note 9, at 924–25 (discussing nonobviousness).

13. § 101; see also Vishnubhakat, *supra* note 9, at 925–26 (discussing utility). Under current doctrine, the utility requirement represents a fairly low practical bar to patentability. See, e.g., Lee Petherbridge, *Road Map to Revolution? Patent-Based Open Science*, 59 *ME. L. REV.* 339, 356 n.90 (2007) (explaining that the utility requirement is “very low and generally presents a low bar to patentability”).

tor could reasonably be said to have possessed.¹⁴ Ensuring compliance with these and other patentability requirements is the basic aim of the examination process.

That an inventor must meet statutory requirements in order to gain a monopoly ensures the economic quality of the patent, or rather the quality of the exchange between an inventor and the public that the grant of a patent right involves. In exchange for the patent owner's ability to exclude others from practicing the relevant invention and thus to recover supracompetitive rents on it for a limited period of time, the public extracts the benefit of ensuring that only worthy inventions receive a patent.¹⁵

The question of legal quality is, in essence, whether the right that the Patent Office has issued will survive judicial review. And it is legal quality that the patent quality debates have primarily addressed. This is for two interrelated reasons. The first is that legal quality tends in part to subsume technological and economic quality. Technological quality describes the contribution that an invention makes to its relevant field. Some aspects of the requisite contribution are fairly lenient, such as the doctrine of utility.¹⁶ Others have become more stringent in recent years, such as the doctrine of nonobviousness following the Supreme Court's decision in *KSR Int'l Co. v. Teleflex Inc.*¹⁷ Regardless of relative stringency, however, an issued patent's likelihood of surviving judicial or administrative review depends directly on whether it has made the necessary contribution to the state of the art. Technological quality is thus a component of legal quality.

14. 35 U.S.C. § 112(a); *see also* Vishnubhakat, *supra* note 9, at 926–28 (discussing enablement, written description, and boundary notice).

15. *See* Eldred v. Ashcroft, 537 U.S. 186, 216 (2003); Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998); Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 484 (1974); *see also* John F. Duffy, *Rethinking the Prospect Theory of Patents*, 71 U. CHI. L. REV. 439, 439–40 (2004).

16. *See* Arti K. Rai, *Patent Validity Across the Executive Branch: Ex Ante Foundations for Policy Development*, 61 DUKE L.J. 1237, 1251 (2012) (citing Utility Examination Guidelines, 60 Fed. Reg. 36,263 (July 14, 1995) and ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 238 (4th ed. 2007)). Moreover, the utility requirement does not mandate that inventions necessarily do a better job than the prior art. *See, e.g.*, Timothy R. Holbrook, *The Treaty Power and the Patent Clause: Are There Limits on the United States' Ability to Harmonize?*, 22 CARDOZO ARTS & ENT. L.J. 1, 17 (2004) (citing *Lowell v. Lewis*, 15 F. Cas. 1018 (C.C.D. Mass. 1817) (No. 8,568)).

17. 550 U.S. 398 (2007); *see* Saurabh Vishnubhakat & Arti K. Rai, *When Biopharma Meets Software: Bioinformatics at the Patent Office*, 29 HARV. J.L. & TECH. 205, 227–28 (2015) (discussing the doctrine of nonobviousness).

Similarly, economic quality describes the potency of the exclusionary patent right to clear the market for the patented good or service and for any reasonable substitutes of it. Like technological quality, this is also distinguishable from concerns about surviving judicial review. However, the commercial success of an invention that is attributable to its innovative qualities is, as a matter of doctrine, part of the inquiry into nonobviousness,¹⁸ and thus is also a component of legal quality. Referring to patent quality and the legal quality of a patent as analogous, therefore, is a reasonable shorthand in that it captures, to some extent, all three dimensions.

The other reason why legal quality tends to draw focus in academic and policy debates is that it is most readily observed in the legal system. Patents may fundamentally be economic rights and fundamentally pertain to technological advancement, but it is the legal process that typically mediates visible disputes over a patent's validity, enforceability, and public or private importance. As a result, salient cases that change or reaffirm prevailing understandings of patent law implicate legal quality, by reshaping both which patents are granted or denied and how patent validity is to be judicially reevaluated in the future.

For the same reason, litigation is where empirical data has long been most readily available with respect to patent enforcement, validity review, cancellations, remedies, and similar issues of interest.¹⁹ Indeed, much of the early empirical work on the patent system gave significant attention to litigated cases.²⁰ The upshot of this attention is that litigation trends are now widely accepted as a symptom of the patent quality-related excesses that the patent system's defects can produce,²¹ though the widely appreciated nature

18. See *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966) (discussing objective indicia of nonobviousness including commercial success and a long felt but unmet need for the particular solution that the invention offers to a given problem).

19. This is closely related, though not identical, to the economic insight that cases selected for litigation are not necessarily representative of the larger superset of disputes that take place in the world. See generally George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984).

20. E.g., Jean O. Lanjouw & Mark Schankerman, *Stylized Facts of Patent Litigation: Value, Scope and Ownership* (Nat'l Bureau of Econ. Research, Working Paper No. 6297, 1997), <http://www.nber.org/papers/w6297.pdf> [<https://perma.cc/4ZF T-3MY7>].

21. See, e.g., Paul R. Gugliuzza, *Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure*, 95 B.U. L. REV. 279, 282 (2015); Joshua D. Wright & Douglas H. Ginsburg, *Patent Assertion Entities and Antitrust: A Competition Cure for a Litigation Disease?*, 79 ANTITRUST L.J. 501, 525 (2014); Mark A. Lemley &

of selection effects cautions against overstating how representative litigated cases are of the patent system as a whole.²²

Patent litigation studies have offered evidence and argument on economic questions, such as the costs generated by the lawsuits of non-practicing entities that purchase patents solely for enforcement,²³ the potential for strategic litigation to create holdup and other inefficiencies,²⁴ and the optimal balance of risk and reward in patent litigation.²⁵ These studies have delved into specific empirical questions about attributes of patents involved in litigation²⁶ and attributes of the patent examiners who issue such patents.²⁷ They have also explored how procedural²⁸ and institutional²⁹ features shape the incidences and results of patent lawsuits.

A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117, 2170 (2013).

22. See Alan C. Marco, *The Selection Effects (and Lack Thereof) in Patent Litigation: Evidence from Trials*, 4 TOPICS ECON. ANALYSIS & POL'Y 1 (2004) (finding the presence of selection bias in patent litigation); see also Shawn P. Miller, *What's the Connection Between Repeat Litigation and Patent Quality? A (Partial) Defense of the Most Litigated Patents*, 16 STAN. TECH. L. REV. 313 (2013); Richard S. Gruner, *How High Is Too High?: Reflections on the Sources and Meaning of Claim Construction Reversal Rates at the Federal Circuit*, 43 LOY. L.A. L. REV. 981 (2010).

23. See, e.g., James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387 (2014); James Bessen & Michael J. Meurer, *The Private Costs of Patent Litigation*, 9 J.L. ECON. & POL'Y 59 (2012).

24. See, e.g., David S. Olson, *On NPEs, Holdups, and Underlying Faults in the Patent System*, 99 CORNELL L. REV. ONLINE 140 (2014); Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991 (2007).

25. See, e.g., John M. Golden, *Litigation in the Middle: The Context of Patent-Infringement Injunctions*, 92 TEX. L. REV. 2075 (2014); Anup Malani & Jonathan S. Masur, *Raising the Stakes in Patent Cases*, 101 GEO. L.J. 637 (2013); Ranganath Sudarshan, *Nuisance-Value Patent Suits: An Economic Model and Proposal*, 25 SANTA CLARA HIGH TECH. L.J. 159 (2008).

26. See, e.g., Jonathan H. Ashtor, Michael J. Mazzeo & Samantha Zyontz, *Patents at Issue: The Data Behind the Patent Troll Debate*, 21 GEO. MASON L. REV. 957 (2014); Colleen V. Chien, *Predicting Patent Litigation*, 90 TEX. L. REV. 283 (2011); John R. Allison, Mark A. Lemley & Joshua Walker, *Extreme Value or Trolls on Top? The Characteristics of the Most-Litigated Patents*, 158 U. PA. L. REV. 1 (2009).

27. See, e.g., Shine Tu, *Invalidated Patents and Associated Patent Examiners*, 18 VAND. J. ENT. & TECH. L. 135 (2015); Shine Tu, *Patent Examiners and Litigation Outcomes*, 17 STAN. TECH. L. REV. 507 (2014).

28. See, e.g., Michael J. Burstein, *Rethinking Standing in Patent Challenges*, 83 GEO. WASH. L. REV. 498 (2015); Megan M. La Belle, *Patent Litigation, Personal Jurisdiction, and the Public Good*, 18 GEO. MASON L. REV. 43 (2010); Mark D. Janis, *Reforming Patent Validity Litigation: The "Dubious Preponderance,"* 19 BERKELEY TECH. L.J. 923 (2004).

29. See, e.g., Megan M. La Belle, *Against Settlement of (Some) Patent Cases*, 67 VAND. L. REV. 375 (2014); Brian J. Love, *An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?*, 161

A second, more current body of research, however—and one that provides a better index of problems with the legal quality of patents—has focused on patent examination rather than litigation. Where litigation reflects symptoms, data on patent examination process reveals underlying pathologies. Contemporary research into patent quality has extensively explored how Patent Office examination actually proceeds, what incentives and disincentives motivate different actors in the process, and where potential reforms may lie. This research rests on two main foundations. One is work from industrial organization microeconomics about the classification of patents,³⁰ the use of backward- and forward-citation networks as proxies for patent examination quality and patent value,³¹ and inferences about innovating activity from patenting trends.³² The other is the development and dissemination, starting in early 2010, of large and highly-documented datasets about patent examination, examiner actions, post-issuance sales and transfers, renewals, and a large number of bibliographic attributes.³³ This mix of methodological tools and detailed data has now produced a rich

U. PA. L. REV. 1309 (2013); Paul Morgan & Bruce Stoner, *Reexamination vs. Litigation—Making Intelligent Decisions in Challenging Patent Validity*, 86 J. PAT. & TRADE-MARK OFF. SOC'Y 441 (2004).

30. See, e.g., Bronwyn H. Hall, Adam B. Jaffe & Manuel Trajtenberg, *The NBER Patent Citations Data File: Lessons, Insights and Methodological Tools* (Nat'l Bureau of Econ. Research, Working Paper No. 8498, 2001), <http://www.nber.org/papers/w8498.pdf> [<https://perma.cc/LXR9-JAS8>].

31. See, e.g., *id.*; Bronwyn H. Hall, Adam Jaffe & Manuel Trajtenberg, *Market Value and Patent Citations*, 36 RAND J. ECON. 16 (2005); Adam B. Jaffe, Manuel Trajtenberg & Michael S. Fogarty, *Knowledge Spillovers and Patent Citations: Evidence from a Survey of Inventors*, 90 AM. ECON. REV. 215 (2000); Adam B. Jaffe, Manuel Trajtenberg & Rebecca Henderson, *Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations*, 108 Q.J. ECON. 577 (1993); Manuel Trajtenberg, *A Penny for Your Quotes: Patent Citations and the Value of Innovations*, 21 RAND J. ECON. 172 (1990).

32. See, e.g., Jean O. Lanjouw & Mark Schankerman, *The Quality of Ideas: Measuring Innovation with Multiple Indicators* (Nat'l Bureau of Econ. Research, Working Paper No. 7345, 1999), <http://www.nber.org/papers/w7345.pdf> [<https://perma.cc/A8MC-3SGS>]; Rebecca Henderson, Adam B. Jaffe & Manuel Trajtenberg, *Universities as a Source of Commercial Technology: A Detailed Analysis of University Patenting, 1965–1988*, 80 REV. ECON. & STAT. 119 (1998); Zvi Griliches, *Patent Statistics as Economic Indicators: A Survey*, 28 J. ECON. LITERATURE 1661 (1990); Zvi Griliches, Ariel Pakes & Bronwyn H. Hall, *The Value of Patents as Indicators of Inventive Activity*, in *ECONOMIC POLICY AND TECHNOLOGICAL PERFORMANCE* 97 (Partha Dasgupta & Paul Stoneman eds., 1987).

