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I Fought the Shaw: A Game Theory Framework and Approach to the District Courts' Struggle with IPR Estoppel

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I FOUGHT THE *SHAW*: A GAME THEORY FRAMEWORK AND APPROACH TO THE DISTRICT COURTS' STRUGGLE WITH IPR ESTOPPEL

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An ongoing dispute among district courts as to the scope of inter partes review estoppel¹ provides a useful set for later examination of game theory perspectives on repeat players and institutional actors within the patent ecosystem: the Patent Trial and Appeal Board, District Courts, Petitioners, and Plaintiffs. While the Federal Circuit would normally be expected to rapidly address this ongoing rift, the potential alteration of the issue by the Supreme Court through *SAS Inst., Inc. v. Matal* may give the Circuit pause and provide a greater window for future study.²

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1. For a quick primer on this issue, see Jonathan R. Bowser, *IPR Estoppel: District Courts Are Questioning the Reasoning of Shaw but are Compelled to Follow It*, 29 NO. 10 INTELL. PROP. & TECH. L.J. 20 (2017).

2. 825 F.3d 1341 (Fed. Cir. 2016), *cert. granted*, 137 S. Ct. 2160 (May 22, 2017) (No. 16-969) (argued Nov. 27, 2017).

The America Invents Act of 2011³ provides for patent challenges at the Patent Trial and Appeal Board (PTAB or the “Board”) through a procedure known as inter partes review (IPR).⁴ A patent challenger files a petition noting the grounds upon which specific claims of a patent may be invalid. The PTAB, in reviewing the petition(s), may elect to institute review only on claims that establish a reasonable likelihood of unpatentability and may cull redundant or otherwise weak grounds.⁵ The PTAB then considers and renders written judgment only as to those instituted claims in light of those grounds.⁶

As a parallel track that may simplify litigation, parties in district court patent actions may seek a stay pending IPR.⁷ However, much of the simplification inherent in IPR relies on the estoppel effect of IPR.⁸ If petitioner-defendants are able to utilize known prior art and combinations in both IPR and patent actions, the winnowing of issues will be greatly limited.⁹ Accordingly, the estoppel provision of the act, 35 U.S.C. Section 315(e)(2), provides that a patent challenger in U.S. District Court or the ITC that also seeks IPR “may not assert” any invalidity ground in the patent case that it “raised or reasonably could have raised during that inter partes review.”¹⁰

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

4. 35 U.S.C. §§ 311–19 (2012).

5. 37 C.F.R. § 42.108 (2018); see also Jason German & Wayne Stacy, *Prepare for More Estoppel if the Supreme Court Reverses Federal Circuit on Partial IPR Institutions*, IP WATCHDOG (Jun. 25, 2017) <http://www.ipwatchdog.com/2017/06/25/prepare-more-estoppel-supreme-court-reverses-federal-circuit-partial-institutions/id=84826/> (finding the PTAB partially instituted 50% of the time in 2013 and 23% of the time in 2016).

6. This is the very issue of *SAS Inst., Inc. v. Matal*. See 825 F.3d 1341, cert. granted, 137 S. Ct. 2160 (May 22, 2017) (No. 16-969) (concerning the validity of this practice in light of Section 318(a)).

7. Numerous academics have addressed the interesting strategic avenues introduced by this parallel system. See Saurabh Vishnubhakat, Arti K. Rai & Jay P. Kesan, *Strategic Decision Making in Dual Ptab and District Court Proceedings*, 31 BERKELEY TECH. L.J. 45, 45 (2016); see also Jonathan Stroud, Linda Thayer & Jeffrey C. Totten, *Stay Awhile: The Evolving Law of District Court Stays in Light of Inter Partes Review, Post-Grant Review, and Covered Business Method Post-Grant Review*, 11 BUFF. INTELL. PROP. L.J. 226, 227 (2015); W. Michael Schuster, *Invalidity Assertion Entities and Inter Partes Review: Rent Seeking as a Tool to Discourage Patent Trolls*, 51 WAKE FOREST L. REV. 1163 (2016).