33. See generally *Office of the Chief Economist*, U.S. PAT. & TRADEMARK OFF., <https://www.uspto.gov/about-us/organizational-offices/office-policy-and-international-affairs/office-chief-economist> [<https://www.perma.cc/ASC2-4J68>].

literature on patent examination process that rivals that on litigation.

For example, studies of the patent examination process have addressed important economic questions, such as notice-related externalities that can arise from lenient or imprecise demarcation of patent rights,³⁴ asymmetries that favor granting patents by providing appellate review where the right may be improperly denied but not where the right may be improperly granted,³⁵ and the role of search costs in evaluating the increasing complexity of the patent landscape that examination must navigate.³⁶ These studies have made much empirical progress toward illuminating both individual events during patent examination and overall trajectories that patent applications take through the process.³⁷ They have also put forward a raft of proposals to reform the processes of the Patent Office, such as imposing ex post financial consequences for succeeding or failing to secure a patent,³⁸ reversing the statutory presumption that patents must be granted absent a showing of unpatentability (so that the patent examiner, not the applicant, bears the burden),³⁹ and improving the quality of information that the Patent Office receives during examination.⁴⁰

34. See, e.g., Peter S. Menell & Michael J. Meurer, *Notice Failure and Notice Externalities*, 5 J. LEGAL ANALYSIS 1 (2013).

35. See, e.g., Sean B. Seymore, *Patent Asymmetries*, 49 U.C. DAVIS L. REV. 963 (2016); Melissa F. Wasserman, *The PTO's Asymmetric Incentives: Pressure to Expand Substantive Patent Law*, 72 OHIO ST. L.J. 379, 385 (2011); Jonathan Masur, *Patent Inflation*, 121 YALE L.J. 470 (2011).

36. See, e.g., Tun-Jen Chiang, *The Reciprocity of Search*, 66 VAND. L. REV. 1 (2013) (discussing patent search costs and introducing a cost-minimizing system design); Christina Mulligan & Timothy B. Lee, *Scaling the Patent System*, 68 N.Y.U. ANN. SURV. AM. L. 289 (2012); Jonathan S. Masur, *Patent Liability Rules as Search Rules*, 78 U. CHI. L. REV. 187 (2011); Jeffrey M. Kuhn, *Information Overload at the U.S. Patent and Trademark Office: Reframing the Duty of Disclosure in Patent Law as a Search and Filter Problem*, 13 YALE J.L. & TECH. 90 (2011).

37. See, e.g., Michael D. Frakes & Melissa F. Wasserman, *Is the Time Allocated to Review Patent Applications Inducing Examiners to Grant Invalid Patents? Evidence from Microlevel Application Data*, 99 REV. ECON. & STAT. 550 (2017); Michael D. Frakes & Melissa F. Wasserman, *Patent Office Cohorts*, 65 DUKE L.J. 1601 (2016); Michael D. Frakes & Melissa F. Wasserman, *Does the U.S. Patent and Trademark Office Grant Too Many Bad Patents?: Evidence from a Quasi-Experiment*, 67 STAN. L. REV. 613 (2015); Mark A. Lemley & Bhaven Sampat, *Is the Patent Office a Rubber Stamp?*, 58 EMORY L.J. 181 (2008).

38. See, e.g., Neel U. Sukhatme, *"Loser Pays" in Patent Examination*, 54 HOUS. L. REV. 165 (2016).

39. See, e.g., Sean B. Seymore, *The Presumption of Patentability*, 97 MINN. L. REV. 990 (2013).

40. See, e.g., Susan Walmsley Graf, *Improving Patent Quality Through Identification of Relevant Prior Art: Approaches to Increase Information Flow to the Patent Office*, 11

The patent quality reform agenda that was ultimately enacted in the AIA's system of administrative review is best understood as an effort to correct patent quality problems that the examination process did not capture—indeed, was perhaps incapable of capturing up front⁴¹—and called for a second look. That the most visible symptoms of these problems appeared in the courts was particularly apt because the traditional means for revealing and correcting Patent Office examination errors had also been court litigation.⁴² Starting in the early 1980s, the virtually exclusive reliance on judicial correction began to soften in favor of administrative reevaluation by the Patent Office itself.⁴³ This administrative system for validity review existed in parallel with litigation in the Article III courts, but was expressly intended to be a faster, cheaper, and more accurate substitute for lay judges and juries.⁴⁴ The key rationale given for this reallocation of power over patent validity, away from courts and into the agency, was expertise—with the scientific details of invention and with the doctrinal details of patent law—in order to minimize cost, delay, and inaccuracy.⁴⁵

The updated and invigorated system of administrative patent validity review that the AIA put in place shares these features. AIA proceedings, too, exist in parallel with federal court litigation, albeit with some caveats. For example, AIA proceedings, unlike earlier reexaminations, have a much more meaningful border between the Patent Office and the courts as substitutes for each other.⁴⁶ This border is the result of several structural features, including stronger estoppel provisions and statutory time bars for leaving court and

LEWIS & CLARK L. REV. 495 (2007); Beth Simone Noveck, "Peer to Patent": *Collective Intelligence, Open Review, and Patent Reform*, 20 HARV. J.L. & TECH. 123 (2006); Kevin Mack, *Reforming Inequitable Conduct to Improve Patent Quality: Cleansing Unclean Hands*, 21 BERKELEY TECH. L.J. 147 (2006).

41. For a discussion of post-grant validity review as not just the only feasible means of patent error-correction but also the more preferable means, see Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495 (2001). *But see* Shubha Ghosh & Jay Kesan, *What Do Patents Purchase? In Search of Optimal Ignorance in the Patent Office*, 40 HOUS. L. REV. 1219 (2004) (replying to Lemley).

42. Vishnubhakat, Rai & Kesan, *supra* note 4, at 51.

43. *Id.* at 51–55 (discussing administrative error-correction prior to the AIA).

44. *Id.*

45. *Id.* at 53–54. *But see* Saurabh Vishnubhakat, *Disguised Patent Policymaking*, 104 IOWA L. REV. (forthcoming) (arguing that the history and structure of administrative patent validity review reveals a desire for—or at least a tendency to introduce—political considerations in addition to expertise when resolving questions of patent validity).

46. *See* Saurabh Vishnubhakat, *The Porous Court-Agency Border in Patent Law*, 51 AKRON L. REV. 915 (2018).

going to the agency.⁴⁷ This court-agency border, in turn, invites forum shopping and other strategic behavior by litigants.⁴⁸

Still, like earlier administrative adjudications, proceedings under the AIA benefit from technical expertise. The administrative patent judges who sit on the PTAB are, in fact, not traditional administrative law judges but rather are hired specifically to serve in the Patent Office and, by statute, must be “persons of competent legal knowledge and scientific ability” in order to qualify for service on the PTAB.⁴⁹ These and other features of the PTAB process do much to frame and explain the Patent Office’s observed intervenor activity. Moreover, although the origins of this intervention lie in reforms motivated by patent quality, the resulting transformation of court-agency relations in the patent system are part of a larger structural campaign toward a more independent Patent Office.

B. Features of Validity Review in the PTAB

The desire for expertise—with its expected attendant benefits of lower cost, faster resolution, and greater accuracy in decision-making—is merely the starting point for the PTAB’s design. The AIA introduced three new adjudicatory proceedings: inter partes review,⁵⁰ covered business method review,⁵¹ and post-grant review.⁵²

All three types of proceedings are concerned essentially with the same problem—correcting patent examination errors—and function in generally the same way.⁵³ First is the petition phase,

47. *See id.* The issue of estoppel from an AIA proceeding upon later court litigation, however, remains somewhat murky. The Federal Circuit addressed the issue in *Shaw Industries Group, Inc. v. Automated Creel Systems, Inc.*, 817 F.3d 1293 (Fed. Cir. 2016). However, as Judge Reyna’s concurring opinion in that case pointed out, estoppel effects are not for the PTAB, the Patent Office, or the Federal Circuit itself to decide in the first instance, but rather by the U.S. district courts or the International Trade Commission—upon which estoppel actually operates. *Id.* at 1305 (Reyna, J., concurring).

48. *See* Vishnubhakat, Rai & Kesan, *supra* note 4, at 64–77 (discussing strategic litigant behavior in employing federal-court litigation and administrative adjudication).

49. 35 U.S.C. § 6(a) (2012).

50. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 6(a), 125 Stat. 284, 299–305 (2011) (codified as amended at 35 U.S.C. §§ 311–319 (2012)).

51. § 18, 125 Stat. at 329–31.

52. § 6(d), 125 Stat. at 305–11 (codified as amended at 35 U.S.C. §§ 321–329 (2012)).

53. The Patent Office has published a chart helpfully summarizing and comparing salient features of the AIA proceedings. U.S. PATENT & TRADEMARK OFFICE, MAJOR DIFFERENCES BETWEEN IPR, PGR, AND CBM (2014), <https://www.uspto.gov/>

identifying a granted patent that appears not to satisfy the requirements for patentability. Next is the proceeding itself, which reevaluates the patent in light of relevant technical and other evidence. The conclusion is the PTAB's judgment, canceling those patent claims that, in the agency's view, should not have been granted. All cases begin with a petition brought by a third party and proceed only where there is enough likelihood of eventual success.⁵⁴ Final orders of the PTAB in AIA proceedings are appealable to the Federal Circuit.⁵⁵ Beneath these general similarities, however, lie important differences that litigants must also take into account.

For example, the inter partes and covered business method reviews are available for patents without regard to when they were issued, including prior to the AIA's passage.⁵⁶ Post-grant review is available only for patents issued under post-AIA rules and within the first nine months of issuance.⁵⁷ Meanwhile, inter partes review and post-grant review proceedings are available as to all patents without regard to technology, whereas covered business method review is available only as to patents that cover non-technological financial products or services.⁵⁸ As to grounds for challenging validity, inter partes review allows the Patent Office to revisit only novelty and nonobviousness and admits only certain evidence about prior inventions, but post-grant review and covered business method review can revisit virtually all major patentability requirements and entertain a much greater scope of prior evidence.⁵⁹

Notwithstanding these differences, the AIA proceedings also have key similarities, especially with regard to who can request review, how the PTAB selects its cases, what standards the PTAB uses in its adjudications, and what aspects of the PTAB's decisions are subject to judicial review. In inter partes review and post-grant review, anyone other than the patent owner may challenge the validity of a patent without meeting the standing requirement to challenge a patent in an Article III court—indeed, without meeting

sites/default/files/ip/boards/bpai/aia_trial_comparison_chart.pptx [https://www.perma.cc/N5PU-9WHG].

54. 37 C.F.R. §§ 42.100–.123, .200–.224, .300–.304 (2017) (respectively addressing inter partes review, post-grant review, and covered business method review).

55. 35 U.S.C. §§ 319, 329, 141(c) (2012).

56. § 311(c); § 6(c)(2)(A), 125 Stat. at 304; § 18(a)(2), 125 Stat. at 330.

57. § 321(c); § 6(f)(2)(A), 125 Stat. at 311.

58. §§ 311, 321; § 6(c)(2)(A), 125 Stat. at 304; § 6(f)(2)(A), 125 Stat. at 311; § 18(a)(2), 125 Stat. at 330; § 18(d)(1), 125 Stat. at 331.

59. *See* §§ 311(b), 321(b); § 18(a)(1)(C), 125 Stat. at 330; 37 C.F.R. § 42.304(b)(2).

any standing requirement at all.⁶⁰ In all three types of proceedings, the PTAB accepts cases if preliminary review suggests that they are sufficiently likely to succeed on the merits.⁶¹

As to adjudicatory standards, in all three types of proceedings, the PTAB in construing and evaluating the scope of the patent gives each patent claim its “broadest reasonable construction.”⁶² This interpretive method is longstanding in initial patent examination, but it is different from the interpretive method used by federal courts for already-issued patents.⁶³ Given the difference, a patent construed under the PTAB method is, at the margin, more likely to be read broadly and consequently more likely to be invalidated than if the same patent were construed under ordinary district court methods.⁶⁴ Likewise, in all three proceedings, the burden for proving patent invalidity is a preponderance of the evidence⁶⁵ whereas the corresponding burden in a court proceeding is higher: to prove invalidity by clear and convincing evidence.⁶⁶

Finally, with regard to judicial supervision of the PTAB, only the final written decision regarding the validity (or not) of patent claims is subject to judicial review.⁶⁷ The initial determination whether to accept the case for adjudication, however, is not appeal-

60. §§ 311(a), 321(a); Vishnubhakat, Rai & Kesan, *supra* note 4, at 55. Covered business method reviews, however, cannot be filed preemptively but only in response to a district-court lawsuit alleging infringement of the patent in question. Leahy-Smith America Invents Act, Pub. L. No. 112-29 § 18(a)(1)(B), 125 Stat. 284, 330 (2011).

61. §§ 314(a), 324(a). In the case of covered business method review and post-grant review, review may also be available where “the petition raises a novel or unsettled legal question that is important to other patents or patent applications.” § 324(b).

62. 37 C.F.R. §§ 42.100(b), 42.200(b), 42.300(b).

63. See *Cuozzo Speed Techs., L.L.C. v. Lee*, 136 S. Ct. 2131, 2142 (2016).

64. Nora Xu, *AIA Proceedings: A Prescription for Accelerating the Availability of Generic Drugs*, 66 EMORY L.J. 1007, 1024 (2017); Robert MacWright, *Three Years After the America Invents Act: Practical Effects on University Tech Transfer*, 52 LES NOUVELLES 68, 70–71 (2017); Jason Mock, *Post-Grant Proceedings at the USPTO and the Rising Tide of Federal Circuit Appeals*, 25 FED. CIR. B.J. 15, 25 (2015). The reason for this, in brief, is that when understanding a patented invention broadly, one is more likely to tread on the body of prior knowledge in the field. This treading upon prior knowledge is what patent examination is supposed to guard against, and so it is grounds for invalidating the patent. Conversely, when an invention is understood narrowly, with clear differentiation between the invention and the prior art, the patent is more likely to survive review. *Id.*

65. §§ 316(e), 326(e).

66. *Microsoft Corp. v. i4i, Ltd. P’ship.*, 564 U.S. 91, 95 (2011).

67. §§ 319, 329, 141(c).

able.⁶⁸ As discussed below, this immunity from judicial review is strong—unusually strong by administrative law standards—and has important consequences for Patent Office incentives to exercise intervenor power.⁶⁹ Similarly, though none of these proceedings by itself is capable of fully supplanting federal courts in reviewing patent validity, there is largely a consensus that they are an attractive alternative for those challenging patent validity.⁷⁰ The background purpose of challenging patent validity—to resolve concerns about patent quality more effectively—has specific implications for participation in PTAB review. These participatory constraints, in turn also influence Patent Office incentives to exercise intervenor power.

C. Participatory Constraints on PTAB Review

In crafting the AIA, Congress took note of calls for greater public input into questions of patent validity. Prior to the AIA's enactment, administrative reevaluations were not especially trial-like in the sense of robust adversarial presentation of argument and evidence—instead, they were reexaminations that placed the patent owner back in the posture of arguing with a patent examiner about the patentability of the given invention.⁷¹ Ex parte reexaminations, for example, had no third-party input beyond the initial request, and, according to USPTO statistics, were initiated in 29 percent of cases by the patent owners themselves.⁷² Even inter partes reexaminations, the most immediate precursor to the AIA proceedings, largely lay unused; this was due to average case pendencies in excess of three years followed by internal Patent Office review and due to disproportionately strong estoppel provisions.⁷³ The error-correction of patent validity through the courts, meanwhile, was strongly constrained by standing requirements. In fact, the Federal Circuit's jurisprudence on standing was often criticized as being too

68. §§ 314(d), 324(e).

69. See *infra* Part III.B.1.

70. See, e.g., Nichole M. Valeyko & Maegan A. Fuller, *The PTAB's Influence of the Biotechnology and Pharma Industries*, 307 N.J. LAW. MAG. 65, 65 (2017); Phong D. Nguyen, *Changes to Patent Law Practices Under the America Invents Act*, ASPATORE, 2013 WL 6683687, at *4 (Nov. 2013); Robert L. Stoll, *Patently Practical Advice: The Impact of Recent Supreme Court and Federal Circuit Cases on Patent Law and How They Affect the Advice We Give Our Clients*, ASPATORE, 2012 WL 6636451, at *12 (Nov. 2012).

71. Vishnubhakat, Rai & Kesan, *supra* note 4, at 55–58.

72. *Id.* at 56–57 (citing U.S. PATENT & TRADEMARK OFFICE, *Ex parte* Reexamination Filing Data—September 30, 2014, http://www.uspto.gov/sites/default/files/documents/ex_parte_historical_stats_roll_up.pdf [<https://perma.cc/758D-5S5X>]).

73. *Id.* at 57–58.

strict to allow otherwise desirable challenges to patent validity through suits for declaratory judgment of invalidity.⁷⁴

Scholars have also argued as a matter of public administrative process that the Patent Office should treat patent rights more explicitly as public rights through more formally participatory and deliberative decision-making structures.⁷⁵ A particularly nuanced middle ground in this literature is a set of proposals to allocate power to the Patent Office over its findings of relevant technical and scientific facts (if not determinations of law or policy)⁷⁶ and to develop patent policy not solely in the Patent Office but with more input and coherence across a variety of relevant executive-branch agencies.⁷⁷ These approaches would altogether sidestep the participatory constraints of litigation and render moot the participatory defects of reexamination. With a few exceptions, however, they remain largely unimplemented in patent law.

Instead, the preferred approach of Congress in the AIA was to throw open the doors of the Patent Office to would-be patent validity challengers. Nevertheless, for longstanding reasons of constitutional separation of powers, Congress was obliged to afford judicial review over the Patent Office's adjudications⁷⁸—and did so.⁷⁹ This naturally raised the question of what to do with a party that would not originally have possessed standing to bring a patent validity challenge in the courts, brought an administrative validity challenge in the Patent Office instead, and lost in the agency. Would such a party be permitted, constitutionally, to seek judicial review? Current Federal Circuit precedent holds that an unsuccessful challenger in administrative patent validity review must still meet stand-

74. See, e.g., Nicholas D. Walrath, *Expanding Standing in Patent Declaratory Judgment Actions to Better Air Public Policy Considerations*, 88 N.Y.U. L. REV. 476 (2013); Megan M. La Belle, *Patent Law as Public Law*, 20 GEO. MASON L. REV. 41 (2012).

75. See, e.g., Kali N. Murray, *Rules for Radicals: A Politics of Patent Law*, 14 J. INTELL. PROP. L. 63 (2006); James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 DUKE L.J. 87 (1997).

76. See Arti K. Rai, *Allocating Power over Fact-Finding in the Patent System*, 19 BERKELEY TECH. L.J. 907 (2004).

77. Rai, *supra* note 16; see also Tejas N. Narechania, *Patent Conflicts*, 103 GEO. L.J. 1483 (2015).

78. Greg Reilly, *The Constitutionality of Administrative Patent Cancellation*, 23 B.U. J. SCI. & TECH. L. 377, 416–17 (2017).

79. §§ 319, 329. This judicial review has, of course, been governed by the Administrative Procedure Act and so is relatively more deferential on issues of fact than review over district court findings. Jeffrey C. Dobbins, *Changing Standards of Review*, 48 LOY. U. CHI. L.J. 205, 214 n.24 (2016).

ing requirements in order to appeal.⁸⁰ The adverse agency decision does not, in itself, create an injury sufficient to create standing.⁸¹ The Federal Circuit's analysis suggests instead that the standing inquiry for an appeal of this sort would simply revert to the same standing inquiry that would govern a district-court lawsuit for declaratory judgment of patent invalidity.⁸² As a result, it is entirely possible that a party could unsuccessfully challenge a patent in inter partes review, covered business method review, or post-grant review and then be unable to seek review in the Federal Circuit.

The reverse, however, is apparently not true. A different recent decision of the Federal Circuit holds that a *successful* challenger in administrative PTAB review need not show standing to defend its victory.⁸³ In this posture, the appellee is not “the party invoking judicial review”—that party is the unsuccessful patent owner, who can plainly show “an alteration of tangible legal rights . . . that is sufficiently distinct and palpable to confer standing under Article III.”⁸⁴ With a justiciable case or controversy thus established, said the Federal Circuit, the appellee bears no added burden to demonstrate standing.⁸⁵ Of course, a challenger-appellee may still decline for its own reasons to appear in the appeal and defend its victory.

In both cases—an unsuccessful patent validity challenger that cannot appeal and a successful patent validity challenger that will not appear in the appeal—the Patent Office has an incentive to intervene in the appeal. This incentive lies in the stare decisis effect that the Federal Circuit's decision may carry and in the potential changes to patent law and policy that may result. The AIA has given the Patent Office significant new interests in these questions.

80. See *Consumer Watchdog v. Wis. Alumni Research Found.*, 753 F.3d 1258 (Fed. Cir. 2014).

81. *Id.* at 1261–62. The issue is now again before the Federal Circuit in a currently pending case, *Momenta Pharms., Inc. v. Bristol-Myers Squibb Co.*, No. 17-1694 (Fed. Cir. argued Dec. 5, 2017) <http://www.cafc.uscourts.gov/node/22675> [<https://perma.cc/3HLK-WDBH>].

82. See *Consumer Watchdog*, 753 F.3d at 1261 (giving weight to the lack of any facts “that could form the basis for an infringement claim”—the traditionally sufficient condition for establishing an injury-in-fact in cases seeking declaratory judgment of patent invalidity).

83. Pers. Audio, *L.L.C. v. Elec. Frontier Found.*, 867 F.3d 1246 (Fed. Cir. 2017).

84. *Id.* at 1250 (citing *Virginia v. Hicks*, 539 U.S. 113, 121, 123 (2003)) (internal quotation marks omitted).

85. *Id.*

III. EVOLVING JUDICIAL OVERSIGHT OF PATENT VALIDITY

To appreciate fully the policy interests that the Patent Office now has in the judicial reshaping of patent law, it is useful to consider how dramatically the judicial role has changed in resolving questions of patent validity. This part discusses that change, particularly in the context of appellate jurisdiction over PTAB review. The upshot is that PTAB review now represents a potent vehicle for Patent Office policymaking. Given the agency's expansive positions in other areas related to administrative patent validity review, exercising intervenor power is a logical and natural part of the broader Patent Office campaign of policymaking.

A. *Federal Circuit Primacy*

Prior to the AIA's enactment, the Federal Circuit's primacy in patent law was difficult to overstate. For issued patents, the court had exclusive jurisdiction in all patent appeals from the federal district courts, be they about infringement or declaratory judgment.⁸⁶ The same was true of *ex parte* and *inter partes* reexamination, which were appealable first, internally, within the Patent Office⁸⁷ and then exclusively to the Federal Circuit.⁸⁸ Likewise, for patent applications, the court had exclusive jurisdiction in all appeals where the agency had denied the inventor's application.⁸⁹

The Federal Circuit's supervision was pervasive. Whether on direct appeal of the agency's denial of an application or in a collateral review, through district-court litigation, of the agency's grant of a patent, the Federal Circuit's review was *de novo*, giving no deference to Patent Office interpretations of substantive patent law.⁹⁰ This was a marked departure from ordinary principles of administrative law, under which an agency's interpretations of a statute that it administers should receive either strong deference under the *Chevron* doctrine⁹¹ or somewhat weaker deference under the *Skid-*

86. 28 U.S.C. § 1295(a)(1) (2006).