8. See *Shaw Indus. Grp. v. Automated Creel Sys.*, 817 F.3d 1293, 1298 (Fed. Cir. 2016). The loss of this efficiency is a constant complaint of district courts struggling with *Shaw*.

9. See, e.g., *Cobalt Boats, LLC v. Sea Ray Boats, Inc.*, No. 2:15CV21, 2017 WL 2605977, at *3 (E.D. Va. June 5, 2017) (“It would waste this Court’s time to allow a stay for a year during IPR proceedings and then review invalidity arguments that Defendants could (and perhaps should) have raised in their IPR petition.”).

10. “The petitioner in an inter partes review . . . that results in a final written decision . . . may not assert either in a civil action [in district court] or in [an ITC investigation] that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during that inter partes review.” 35 U.S.C. § 315(e)(1).

The prior understanding of that provision was that estoppel attached broadly, giving the petitioning party incentive to focus on the best invalidity grounds while also providing a reasonably wide canvas of other invalidating grounds and art, all within the petitions' constrained pages.¹¹ However, the Federal Circuit disturbed this understanding by announcing a far narrower reach of estoppel, first in *Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*,¹² and again in *HP Inc. v. MPHJ Tech. Invs., LLC*.¹³

In the former case, the Petitioner had petitioned for IPR bringing three grounds against interposing claims.¹⁴ The Board instituted only on two of those three grounds, denying institution of the third ground "as redundant in light of [its] determination that there is a reasonable likelihood that the challenged claims are unpatentable based on the grounds of unpatentability on which we institute an inter partes review."¹⁵ Petitioner later sought review of the ground that was not instituted as redundant. The Petitioner sought a writ of mandamus "instructing the PTO to reevaluate its redundancy decision and to institute IPR based on the [non-instituted] ground," arguing that extraordinary relief was necessary as it would be estopped from bringing that non-instituted ground in district court.¹⁶

The Court denied the writ. In short, the Federal Circuit read the "during that inter partes review" section text as applying only to instituted grounds, on the basis that the IPR only occurs when review is actually instituted.¹⁷ Thus, petitioner's petitioned but not instituted ground, which was rejected without a merits review, was never part of the IPR and accordingly was not estopped.¹⁸

Before exploring the potential meaning of *Shaw*, it is helpful to review four categories of challenges that will come into play.

11. See, e.g., *Clearlamp, LLC v. LKQ Corp.*, No. 12 C 2533, 2016 WL 4734389, at *8 (N.D. Ill. Mar. 18, 2016), *judgment entered*, 2016 WL 7013478 (N.D. Ill. Nov. 30, 2016); Note, *Recasting the U.S. International Trade Commission's Role in the Patent System*, 126 HARV. L. REV. 2337, 2342 (2013) (presenting broad estoppel as non-controversial point).

12. 817 F.3d at 1293.

13. 817 F.3d 1339, 1347 (Fed. Cir. 2016) ("the noninstituted grounds do not become a part of the IPR. Accordingly, the noninstituted grounds were not raised and, as review was denied, could not be raised in the IPR."); see also *Shaw*, 817 F.3d at 1299 (*MPHJ*'s citation of *Shaw* guards against accusations that the estoppel discussion in *Shaw* was mere dicta, as the court found it "lack[ed] jurisdiction to review the Board's decision not to institute IPR on the [redundant] ground.").

14. *Shaw*, 817 F.3d at 1296.

15. *Id.* at 1297 (internal citations omitted, internal quotations omitted, and emphasis in original).

16. *Id.* at 1299.

17. *Id.* at 1300 (emphasis in original).

18. *Id.*

- 1) Instituted Ground – a prior art ground advanced by petitioner on which the PTAB institutes review of a claim;
- 2) Non-Petitioned Ground – a prior art ground not advanced by petitioner;¹⁹
- 3) Non-Instituted Non-Procedural – a prior art ground advanced by petitioner on which the PTAB does not institute review due to merits or discretion; and
- 4) Non-Instituted Procedural – a prior art ground advanced by petitioner on which the PTAB does not institute review due a procedural reason, such as redundancy in light of other instituted grounds.