87. 35 U.S.C. §§ 306, 315(b), 134(c).

88. § 141.

89. 28 U.S.C. § 1295(a)(4)(A).

90. *See, e.g., In re DBC*, 545 F.3d 1373, 1377 (Fed. Cir. 2008); *DH Tech., Inc. v. Synergystex Int'l, Inc.*, 154 F.3d 1333, 1339 (Fed. Cir. 1998); *In re Portola Packaging, Inc.*, 110 F.3d 786, 788 (Fed. Cir. 1997); *In re Kulling*, 897 F.2d 1147, 1149 (Fed. Cir. 1990).

91. *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837 (1984).

more doctrine⁹² depending on the legal authoritativeness of the agency interpretation or the formality with which it was developed.⁹³ The Federal Circuit's patent exceptionalism on this key administrative law issue was also the subject of scholarly criticism.⁹⁴ Adding to this intrusive scope of review was the Federal Circuit's conclusion that the Patent Office lacks any general substantive rulemaking authority.⁹⁵ Instead, the agency has the authority to promulgate rules only on procedural issues and on enumerated substantive issues.⁹⁶ Just as the agency's backward-looking adjudications were a rather poor means for advancing a Patent Office policy agenda, the agency's forward-looking rulemaking was equally ineffectual in view of the Federal Circuit's jurisprudence.

The AIA was a mixed reform in this regard. It did not change the state of affairs surrounding substantive rulemaking authority,⁹⁷ which may be for the best.⁹⁸ What the Act did change was adjudication. Administrative trials under the inter partes review, covered business method review, and post-grant review statutes all do appear to meet the standards for formality and rigor that suggest that Congress, in the AIA, intended the agency to "speak with the force

92. *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944).

93. See *United States v. Mead Corp.*, 533 U.S. 218 (2001). The particular contours of *Chevron* versus *Skidmore* deference have been the subject of extensive debate. See generally Cass R. Sunstein, *Chevron Step Zero*, 92 VA. L. REV. 187 (2006); Adrian Vermeule, *Introduction: Mead in the Trenches, Recent Decisions of the United States Court of Appeals for the District of Columbia Circuit*, 71 GEO. WASH. L. REV. 347 (2003); Thomas W. Merrill & Kathryn Tongue Watts, *Agency Rules with the Force of Law: The Original Convention*, 116 HARV. L. REV. 467 (2002); Thomas W. Merrill, *The Mead Doctrine: Rules and Standards, Meta-Rules and Meta-Standards*, 54 ADMIN. L. REV. 807 (2002).

94. See, e.g., Melissa F. Wasserman, *The Changing Guard of Patent Law: Chevron Deference for the PTO*, 54 WM. & MARY L. REV. 1959 (2013); 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).

95. See *Merck & Co. v. Kessler*, 80 F.3d 1543, 1549–50 (Fed. Cir. 1996) (discussing *Chrysler Corp. v. Brown*, 441 U.S. 281, 302 (1979)).

96. See *Star Fruits S.N.C. v. United States*, 393 F.3d 1277, 1282 (Fed. Cir. 2005); see also Benjamin & Rai, *supra* note 94, at 297–98.

97. The "specific powers" provision of the Patent Act remains unchanged and still limits the power of the Office to "establish regulations, not inconsistent with law, which shall govern the conduct of *proceedings* in the Office." 35 U.S.C. § 2(b)(2)(A) (2012) (emphasis added). Notably, earlier versions of the legislation did propose substantive rulemaking authority for the agency. Patent Reform Act of 2007, S. 1145, 110th Cong. § 11.

98. See Benjamin & Rai, *supra* note 94, at 272 n.13 ("[G]iven the tendency of rulemaking to be particularly subject to interest group pressures . . . the attractiveness of substantive rulemaking authority is unclear." (internal citations omitted)).

of law”⁹⁹ through its adjudications.¹⁰⁰ Curiously and notably, however, the Patent Office thus far has declined to ask for *Chevron* deference with regard to core patentability requirements,¹⁰¹ deference to which it may be entitled either based on current agency practice or with relatively easy internal changes.¹⁰²

Instead, the Patent Office has asserted itself in other ways. One approach has been to take a broad view of the nonappealability provisions of the inter partes, covered business method, and post-grant review statutes.¹⁰³ A second approach—more brazen but less widespread, at least so far—has been to politicize the PTAB’s adjudications in order to reach specific outcomes in accordance with the preferences of the political leadership of the Patent Office. Both of these approaches are highly contested and are the subject of judicial concern¹⁰⁴ as well as academic criticism.¹⁰⁵

B. PTAB Review as Policymaking

Both of these approaches are also best understood as a platform for policymaking by the Patent Office. Reading the AIA’s nonappealability provisions broadly makes the Patent Office less answerable to the Federal Circuit and opens the door to greater politi-

99. *United States v. Mead Corp.*, 533 U.S. 218, 229 (2001).

100. Stuart Minor Benjamin & Arti K. Rai, *Administrative Power in the Era of Patent Stare Decisis*, 65 DUKE L.J. 1563, 1582–83 (2016); Wasserman, *supra* note 94, at 1977.

101. The core patentability conditions are the eligibility-, innovation-, and disclosure-related requirements that inventions must satisfy in order to merit patent protection. *See supra* notes 9–14 and accompanying text.

102. *Cf.* Benjamin & Rai, *supra* note 100, at 1581–90 (arguing that in such cases, the Patent Office would *likely* be entitled to *Chevron* deference). Benjamin & Rai suggest that the agency’s refusal to seek *Chevron* deference is driven by political cost and by anticipated hostility from the Federal Circuit, the Supreme Court, or both. *Id.* at 1590.

103. *See supra* notes 67–68 and accompanying text.

104. *See, e.g.*, *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1020 (Fed. Cir. 2017) (Dyk, J., concurring) (expressing concern that “[w]hile we recognize the importance of achieving uniformity in PTO decisions, we question whether the practice of expanding panels where the PTO is dissatisfied with a panel’s earlier decision is the appropriate mechanism of achieving the desired uniformity”); *Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*, 817 F.3d 1293, 1302–05 (Fed. Cir. 2016) (Reyna, J., concurring) (expressing concern with the Patent Office’s “claim to unchecked discretionary authority” and its refusal to provide reasoned bases for its decisions even where those decisions may be nonappealable by statute).

105. The discussion that follows summarizes a more fully theorized critique of the increasingly political style of decision-making that contemporary PTAB practice reflects. *See Vishnubhakat, supra* note 45.

cal independence for the agency. Politicizing PTAB adjudication in order to reach particular outcomes in individual cases, meanwhile, can more directly implement policy preferences about how the patent laws should apply to certain technology areas, certain industries, certain types of litigants, and so on.

1. Leveraging Nonappealability

To advance the expansive view of nonappealability, the Patent Office takes advantage of an efficiency measure that Congress has included in each administrative adjudication that it has enacted. For *ex parte* and *inter partes* reexaminations, anyone requesting review had to show that a “substantial new question of patentability” existed as to the patent in question.¹⁰⁶ For *inter partes* reviews, the petitioner must show a “reasonable likelihood” of prevailing as to at least one of the challenged patent claims.¹⁰⁷ And for covered business method and post-grant reviews, the petitioner must show that it is “more likely than not” that at least one of the challenged patent claims is, indeed, unpatentable.¹⁰⁸ These determinations, in turn, were final and nonappealable for *ex parte*¹⁰⁹ and *inter partes* reexamination¹¹⁰ just as they now are for AIA proceedings.¹¹¹

These likelihood-of-success standards were intended to promote efficiency by gauging credibility up front and guarding against the waste of agency time and resources with frivolous challenges. Similarly, immunizing these initial determinations from judicial review promotes efficiency by sparing the agency from constantly defending the screening decisions that it makes in the hundreds or even thousands of petitions that come before it.¹¹²

106. 35 U.S.C. § 303(a) (2006); MPEP § 2216 (8th ed. Rev. 7, July 2008); 35 U.S.C. § 312(a); MPEP § 2616.

107. 35 U.S.C. § 314(a) (2012).

108. § 324(a).

109. § 303(c) (1982); *id.* § 303(c) (2000); *id.* § 303(c) (2006); *id.* § 303(c) (2012).

110. § 312(c) (2000); *id.* § 312(c) (2006); *id.* § 312(c) (Supp. V 2012).

111. §§ 314(d), 324(e) (2012).

112. This is not to say that the lack of judicial review has no efficiency costs. A lack of judicial correction may, for example, bring about unprincipled or unaccountable decision-making by the agency and generate inefficiency in the longer term. *See, e.g.,* Saurabh Vishnubhakat, *The Non-Doctrine of Redundancy*, 33 BERKELEY TECH. L.J. (forthcoming). The conclusion of Congress, however, appears to have been that the benefits from committing these decisions to agency discretion would likely outweigh the costs.

Some judicial review must remain, of course, to ensure accountability in the agency.¹¹³ Accordingly, appellate jurisdiction remains over the eventual adjudications that the PTAB makes on the merits of each case.¹¹⁴ Faced with this bifurcated structure—where initial screening decisions are unreviewable but merits adjudications are reviewable—an agency whose aim is to assert itself against a supervising court has self-evident incentive to characterize issues as screening-related rather than adjudication-related. The Patent Office has already taken this approach in at least four major contexts: three pertaining to inter partes review and a fourth, discussed in the next section, pertaining to covered business method review. In one instance, the agency defended its practice in the Supreme Court and won.¹¹⁵ In the second, the agency just lost in the en banc Federal Circuit.¹¹⁶ In the third, the agency awaits a decision by the Supreme Court yet again.¹¹⁷ In the fourth, the Federal Circuit has consistently held against the Patent Office position from the start.¹¹⁸

The first context is the requirement that inter partes review petitions must plead their arguments “with particularity,” or else the petition may not be considered.¹¹⁹ In 2012, petitioner Garmin International challenged the validity of a patent held by Cuozzo Speed Technologies.¹²⁰ Based on its initial screening, the PTAB granted review on certain of the patent’s claims and found them invalid on the merits.¹²¹ Cuozzo appealed to the Federal Circuit, arguing that the PTAB was wrong to grant review because Garmin’s petition had not been pled with the requisite particularity.¹²² The Supreme Court agreed with the Patent Office that the particularity of pleading, though it may implicate adjudication-related questions

113. This is administrative law’s familiar presumption in favor of judicial review when construing statutes, including statutes that purport to limit or preclude review. *Cuozzo Speed Techs., L.L.C. v. Lee*, 136 S. Ct. 2131, 2140 (2016).

114. §§ 319, 329.

115. *Cuozzo*, 136 S. Ct. 2131.

116. *Wi-Fi One, L.L.C. v. Broadcom Corp.*, 837 F.3d 1329 (Fed. Cir. 2016).

117. *SAS Inst., Inc. v. ComplementSoft, L.L.C.*, 825 F.3d 1341 (Fed. Cir. 2016).

118. *See, e.g., Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306 (Fed. Cir. 2015); *SightSound Techs., L.L.C. v. Apple, Inc.*, 809 F.3d 1307 (Fed. Cir. 2015); *Blue Calypso, L.L.C. v. Groupon, Inc.*, 815 F.3d 1331 (Fed. Cir. 2016).

119. § 312(a)(3).

120. *Cuozzo*, 136 S. Ct. at 2138.

121. *Id.* at 2138–39.

122. *Id.* at 2139. Cuozzo also argued, unsuccessfully, that the nonappealability provision of the inter partes review statute is a bar only to interlocutory review, not to all review of PTAB screening decisions. *Id.* at 2140.

about quality or sufficiency of evidence, means little more than that the petition deserves review—a quintessentially screening-related issue.¹²³

The second context is the requirement that a PTAB petitioner that has previously been sued in U.S. district court for infringing a patent must seek inter partes review on the relevant patent within one year, or else the inter partes review may not be instituted.¹²⁴ In 2013, Broadcom Corp. challenged the validity of a patent held by Wi-Fi One.¹²⁵ Wi-Fi argued that Broadcom's challenge was barred because Broadcom was in privity with entities whom Wi-Fi had sued more than one year earlier in U.S. district court for infringing the same patent.¹²⁶ The PTAB rejected Wi-Fi's arguments, granted review, and found certain of the patent's claims invalid on the merits.¹²⁷ Wi-Fi appealed to the Federal Circuit and argued that the PTAB acted outside its authority by granting the petition of a statutorily time-barred party.¹²⁸ On *en banc* rehearing, the Patent Office cast the issue as one of initial screening, not adjudication—just as it had in *Cuozzo*—and therefore as unreviewable.¹²⁹ The potential of the case to define the reach of *Cuozzo* attracted a good deal of amicus briefing¹³⁰ and commentary.¹³¹ The *en banc* majority rejected the Patent Office position, concluding that applications of the one-year time remain reviewable.¹³²

123. *Id.* at 2141–42.

124. § 315(b). The one-year bar attaches not only to the petitioner but also to any of its privies or real parties in interest. *Id.*

125. *Wi-Fi One, L.L.C. v. Broadcom Corp.*, 837 F.3d 1329, 1332 (Fed. Cir. 2016), *vacated on reh'g en banc*, 851 F.3d 1241 (Fed. Cir. 2017), *on reh'g en banc*, 878 F.3d 1364 (Fed. Cir. 2018).

126. *Id.*

127. *Id.* at 1332–33.

128. *Id.* at 1333.

129. En Banc Brief for Intervenor Michelle K. Lee, Director, United States Patent and Trademark Office at 9, *Wi-Fi One, L.L.C. v. Broadcom Corp.*, 878 F.3d 1364 (Fed. Cir. 2018) (Nos. 15-1944, 15-1945, 15-1946), 2017 WL 1132930, at *9 (arguing that “[s]ection 315(b) exemplifies the kind of institution-specific determination for which Congress intended to foreclose appeals”).

130. *See, e.g.*, Brief of Amici Curiae Professors of Patent and Administrative Law in Support of Neither Party, *Wi-Fi One, L.L.C. v. Broadcom Corp.*, 878 F.3d 1364 (Fed. Cir. 2018) (Nos. 15-1944, 15-1945, 15-1946), 2017 U.S. Fed. Cir. Briefs LEXIS 29.

131. *See, e.g.*, Saurabh Vishnubhakat, *Court-Agency Allocations of Power and the Limits of Cuozzo*, PATENTLY-O (May 5, 2017), <https://patentlyo.com/patent/2017/05/agency-allocations-limits.html> [<https://perma.cc/78GD-HTWM>].

132. *Wi-Fi One, L.L.C. v. Broadcom Corp.*, 878 F.3d 1364 (Fed. Cir. 2018) (*en banc*).

The third context is the requirement that the PTAB, where review is granted and not dismissed, must issue a final written decision addressing the merits of “any patent claim challenged by the petitioner.”¹³³ Unlike the particularity requirement and the one-year time bar, this requirement tends to disadvantage the challenger rather than the patent owner. In 2014, SAS Institute challenged the validity of 16 claims in a patent held by ComplementSoft.¹³⁴ The PTAB granted review on nine of the claims but denied review on the seven others.¹³⁵ The PTAB’s final written decision addressed the merits only of the patent claims on which the PTAB granted review—not on all the claims “challenged by the petitioner” in the original petition.¹³⁶ The Patent Office argued in the Supreme Court, as it had in the Federal Circuit below as intervenor, that the statutory obligation regarding completeness in the final written decision is constrained by the initial PTAB screening.¹³⁷ Understood in light of that screening power, said the Patent Office, the statute that governs final written decision need address only the claims on which the PTAB actually granted review.¹³⁸

This trilogy of cases reveals a progression of increasingly bold agency claims about what should be considered screening-related and judicially unreviewable. *Cuozzo* was about the necessary qualities of the petition itself, and the argument that the issue was primarily about screening rather than adjudication was plausible even if it sometimes leads to disagreeable results. *Wi-Fi One*, in turn, is a case about the court-agency allocation of power to decide patent validity cases, an allocation that rests in significant part on the one-year time bar for inter partes review.¹³⁹ The decision to enforce the time bar is not primarily about the necessary qualities of the petition but rather about extrinsic conditions that bear on the PTAB’s authority to proceed. This is at least a closer case than *Cuozzo* and likely con-

133. § 318(a). The provision also requires the decision to address any new claims that the patent owner may have added during the proceeding. *Id.*

134. *SAS Inst., Inc. v. ComplementSoft, L.L.C.*, 825 F.3d 1341, 1346 (Fed. Cir. 2016), *cert. granted sub nom. SAS Inst., Inc. v. Lee*, 137 S. Ct. 2160 (2017).

135. *Id.* The PTAB’s practice of granting-in-part and denying-in-part rests on a Patent Office rule, 37 C.F.R. § 42.108 (2017), that interprets 35 U.S.C. § 314(a) to permit this practice.

136. *SAS Inst.*, 825 F.3d at 1352.

137. Brief for the Federal Respondent at 13–14, *SAS Inst., Inc. v. Matal*, No. 16-969 (U.S. Sept. 5, 2017), 2017 WL 3948437, at *13–14.

138. *Id.*

139. *See* Vishnubhakat, *supra* note 46; Vishnubhakat, *supra* note 131.

trary to *Cuozzo*.¹⁴⁰ Meanwhile, *SAS Institute* is about adjudication-related obligations that Congress imposed on the PTAB. Undoubtedly, one can recast the issue in terms of initial screening power and defend the agency's practice on that basis, but this overall line of argument suggests a marked preference on the part of the Patent Office for resisting judicial review of the PTAB where possible.

2. Defining Covered Business Method Patents

An interesting postscript to this nonappealability-based approach to policy also bears mention. The trilogy of *Cuozzo*, *Wi-Fi One*, and *SAS Institute* all pertain to inter partes review, though they do directly affect the other AIA proceedings given the identical or highly similar provisions that govern nonappealable screening, estoppel, and other structural features in all three review mechanisms. Yet the covered business method statute includes an additional and express policymaking provision. Covered business method review is available only for patents that satisfy the AIA's definition of an eligible patent.¹⁴¹ The enabling statutory provision authorizes and commands the Director to promulgate rules that elaborate on this definition.¹⁴²

From the start, the Patent Office has argued that PTAB determinations of whether patents satisfy the definition are nonappealable—just as PTAB determinations of whether to grant review as to the validity of those patents is nonappealable. The agency advanced this argument in multiple cases, including *Versata v. SAP*,¹⁴³ *Sight-Sound v. Apple*,¹⁴⁴ and *Blue Calypso v. Groupon*.¹⁴⁵ A panel of the Federal Circuit first ruled against the Patent Office in *Versata*, agreeing that the determination of whether to grant review is immune from

140. The *en banc* decision in *Wi-Fi* supports this view, concluding in a 9–4 majority that applications of the one-year time bar are judicially reviewable even in light of the *Cuozzo* decision. *Wi-Fi One, L.L.C. v. Broadcom Corp.*, 878 F.3d 1364, 1374–75 (Fed. Cir. 2018) (*en banc*).

141. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 18(d)(1), 125 Stat. 284, 331 (2011).

142. § 18(d)(2).

143. Brief for the Intervenor, Director of the United States Patent and Trademark Office at 16–17, *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306 (Fed. Cir. 2015) (No. 14-1194), 2014 WL 1878618, at *16–17.

144. Brief for the Intervenor, Director of the United States Patent and Trademark Office at 26–27, *SightSound Techs., L.L.C. v. Apple, Inc.*, 809 F.3d 1307 (Fed. Cir. 2015) (Nos. 15-1159, 15-1160), 2015 WL 1814625, at *26–27.

145. Brief for Intervenor, Director of the United States Patent and Trademark Office at 16–17, *Blue Calypso, L.L.C. v. Groupon, Inc.*, 815 F.3d 1331 (Fed. Cir. 2016) (Nos. 15-1391, 15-1393, 15-1394), 2015 WL 4400825, at *16–17.

review but holding that the definitional determination of a covered business method patent is reviewable after a final decision on the merits.¹⁴⁶ Subsequent panels, bound by *Versata*, reached the same conclusion until the entire Federal Circuit this year considered whether the definition of a covered business method might be re-considered *en banc*.

However, in a significant split, the court in *Secure Access v. PNC Bank* denied *en banc* rehearing.¹⁴⁷ Of the twelve judges who participated, five dissented from the denial of *en banc* consideration.¹⁴⁸ And of the five dissenters, three—Judges Dyk, Wallach, and Hughes—further dissented from the holding of *Versata*, that determinations of whether patents meet the covered business method definition are reviewable.¹⁴⁹ They argued instead that the *Versata* panel decision did not survive the Supreme Court’s holding in *Cuozzo*, where a materially identical nonappealability provision was at work.¹⁵⁰

Following the *en banc* denial in *Secure Access*, but possibly sensing a receptive audience, the Patent Office has now, for the first time, expressly sought deference for its interpretation of the statutory covered business method definition. In *SmartFlash v. Samsung*, the agency suggested that its interpretation is “consistent with the text, legislative debate history, and purpose of the statute, and, moreover, it is sensible, practical, and longstanding”—and deserving of *Skidmore* deference.¹⁵¹ How the Federal Circuit responds to this request for interpretive deference may do much to shape the agency’s continued use of the AIA nonappealability provisions as a platform for its policy agenda.

3. Stacking PTAB Panels

The other major way in which the Patent Office has asserted itself is the controversial practice of panel stacking. Panel stacking

146. 793 F.3d 1306, 1319 (Fed. Cir. 2015) (rejecting the contention that the court may not review whether a given patent is a qualifying covered business method patent).

147. *Secure Access, L.L.C. v. PNC Bank Nat’l Ass’n*, 859 F.3d 998 (Fed. Cir. 2017).

148. *Id.* at 1004 (Lourie, J., dissenting).

149. *Id.* at 1009–10 (Dyk, J., dissenting).

150. *Id.* at 1010–11 (Dyk, J., dissenting).

151. Brief for Intervenor, Director of the United States Patent and Trademark Office at 23–24, *SmartFlash, L.L.C. v. Samsung Elecs. Am., Inc.*, Nos. 16-2451, 16-2452, 16-2455, 16-2457, 16-2458, 17-1056, 17-1102, 17-1104, 17-1109, 17-1110, 17-1111, 17-1833, 17-1834, 17-1835, 17-1836, 17-1847, 17-1837, 17-1846 (Fed. Cir. Sept. 27, 2017), 2017 WL 4402106, at *23–24.

is a practice whereby the Patent Office leadership responds to PTAB decisions it finds undesirable by expanding the original three-judge panel in order to create a majority for the Office's desired outcome. The agency's motivation for this has been candidly political. In *Yissum Research v. Sony Corp.*, the question arose during oral argument whether, in situations where a PTAB decision appeared to be an outlier, "[the Patent Office has] engaged the power to reconfigure the panel so as to get the result [it wants]."¹⁵² The Patent Office confirmed the practice and defended it as the Director "trying to ensure that her policy position is being enforced by the panels."¹⁵³ Similarly, in *Nidec v. Zhongshan*, the Federal Circuit questioned whether uniformity, even if desirable and desired by the PTAB, could legitimately be achieved through panel stacking "where the PTAB can look at a prior decision and say, 'Well we don't like that, let's jump back in there and change that?'"¹⁵⁴ The question went unanswered amid other questions about how additional PTAB judges are assigned.¹⁵⁵

The relationship of the practice of panel stacking to the agency's policy agenda is twofold. In a direct sense, the ability of Patent Office leadership to stack the PTAB with additional judges until the desired outcome is reached allows the agency to impose policy preferences in a great many ways. These include particularized applications of patent law that are specific to a given technology, a given industry, a given type of challenger, a given type of patent owner, or any other attribute of interest. However, these sorts of policy vindications are short-term gratifications at best and potentially inappropriate distortions of the adjudicatory process at worst.