The exact meaning of *Shaw* has befuddled the district courts, as the meaning of “reasonably could have raised” is hard to square with the literal reading of *Shaw*. The difficulty of applying *Shaw* is further complicated by two obstacles: first, the Federal Circuit did not have cause to address *non-petitioned* grounds, and second, a narrowing of estoppel would potentially give patent challengers two bites at the apple, thereby weakening the purposeful streamlining implicit in the very creation of the IPR process.

In light of the Federal Circuit’s arguable silence on this issue and the particular salience of an issue impacting district court dockets, lower courts have been exploring the contours of *Shaw*. The district courts have split into three camps with regard to the estoppel exemption:

- 1) Broad *Shaw*: Estoppel applies only to instituted grounds. Thus, petitioners are not estopped for grounds that were petitioned but denied, as well as for grounds that were not petitioned, even if those grounds were known or capable of being found with a diligent search.
- 2) Narrow *Shaw*: *Shaw*’s estoppel exemption applies only to petitioned but rejected grounds. Thus, the petitioners are estopped for grounds that were instituted, as well as for non-petitioned grounds that could have been raised had the petitioner been reasonably diligent.
- 3) Extremely Narrow *Shaw*: *Shaw*’s estoppel exemption applies only to the unique facts of *Shaw*. That is, the exemption ap-

19. For the purposes of this Article, assume that non-petitioned grounds involve art that a “skilled searcher conducting a diligent search reasonably could have been expected to discover.” 157 CONG. REC. S1375 (daily ed. Mar. 8, 2011) (statement of Sen. Kyl).

plies only to petitioned grounds that were rejected for procedural reasons, e.g., redundancy.

The chart below summarizes the reach of estoppel as to grounds in the view of the relevant judicial camps:

	Instituted Grounds	Non-Petitioned Grounds Reasonably Known	Petitioned Grounds, Not Instituted for non-Procedural Reason	Petitioned Grounds, Not Instituted for Procedural Reason
Broad <i>Shaw</i>	Estopped			
Narrow <i>Shaw</i>	Estopped	Estopped		
Extremely Narrow <i>Shaw</i>	Estopped	Estopped	Estopped	

I. NOTABLE CASES IN THE RESPECTIVE CAMPS

To better understand the logic and posture of these respective camps, it is helpful to review notable cases within each.

A. Broad Application of *Shaw*

Intellectual Ventures I LLC v. Toshiba Corp is notable in that Judge Robinson applies *Shaw* broadly while simultaneously lambasting the logic underpinning the Federal Circuit's opinion.²⁰ Judge Robinson wrote, "Although extending [this] logic to prior art references that were never presented to the PTAB at all (despite their public nature) confounds *the very purpose of this parallel administrative proceeding*, the court cannot divine a reasoned way around the Federal Circuit's interpretation in *Shaw*."²¹ Judge

20. 221 F. Supp. 3d 534, 553–54 (D. Del. 2016) (citing *Shaw*, 817 F.3d 1293).

21. *Id.* (emphasis added).

Robinson's opinion in denying reconsideration again signaled that the issue needed to be addressed by the Federal Circuit on appeal.²²

*Koninklijke Philips N.V. And Philips Lighting North America Corp., v. Wangs Alliance Corp.*²³ is an important case as it runs counter to the apparent shift typified by *Oil Dri*²⁴ towards a restrictive reading of *Shaw*. While the court notes that there is "much appeal in a broader reading of the estoppel provision," it held that estoppel did not apply to non-petitioned claims because "*Shaw* held that . . . 'during inter partes review' applies only to the period of time after the PTAB has instituted review."²⁵

B. Narrow Application of *Shaw*

Douglass Dynamics v. Myer Prods. announced common themes of district courts that are compelled to follow *Shaw* but seek to limit its impact.²⁶ Namely, that the lack of estoppel will prevent a stay from simplifying issues in surviving civil litigation and undermines the legislative intent of the law. Accordingly, the court applied *Shaw* to petitioned, non-instituted grounds, but found that known, non-petitioned grounds were estopped. "*Shaw*'s narrow view of § 315(e) estoppel undermines the purported efficiency of IPR, [and that u]nder this approach, IPR is not an alternative to litigating validity in the district court, it is an additional step in the process."²⁷

Oil Dri Corp. v. Nestle Purina Petcare Co. is a vital "narrow *Shaw*" case, that forcefully sets out the reasoning for applying *Shaw*'s estoppel exemption to petitioned, non-instituted grounds.²⁸ Specifically, applying estoppel to "noninstituted (but petitioned-for) grounds—which the PTAB declines to fully consider—deprives a party of 'a full and fair opportunity to be heard on the estopped ground'" whereas "[estopping] a party [who]

22. *Intellectual Ventures I LLC v. Toshiba Corp.*, Civ. No. 13-453-SLR, 2017 WL 107980, at *2 (D. Del. Jan. 11, 2017).

23. CA No. 14-12298-DJC, 2018 WL 283893 (D. Mass. Jan. 2, 2018).

24. *Oil Dri Corp. v. Nestle Purina Petcare Co.*, No. 1-15-CV-01067, 2017 WL 3278915 (N.D. Ill., Aug. 2, 2017).

25. *Koninklijke Philips*, 2018 WL 283893, at *4.

26. No. 14-CV-886-JDP, 2017 WL 1382556 (W.D. Wis. Apr. 18, 2017).

27. *Id.* at *4; *see also* *Cobalt Boats, LLC v. Sea Ray Boats, Inc.*, No. 2:15CV21, 2017 WL 2605977, at *3 (E.D. Va. June 5, 2017) ("It would waste this Court's time to allow a stay for a year during IPR proceedings and then review invalidity arguments that Defendants could (and perhaps should) have raised in their IPR petition.").

28. 2017 WL 3278915, at *9.

fails to raise a claim that it reasonably could have raised . . . is . . . fair—as the party could only blame itself.”²⁹

C. Very Narrow Application of Shaw

Biscotti Inc. v. Microsoft Corp. represents a clear outlier, with the court doing all in its power to cabin the effects of *Shaw*.³⁰

The Court recommends adopting the narrow view of *Shaw* and *HP* Namely, the Court reads *Shaw* and *HP* to exempt an IPR petitioner from § 315(e)’s estoppel provision only if the PTAB precludes the petitioner from raising a ground during the IPR proceeding for purely procedural reasons, such as redundancy Section 315(e) estops [defendant] from asserting at trial: (1) grounds for which the PTAB instituted IPR and determined those grounds to be insufficient to establish unpatentability after a trial on the merits; (2) grounds included in a petition but determined by the PTAB to not establish a reasonable likelihood of unpatentability (in other words, administrative review on the merits of a ground); and (3) grounds not included in a petition that a ‘skilled searcher conducting a diligent search reasonably could have been expected to discover.’ . . . [Defendant] is not estopped from asserting grounds included in a petition but which the PTAB found redundant or declined to institute review for another procedural reason.³¹

II. THE TRENDS OF THE DISTRICT COURTS AND THE SILENT FEDERAL CIRCUIT

A review of case law shows a trend toward the narrow *Shaw* approach,³² unsurprising in light of the perceived inefficiencies of the broad

29. *Id.*

30. No. 2:13-CV-01015-JRG-RSP, 2017 WL 2526231, at *7 (E.D. Tex. May 11, 2017).

31. *Id.*

32. See, e.g., *Oil-Dri Corp. of Am. v. Nestle Purina Petcare Co.*, No. 15-CV-1067, 2017 WL 3278915, at *4 (N.D. Ill. Aug. 2, 2017); *Cobalt Boats*, 2017 WL 2605977, at *3; *Douglas Dynamics, LLC v. Meyer Prod. LLC*, No. 14-CV-886-JDP, 2017 WL 1382556, at *4 (W.D. Wis. Apr. 18, 2017), *reh’g granted in part*, No. 14-CV-886-JDP, 2017 WL 2116714 (W.D. Wis. May 15, 2017); *Parallel Networks Licensing, LLC v. Int’l Bus. Machs. Corp.*, CA No.13-2072 (KAJ), 2017 WL 1045912, at *11 (D. Del. Feb. 22, 2017); *Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, No. 14-CV-1296-JPS, 2017