The longer-term benefit to Patent Office policymaking from panel stacking would be strong deference under *Chevron*, even if the relevant opinions themselves were non-precedential. The Patent Office has, indeed, used the practice already to argue in favor of *Chevron* deference—though only on procedural matters, such as in *Yissum* where the agency's interpretation of the inter partes re-

152. Oral Argument at 47:20, *Yissum Research Dev. Co. of the Hebrew Univ. of Jerusalem v. Sony Corp.*, 626 F. App'x 1006 (Fed. Cir. 2015) (mem.) (Nos. 15-1342, 15-1343), <http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2015-1342.mp3> [www.perma.cc/S6AQ-C6EE].

153. *Id.* at 47:35.

154. Oral Argument at 25:27, *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013 (Fed. Cir. 2017) (No. 16-2321), <http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2016-2321.mp3> [https://perma.cc/X74B-6QY6].

155. *Id.* at 25:40.

view joinder statute was at issue.¹⁵⁶ The Patent Office argued that its diligent use of panel-stacking, coordinated by the Director to generate a uniform body of case outcomes, was a way of speaking consistently on the issue, such that its determinations ought to be granted *Chevron* deference.¹⁵⁷ Speaking consistently with input from the agency head herself, in turn, may or may not be necessary in order to “speak with the force of law” for *Chevron* purposes—but it does appear to be sufficient.¹⁵⁸ The agency argued that it had met this standard. Even so, the Federal Circuit declined to reach the argument, disposing of the case instead with a summary affirmance.¹⁵⁹ Still, as with the covered business method definition,¹⁶⁰ the latitude of the Patent Office to seek deference, or otherwise to shield itself from judicial scrutiny in service of its policymaking agenda, is likely to change as and when the Federal Circuit continues to give its feedback.

C. Patent Office Intervention in PTAB Appeals

It is in this broader policymaking framework of conducting PTAB review, with the Patent Office leveraging and enlarging immunity from judicial review and seeking *Skidmore* or *Chevron* deference, with the stark potential for politicized outcomes, that the agency’s intervenor power should be evaluated and understood. Indeed, in many of the cases already discussed as part of the Patent Office’s strategy, it was as intervenor that the agency entered—rather than, for example, as *amicus curiae*. In the debate over non-appealable screening in inter partes review, the Patent Office was an intervenor in *Cuozzo*, *Wi-Fi One*, and *SAS Institute*. In the arc of cases regarding the definition of a covered business method patent, the Patent Office was an intervenor in *Versata*, *SightSound*, and *Blue Calypso* and is currently an intervenor in *SmartFlash*. And in the cases where panel-stacking came to light at oral argument, the Patent Office was an intervenor in both *Yissum* and *Nidec*. In short, intervention in Federal Circuit appeals has been a central feature in

156. Brief for Intervenor, Director of the United States Patent and Trademark Office at 2, 9–11, *Yissum Research Dev. Co. of the Hebrew Univ. of Jerusalem v. Sony Corp.*, 626 F. App’x 1006 (Fed. Cir. 2015) (mem.) (Nos. 15-1342, 15-1343), <https://www.patentspostgrant.com/wp-content/uploads/sites/34/images/Intervenorbrieff.pdf> [<https://perma.cc/337H-5FK4>].

157. *Id.* at 19–20.

158. Benjamin & Rai, *supra* note 100, at 1581–84 (summarizing the debate over whether “adjudications overseen by agency heads and/or treated as precedential by the agency” are the only adjudications that merit *Chevron* deference).

159. *Yissum*, 626 F. App’x. 1006.

160. *See supra* Part II.B.2.

how the Patent Office has asserted its post-AIA policymaking ambitions.

This is fitting, for the statutory power of the Patent Office to intervene in appeals from the PTAB was itself a creation of the AIA.¹⁶¹ Previously, the agency was a mandatory co-appellee in all Federal circuit appeals from a reexamination or simply as an appellee from a refusal to proceed with *ex parte* reexamination.¹⁶² The AIA removed reexaminations from the set of cases in which the agency was obliged to appear and added the current authority to intervene, using language that signals at least some discretion for the Patent Office.¹⁶³

Although this statutory revision was virtually unremarked in the AIA's legislative history,¹⁶⁴ it raised analytical and empirical questions among commentators. As a matter of institutional structure, for example, John Golden observed that the power to intervene on appeal in the Federal Circuit—instead of a power of independent adjudicatory review for the Director to supervise the PTAB—is an important deviation from the standard APA conception of formal adjudication.¹⁶⁵ In Golden's account, this structure suggests that "Congress arguably placed the Federal Circuit in the authoritative position analogous to that of 'the agency.'"¹⁶⁶ If this is an accurate view of Congressional intent, it reinforces pre-AIA notions of Federal Circuit primacy. It also invites robust use of the powers that the Patent Office does have, if the agency is to advance its policymaking agenda at all, because the Federal Circuit is likely to have its own strongly held views regarding proper patent policy.¹⁶⁷

161. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 7(c)(3), 125 Stat. 284, 314–15 (2011) (codified as amended at 35 U.S.C. § 143 (2012)).

162. 35 U.S.C. § 143 (2006) (requiring that, in "an *ex parte* case or *any reexamination case*, the Director *shall submit* to the court in writing the grounds for the decision of the Patent and Trademark Office, addressing all the issues involved in the appeal" (emphasis added)).

163. 35 U.S.C. § 143 (2012) (providing that the Director "shall have the right to intervene," but not the obligation, in appeals from administrative patent validity reviews).

164. See Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 539, 543 (2012) (indicating only a passing reference to the provision in Senator Kyl's remarks during floor debate in March 2011).

165. John M. Golden, *Working Without Chevron: The PTO as Prime Mover*, 65 DUKE L.J. 1657, 1682–83 (2016).

166. *Id.* at 1683.

167. See, e.g., Sapna Kumar, *The Accidental Agency?*, 65 FLA. L. REV. 229, 229 (2013) (arguing that the Federal Circuit's jurisprudence reveals an institutional desire to act as "the *de facto* administrator of the Patent Act").

Moreover, given the agency's discretion to intervene on a case-by-case basis, it was unclear when and based upon what criteria the agency would exercise its power.¹⁶⁸ Dmitry Karshedt recently speculated that, "[g]iven that the typical outcome of a post-issuance proceeding is patent invalidation, the PTO's participation in Federal Circuit appeals means that the agency will more or often than not argue against the patentee whenever it intervenes."¹⁶⁹ Meanwhile, where the agency's purpose in intervening is to step in for an absent party to ensure fully adversarial vetting of the issues, it seems virtually certain that the agency would only ever intervene on behalf of an absent prevailing petitioner—a challenger that successfully obtained an invalidation in the PTAB and is either unwilling or unable to defend against the patent owner's appeal.¹⁷⁰ These points are salient because a meaningful discussion of how the Patent Office can or should intervene must begin with a realistic picture of how the agency has actually done so until now.

To that end, a comprehensive review of appeals from PTAB decisions where the Patent Office appeared as an appellate intervenor revealed 145 docketed Federal Circuit cases. Taking consolidations into account, these cases reflected 96 distinct disputes where the Patent Office intervened. Every intervenor brief that the agency filed was in full or partial defense of the PTAB's position or of some larger structural value associated with administrative adjudication—never in opposition to the PTAB's stance.¹⁷¹

Across these 96, the party that challenged patent validity in the PTAB below participated in the appeal in a total of 68 disputes (70.8%) and was either unwilling or unable to participate in a total of 28 disputes (29.2%). Across the same 96 disputes, the patent challenger prevailed below in the PTAB and came to the appeal to defend its victory in 77 disputes (80.2%); the patent owner prevailed in the PTAB in only 19 disputes (19.8%). Given that the Patent Office appeal always supported the PTAB, these findings

168. David L. McCombs et al., *Federal Circuit Appeals from the PTAB: A New Game or Just the Same Old Practice?*, 95 J. PAT. & TRADEMARK OFF. SOC'Y 240, 253 (2013).

169. Dmitry Karshedt, *Acceptance Instead of Denial: Pro-Applicant Positions at the PTO*, 23 B.U. J. SCI. & TECH. L. 319, 342 n.129 (2017).

170. The converse case would be that the patent owner successfully defended its patent in the PTAB, the losing petitioner appealed, and the patent owner declined to appear. In such a case, the Patent Office would be standing in for a patentee who had no interest in defending its victory. Expending resources on this scenario seems highly unlikely.

171. The agency submitted briefing in 93 disputes; the rest were terminated early.

confirm Karshedt's conjecture: the agency did, indeed, intervene against the patentee far more often than not, by a 4:1 ratio.

Of the 68 disputes where the PTAB challenger went on to participate in the appeal, the PTAB challengers came to appeal as winners in a total of 49 disputes (72.1%); only in 19 disputes (27.9%) did they come to appeal having lost in the PTAB. Notably, of the 28 remaining disputes, where the PTAB challenger did not participate in the appeal, every dispute had been a victory for the challenger. In other words, the Patent Office never intervened in an appeal where the patent challenger lost in the PTAB and was then unwilling or unable to appeal. As expected,¹⁷² then, where the patent challenger was absent from the appeal and the Patent Office stepped in, it was always after a validity challenge had succeeded in the PTAB below. These findings are summarized in Table 1.¹⁷³

These descriptive tabulations confirm the intuition that taking specific positions in Federal Circuit appeals from PTAB decisions has, indeed, been a meaningful part of how the Patent Office uses PTAB review as a policymaking vehicle. Policy-relevant features of agency intervention include a preference for defending the PTAB's decisions, for intervening even when adversary parties are both participating, and for standing in for validity challengers that are absent on appeal, but not for absent patent owners. Notably, the combination of defending PTAB decisions and standing in for absent validity challengers suggests that it is a Patent Office priority that findings of invalidity be affirmed, but not necessarily findings of validity.

IV.

THE CONSTITUTIONALITY OF INTERVENTION

Until now, Patent Office decisions to intervene have been shaped entirely by the agency's policy agenda under the broad assumption that the agency was not legally constrained, let alone constitutionally constrained, in those decisions. Indeed, that assumption forms the basis for the Patent Office's position in *Knowles Electronics v. Matal*,¹⁷⁴ the case in which the Federal Circuit has finally inquired about those constraints. Based on the observed usage of Patent Office intervention, this part now turns to the issues

172. See *supra* note 170 and accompanying text.

173. Case data on USPTO intervention in the Federal Circuit was gathered using Docket Navigator. Data about the agency's positions was hand-coded from its briefs in those cases and is on file with the author.

174. See *generally* Supplemental Brief for Intervenor, *Knowles Elecs., L.L.C. v. Matal*, No. 16-1954, 2017 WL 3399631 (Fed. Cir. July 31, 2017).

of constitutional standing raised in *Knowles*.¹⁷⁵ Recent scholarship and Supreme Court case law suggest that the Patent Office may, indeed, have to show standing in order to exercise its intervention authority. Standing doctrine and administrative law constraints limit the substantive positions that the agency can take as intervenor. Under certain conditions, these obligations and constraints may also have influence on intervention by private parties in appeals from PTAB reviews of patent validity.

A. *Standing to Intervene*

The need for standing to participate in a federal court proceeding is a familiar application of Article III's "case or controversy" requirement.¹⁷⁶ A party that lacks necessary standing must be excluded, and the absence of standing bars the court jurisdictionally from hearing the case.¹⁷⁷ Patent Office authority under section 143 implicates two important details of the somewhat discordant law and commentary in this area: the relationship between standing and the rights of intervenors and the side of the dispute on which the standing inquiry is directed.¹⁷⁸ The difficulty of reconciling standing with intervention—specifically intervention as a matter of right—is, ironically, that they are analytically quite similar.

Standing generally requires the existence of an injury, the traceability of the injury to particular conduct, and the redressability of the injury by the relief that is sought.¹⁷⁹ To have an injury is to suffer "an invasion of a legally protected interest" in a "concrete and particularized" manner and with "actual or imminent, not conjectural or hypothetical" timing.¹⁸⁰ To trace the injury to particular conduct, meanwhile, is to attribute causation, and this naturally raises inferential difficulties when multiple possible causes

175. *See Knowles Elecs., L.L.C. v. Matal*, No. 16-1954 (Fed Cir. June 30, 2017) (per curiam) (order requesting supplemental briefing), <https://cdn.patentlyo.com/media/2017/06/KnowlesOrder.pdf> [<https://perma.cc/7VXQ-LHK2>].

176. U.S. CONST. art. III, § 2, cl. 1.

177. *See, e.g., Warth v. Seldin*, 422 U.S. 490, 498–99 (1975) (explaining that "the standing question is whether the plaintiff has alleged such a personal stake in the outcome of the controversy as to warrant his invocation of federal-court jurisdiction").

178. A third potential detail, the distinction that the Patent Office can intervene in appeals rather than in courts of first instance, is actually largely irrelevant. The principles underlying FED. R. CIV. P. 24, which governs intervention in the U.S. district courts, may also apply in the U.S. courts of appeal. *UAW v. Scofield*, 382 U.S. 205, 217 n.10 (1965).

179. *Spokeo, Inc. v. Robins*, 136 S. Ct. 1540, 1547 (2016).

180. *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560 (1992) (citations omitted).

may be at work.¹⁸¹ To show a likelihood of redress is similarly an exercise in causation, for the remedy sought must actually bring about an end to the relevant injury.¹⁸² Otherwise, the judicial action urged by the party is animated, impermissibly, by a “generalized grievance.”¹⁸³

The right to intervene under Federal Rule of Civil Procedure 24 reflects similar concerns, and this similarity is helpful to consider when evaluating how Article III standing might be deemed satisfied.¹⁸⁴ Intervention of right first requires an interest in subject of the action.¹⁸⁵ Like the injury requirement of standing, the intervenor’s interest reflects a stake in the dispute. Intervention of right also requires a risk that the interest will be impaired by the disposition of the lawsuit.¹⁸⁶ Like the traceability requirement, this calls for a causal connection between the interest at stake and the consequences of denying participation. Finally, intervention of right requires a comparably improved ability to protect the interest through intervention.¹⁸⁷ Like the redressability requirement, this also demands a showing that the relief sought—intervening in the action—will make a meaningful difference with regard to the interest at stake.

One difficulty with these doctrinal overlaps is that a case’s facts may satisfy one set of inquiries but not the other.¹⁸⁸ For example, an injury for standing purposes must be fairly specific and personalized, but the interest at stake for an intervenor may be impaired in fairly broad fashion and still qualify.¹⁸⁹ The mere prospect of stare

181. *See id.* at 560–61 (discussing, e.g., the independent action of third parties not before the court).

182. *Id.* at 561–62.

183. *Id.* at 575.

184. The comparison to FED. R. CIV. P. 24(a)(2) is also salient for private-party intervenors. *See infra* Part IV.C.

185. FED. R. CIV. P. 24(a)(2) (requiring the intervenor to “claim [] an interest relating to the property or transaction that is the subject of the action”).

186. *Id.* (requiring the intervenor to be “so situated that disposing of the action may as a practical matter impair or impede the movant’s ability to protect its interest”).

187. *Id.* (limiting the court’s obligation to allow intervention where “existing parties adequately represent that interest”).

188. As Gregory Manring has argued, neither inquiry “can subsume the other.” Gregory R. Manring, Note, *It’s Time for an Intervention!: Resolving the Conflict Between Rule 24(a)(2) and Article III Standing*, 85 *FORDHAM L. REV.* 2525, 2542 (2017).

189. 7C CHARLES ALAN WRIGHT ET AL., *FEDERAL PRACTICE AND PROCEDURE* § 1908.1 (3d ed. 2017) (discussing “Intervention under the 1966 Amended Rule—What Constitutes a Sufficient Interest”).

decis from an unfavorable judgment can be a sufficient intervenor interest,¹⁹⁰ as can the prospect of future adverse litigation¹⁹¹ or potential inability to assert future claims.¹⁹² On the other hand, it is likely that any of these interests would, by itself, be too speculative an injury to establish party standing. As a result, one cannot assume that a party that can satisfy the intervention standard could necessarily show standing if that showing were required.¹⁹³

Thus, the mere fact that the Patent Office can intervene in a Federal Circuit appeal from a PTAB decision does not, by itself, necessarily mean that the Patent Office has standing to do so. The question then is whether it is necessary separately to show standing.

As the Court has explained, it is not always necessary. Under the one-plaintiff rule, multiple parties that jointly bring a claim for relief must show standing only for one party, and separate showings for the remaining parties are unnecessary.¹⁹⁴ This rule also permits intervenors to enter a case on the side of a party that has already shown standing, with no separate inquiry into the intervenor's standing.¹⁹⁵ To this, the Court in *Town of Chester v. Laroe Estates* last Term added the clarification that an intervenor cannot rely on the standing of another party in this way if the intervenor seeks relief

190. See, e.g., *Stone v. First Union Corp.*, 371 F.3d 1305, 1310 (11th Cir. 2004); *Georgia v. U.S. Army Corps of Eng'rs*, 302 F.3d 1242, 1258 (11th Cir. 2002); *Utah Ass'n of Counties v. Clinton*, 255 F.3d 1246, 1254 (10th Cir. 2001).

191. See, e.g., *California ex rel. Lockyer v. United States*, 450 F.3d 436 (9th Cir. 2006).

192. See, e.g., *id.*; *United States v. Albert Inv. Co.*, 585 F.3d 1386 (10th Cir. 2009); *Ford v. City of Huntsville*, 242 F.3d 235 (5th Cir. 2001).

193. The scope of this caveat is an unresolved empirical question, and a circuit split has grown around the intuitions of different courts about how to craft predictable doctrine in the face of the empirical uncertainty. See Elizabeth Zwickert Timmermans, Note, *Has the Bowsher Doctrine Solved the Debate?: The Relationship Between Standing and Intervention as of Right*, 84 NOTRE DAME L. REV. 1411, 1428–40 (2009) (discussing the circuit split on whether the requirements for standing and intervention are equivalent).

194. See, e.g., *Massachusetts v. EPA*, 549 U.S. 497, 518 (2007); *Bowsher v. Synar*, 478 U.S. 714, 721 (1986). The one-plaintiff rule has also been termed the *Bowsher* doctrine. See, e.g., Timmermans, *supra* note 193. The term “one-plaintiff rule,” see Aaron-Andrew P. Bruhl, *One Good Plaintiff Is Not Enough*, 67 DUKE L.J. 481 (2017), avoids confusion. The term “*Bowsher* doctrine” may also refer to the substantive holding of that case, which involved active Congressional supervision of officers charged with executing the laws that Congress enacts. Hanah Metchis Volokh, *Congressional Immunity Grants and Separation of Powers: Legislative Vetoes of Federal Prosecutions*, 95 GEO. L.J. 2017, 2037–38 (2007).

195. See *McConnell v. FEC*, 540 U.S. 93, 233 (2003), *overruled on other grounds by Citizens United v. FEC*, 558 U.S. 310 (2010).

that is different from what the party with proven standing seeks.¹⁹⁶ The one-plaintiff rule is the subject of a compelling recent critique by Aaron-Andrew Bruhl,¹⁹⁷ but at present, it remains a doctrine with considerable precedential force.¹⁹⁸

Thus, the Patent Office as intervenor may be able avoid having to show its own standing, but only if the agency has entered the case on the side of a party that does establish standing, and so long as the agency does not seek relief that is different from what that friendly party seeks. This reveals, importantly, that the Patent Office cannot rely on the standing of a friendly party that declines to appear. The Court explained in *Arizonans for Official English v. Arizona* that standing “must be met by persons seeking appellate review, just as it must be met by persons appearing in courts of first instance.”¹⁹⁹ Where the friendly party with proven standing declines to appear, the intervenor “cannot step into the shoes of the original party unless the intervenor independently fulfills the requirements of Article III”—even where the intervenor takes the same position as that of the absent party.²⁰⁰ The question then is whether an intervenor can rely on the standing of an adverse party.

The answer is likely no. Adverse parties must have standing independently of each other. Contrary to popular shorthand that a plaintiff’s duty to show standing means that standing is required only from plaintiffs, standing to defend is necessary as well.²⁰¹ To be sure, a defendant is likely to show standing, as most defendants face the risk of injury from an adverse judgment and so have enough of a stake in the case to satisfy Article III.²⁰² Nevertheless, the case-or-controversy requirement demands standing “to sue or defend,” not merely standing to sue.²⁰³

196. 137 S. Ct. 1645, 1651 (2017).

197. See Bruhl, *supra* note 194.

198. *Id.* at 535.

199. 520 U.S. 43, 64 (1997).

200. *Id.* at 64–65 (citing *Diamond v. Charles*, 476 U.S. 54, 68 (1986)). The friendly party with proven standing was absent both in *Arizonans for Official English* and in *Diamond*. In both cases, the Court held that a separate Article III standing inquiry was necessary for the intervenor who purported to represent the position of the absent party. *Id.*

201. See Matthew I. Hall, *Standing of Intervenor-Defendants in Public Law Litigation*, 80 FORDHAM L. REV. 1539, 1550 (2012).

202. *Id.* at 1551–52; see Joan Steinman, *Shining a Light in a Dim Corner: Standing to Appeal and the Right to Defend a Judgment in the Federal Courts*, 38 GA. L. REV. 813, 831 (2004).

203. See *Arizonans for Official English*, 520 U.S. at 64. This view calls into question the Federal Circuit’s recent panel decision in *Personal Audio, L.L.C. v. Elec. Frontier Found.*, 867 F.3d 1246 (Fed. Cir. 2017). In *Personal Audio*, the successful

This is particularly problematic for the Patent Office because it often intervenes specifically to step in for an absent party whose position is in line with the agency's views.²⁰⁴ The intervenor standing cases reveal that the agency cannot rely on the standing either of a friendly party that is absent or of an adverse party that is present. In such cases, it must establish its own standing in order to exercise its intervenor authority. Moreover, even where both parties to the PTAB adjudication are present on appeal, the Patent Office can rely on the one-plaintiff rule and avoid a separate standing inquiry only to the extent that it seeks relief identical to what its friendly party seeks.²⁰⁵

These constraints apply to interventions in favor of patent validity challengers or patent owners alike. The revealed preference of the Patent Office for siding with validity challengers, though, does mean that as a practical matter, the agency must show independent standing more often than if it intervened on behalf of the patent owner. Patent owners who suffer invalidation in the PTAB will have standing to appeal the deprivation of their property interests, but challengers who suffer defeat may or may not.²⁰⁶ Those who do not will leave the Patent Office obliged to establish its own standing on appeal. Close to a third of Patent Office interventions on appeal fit this pattern (29.2%),²⁰⁷ making the standing requirement a potentially significant constraint on the agency's continued use of its intervenor authority as a means for advancing policy aims through Federal Circuit appeals. Meanwhile, when both parties do appear, whichever side the Patent Office favors as intervenor, the agency may still have to establish its own standing where its position promotes a larger structural value or otherwise looks beyond the parties' immediate dispute—as it often does.²⁰⁸ And in making the case for standing in these situations, an agency interest that is “shared generally with the public at large in the proper application of the Constitution and laws will not do.”²⁰⁹

PTAB challenger (EFF) was “not constitutionally excluded from appearing in court to defend the PTAB decision in its favor” because it was the unsuccessful patent owner who was invoking judicial review in defense of its patent claims. 867 F.3d at 1250.

204. See *supra* Part III.C.

205. See *supra* note 196 and accompanying text.

206. See *Consumer Watchdog v. Wis. Alumni Research Found.*, 753 F.3d 1258, 1261–62 (Fed. Cir. 2014); *supra* notes 80–81 and accompanying text.

207. See *supra* Part III.C.

208. See *supra* note 171 and accompanying text.

209. *Arizonans for Official English v. Arizona*, 520 U.S. 43, 64 (1997). The Patent Office itself seems to have taken just this course, however. It argued in sup-

B. *The Scope of Intervention*

The principles of intervenor standing do not merely require the Patent Office independently to show its standing in certain situations. In the absence of such an independent showing, those principles also constrain what substantive positions the agency may take upon intervening. Where the agency satisfies Article III by relying on a party with proven standing, *Town of Chester* confirms that the agency cannot seek “relief that is different” from what that party seeks.²¹⁰

Whether differences between Patent Office arguments and litigant arguments during a Federal Circuit appeal amount to different relief is difficult to predict. One may define relief at a high level of generality, tending to favor findings that the forms of relief sought by two different parties are essentially the same. Conversely, one may define relief at a high level of specificity, tending to favor the opposite outcome. The Court in *Town of Chester* did point to differences in the “form of relief requested *in the complaint*” as being enough to trigger a separate standing inquiry,²¹¹ such as where one party seeks money damages and the other seeks an injunction.²¹² It is unclear from *Town of Chester* itself whether this was intended merely as a sufficient condition and not also a necessary one.

Apart from standing, the substantive positions that the Patent Office may properly take as an intervenor in PTAB validity challenge appeals are also constrained by ordinary administrative law. Under the *Chenery* doctrine, a reviewing federal court may uphold an agency’s action only on the grounds that the agency itself cited as its basis for the decision.²¹³ The court may also reverse the agency, of course, but to affirm on grounds not articulated by the agency—though acceptable in court-court review—is inapt in court-agency review for reasons of separation of powers.²¹⁴ The Patent Office in *Knowles Electronics* expressed some agreement with this

plemental briefing for the *Knowles* case that it has Article III standing “to advocate for the correct application of the federal patent laws.” Supplemental Brief for Intervenor at 9, *Knowles Elecs., L.L.C. v. Matal*, No. 16-1954, 2017 WL 3399631, at *9 (Fed. Cir. July 31, 2017). Nevertheless, there are certainly cognizable interests that the United States may assert as sovereign in showing standing. *Cf.* *Massachusetts v. EPA*, 549 U.S. 497, 520 (2007) (concluding that the quasi-sovereign interests of Massachusetts entitle it to “special solicitude” in the standing inquiry).

210. 137 S. Ct. 1645, 1651 (2017).

211. *Id.* at 1650–51 (emphasis added).

212. *Id.* at 1651.

213. *SEC v. Chenery Corp.*, 318 U.S. 80, 87 (1943).

214. *Id.* at 95.

view about its *Chenery* obligations.²¹⁵ However, where an issue on appeal is one on which the PTAB ruled below, the agency reserved to itself the right to take a different position on the issue.²¹⁶

This stance is somewhat puzzling. Arguing that an agency action should be upheld because position X is correct seems necessarily to be a different ground for affirmance than arguing that the agency action should be upheld because position X is incorrect. Regardless of what other position the Patent Office advances on appeal, reversing itself on the correctness of the PTAB's reasoning would, at minimum, seem to be in tension with *Chenery*.²¹⁷ Moreover, grounds for affirmance—like forms of relief—may be defined broadly or narrowly and thereby also produce different outcomes. The need for clarity on the scope for Patent Office intervention, therefore, invites answers to the jurisprudential question of how to determine the appropriate level of generality in both the separate-relief inquiry and the *Chenery*-grounds inquiry.

C. *Implications for Private Intervenors*

Answering these jurisprudential questions will also do much to guide private parties who may wish to intervene, as the Patent Office does, in Federal Circuit appeals from validity challenges in the PTAB. Without statutory authority such as what the Patent Office enjoys under section 143, private intervenors face the additional step of either establishing their rights to intervene²¹⁸ or obtaining leave to do so permissively.²¹⁹ The standard for what kinds of interests are sufficient for intervention of right is lenient relative to the sorts of injuries required for standing.²²⁰ The particular interests that courts have approved before are well-suited for intervention by private parties.

For example, a would-be intervenor can properly assert the prospect of stare decisis from an unfavorable judgment.²²¹ This would be of interest not only to firms or advocacy organizations who are engaged with patent policy, but also to potential infringers

215. Reply in Support of Supplemental Brief for Intervenor at 5, Knowles Elecs., L.L.C. v. Matal, No. 16-1954, 2017 WL 4157187, at *5 (Fed. Cir. Sept. 5, 2017).

216. *Id.*

217. See 318 U.S. at 95 (referring to affirmance upon the same “*grounds* on which the agency acted,” not on different grounds pertaining to the same issue (emphasis added)).

218. See FED. R. CIV. P. 24(a)(2).

219. See *id.* 24(b).

220. See *supra* note 189 and accompanying text.

221. See *supra* note 190 and accompanying text.

who sensibly wish to avoid relitigating the validity of a particular patent or the probative force of a certain piece of prior knowledge in a given technology, or against a given patented invention or class of inventions. Similarly, a would-be intervenor can properly assert the prospect of future adverse litigation.²²² This would likely be of great interest to potential infringers of the patent in question, as the majority of parties (70%) who bring a PTAB validity challenge are prior defendants in an infringement lawsuit in U.S. district court on the same patent.²²³

Moreover, under the one-plaintiff rule, intervening on appeal would solve the significant problem of standing for private parties who could not otherwise make the leap from agency adjudication to Article III review.²²⁴ The AIA proceedings' liberal rules on joinder and their lack of standing requirements have mitigated a considerable collective action problem in bringing patent validity challenges,²²⁵ but these effects are limited to the agency adjudication process. So long as an intervenor who seeks the same relief as a party with proven standing need not establish its own standing, however, validity challengers without standing seem to have a back door into the appellate review process. Even parties who were not involved in the PTAB adjudication may reasonably infer the importance of a case from the fact that it was appealed at all, and opt into the appeal.²²⁶ In other words, this selection effect offers savings of the cost that a party would otherwise have to bear in searching out patents and patent cases in which to commit its resources, albeit at the expense of entering late in the case after many issues have already been framed or even resolved.

Current intervention in Federal Circuit appeals is largely, though not exclusively, a Patent Office activity. Analysis of data on intervenors in the Federal Circuit reveals that, during the period of December 2013 to April 2017, when the Patent Office intervened in 145 docketed cases,²²⁷ 142 private parties intervened in only 43

222. See *supra* note 191 and accompanying text.

223. See Vishnubhakat, Rai & Kesan, *supra* note 4, at 73–74.

224. See *Consumer Watchdog v. Wis. Alumni Research Found.*, 753 F.3d 1258, 1261–62 (Fed. Cir. 2014); *supra* notes 80–81 and accompanying text.

225. See Vishnubhakat, Rai & Kesan, *supra* note 4, at 49–50, 59, 65–66, 74–75.

226. It is well documented in the law and economics literature that the cases that survive settlement and post-trial process such as motions for judgments notwithstanding the verdict that proceed to appeal are likely to be uncertain under existing law. See generally Richard L. Revesz, *Litigation and Settlement in the Federal Appellate Courts: Impact of Panel Selection Procedures on Ideologically Divided Courts*, 29 J. LEGAL STUD. 685 (2000); Priest & Klein, *supra* note 19.

227. See *supra* Part III.C.

cases.²²⁸ By contrast, during the equivalent preceding period of February 2010 to November 2013, 63 private parties intervened in 30 docketed cases while the Patent Office apparently did not intervene in any. The distribution of private-party intervenors after December 2013, when the Patent Office began exercising its authority under section 143, appears to have shifted toward more concentrated, multi-party intervention as compared to the pre-December 2013 period. Table 2 and Figure 1 summarize these findings.

A decline in the relative share of private-party intervention coupled with more concentrated case selection by private parties suggests a net offloading onto the Patent Office of the responsibility to intervene. This is significant precisely because private party intervenors will often have a greater ability than the Patent Office to show an interest that is sufficient to intervene in a given case. Still, rather than entrust the protection of larger social interests to a diffuse group of private-party intervenors, Congress has recognized the coordinating and policymaking function that agency intervention can properly serve—within constitutional limits. When understood this way, further intervention by private parties remains a useful adjunct, especially for those who may be dissatisfied by the agency's priorities. Thus, if the decline in private-party intervention has reached, or will soon reach, some equilibrium with agency intervention, that outcome seems preferable to a complete abdication by private parties of the effort to intervene.

What remains unknown, moreover, is whether the private parties that intervened, either before or after the Patent Office's ascendant role, participated in the dispute below as well or intervened only on appeal. It is also unknown whether these private-party intervenors could have shown, or did show, independent Article III standing. Further analysis of these issues would shed light on the hypotheses above regarding selective intervention on appeal and the use of the one-plaintiff rule to sidestep a standing inquiry between agency adjudication and Article III review.

V. CONCLUSION

The recently created authority of the Patent Office to intervene in appeals from its own administrative adjudications of patent validity has conferred both discretion and obligation upon the agency. The observed current usage of this statutory intervention

228. Data on Federal Circuit intervenors was gathered using Docket Navigator. See <http://www.docketnavigator.com> [<https://perma.cc/NVF6-U4XH>].

authority is best understood as part of a larger campaign of policymaking that the agency has undertaken after a long period of Federal Circuit primacy in U.S. patent law. Choices by agency leadership about when to intervene and what positions to take are, by prevailing understandings of Article III standing generally and intervenor standing in particular, relatively unfettered, particularly under the one-plaintiff rule. Recent Supreme Court guidance about the limits of intervenor standing, however, should give the agency pause in pressing the highly expansive view that it has recently taken before the Federal Circuit. The Federal Circuit, for its part, has an opportunity in the currently pending *Knowles Electronics* case to clarify how these general principles of justiciability and procedure will reshape participation and engagement with the patent system in the era of PTAB review, not only by the Patent Office but also by the public.

APPENDIX: TABLES AND FIGURES

Table 1. Procedural Posture of Consolidated Disputes in Federal Circuit Appeals Where the Patent Office Intervened (Dec. 2013–Apr. 2017)²²⁹

	Challenger Did Participate in Appeal	Challenger Did Not Participate in Appeal	Subtotal
Challenger Won in the PTAB	49	28	77
Challenger Lost in the PTAB	19	0	19
Subtotal	68	28	96

Table 2. Intervention in Docketed Federal Circuit Cases before and after the Patent Office Began Using its § 143 Intervenor Authority

Intervenor	Feb. 2010–Nov. 2013	Dec. 2013–Sept. 2017
Patent Office	0 cases	145 cases
Private Party	63 parties 30 cases	142 parties 43 cases

229. Case data on USPTO intervention in the Federal Circuit was gathered using Docket Navigator. See <http://www.docketnavigator.com> [<https://perma.cc/NVF6-U4XH>]. Data about the agency's positions was hand-coded from its briefs in those cases.

Figure 1. Distribution of Private-Party Intervenor Appeals across Single- and Multi-Intervenor Appeals in the Federal Circuit