Shaw camp. However, the recent *Koninklijke* decision signals potential ongoing judicial constraint motivating at least some courts to buck this trend.³³ Courts that do adopt a broad *Shaw* reading appear to do so grudgingly, as both *Koninklijke* and *Intellectual Ventures* note the appeal of a narrow *Shaw* reading before following the interpreted will of the Federal Circuit. There appears to be at least one intra-district split, with the District of Delaware adopting both the narrow *Shaw* approach in *Parallel Networks Licensing, LLC v. Int'l Bus. Machs. Corp.*,³⁴ and the broad *Shaw* approach in *Intellectual Ventures I LLC v. Toshiba Corp.*³⁵

The Federal Circuit is not stepping in to address this rift. It has rejected as least one mandamus,³⁶ and does not appear to be in any hurry to weigh in. This may be due in part to the potential effects of *SAS*, which may alter the practice of partial institutions. In *SAS*, the Federal Respondent framed the issues thusly:

Section 318(a) of the Patent Act provides that, if the Patent and Trademark Office (PTO) institutes an inter partes review, the agency's Patent Trial and Appeal Board "shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added" during the proceeding. 35 U.S.C. 318(a). The question presented is as follows: Whether, in a case in which the PTO agrees to review the patentability of only a subset of the claims in a patent, the Board may address in its final written decision only the patentability of those claims the agency agreed to review.³⁷

WL 4220457, at *25 (E.D. Wis. Sept. 22, 2017); *Network-1 Techs., Inc. v. Alcatel-Lucent USA, Inc.*, No. 6:11-CV-492-RWS-KNM, 2017 WL 4478236, at *2 (E.D. Tex. Sept. 26, 2017).

33. See *Verinata Health, Inc. v. Ariosa Diagnostics, Inc.*, No. 12-CV-05501-SI, 2017 WL 235048, at *2 (N.D. Cal. Jan. 19, 2017). For a greater discussion of constraint and judicial splits, see Brian Sheppard & Andrew Moshirnia, *For the Sake of Argument: A Behavioral Analysis of Whether and How Legal Argument Matters in Decisionmaking*, 40 FLA. ST. U. L. REV. 537, 555 (2013).

34. No. CV 13-2072 (KAJ), 2017 WL 1045912, at *11 (D. Del. Feb. 22, 2017) (noting litigant was estopped from bringing claims based on prior art combinations of which it was aware before it filed its IPR petitions, though the court does not mention *Shaw*).

35. 221 F. Supp. 3d 534, 554 (D. Del. 2016).

36. See *In re Verinata Health, Inc.*, No. 2017-109, 2017 WL 1422489, at *2 (Fed. Cir. Mar. 9, 2017).

37. Brief for the Federal Respondent in Opposition, at I, *SAS Inst., Inc. v. Matal*, 137 S. Ct. 2160 (2017) (No. 16-969), 2017 WL 1291696, at *I.

SAS concerns the ability of the PTAB to address only particular claims. However, if the Board may no longer issue piecemeal decisions as to *claims*, it may reasonably impact the Board's approach to piecemeal handling of *grounds*.

III. WHEN RULES CHANGE, GAMING FOLLOWS

The differences between the Pre- and Post-*Shaw* approaches, and between the Post-*Shaw* approaches themselves, provide a wealth of potential trends to test for.

Specifically, the values of various grounds that are not instituted are no longer uniform:

- 1) *Petitioned, but Not Instituted Grounds are More Valuable Post-Shaw*—The Post-*Shaw* approach shared by the broad and narrow camp is the treatment of petitioned, non-instituted grounds as exempt from estoppel.
- 2) *The Narrow Application of Shaw Restricts Petitioners*—The narrow application of *Shaw* may force petitioners to abandon any ground that reasonably could have been included in the IPR petition. The extreme narrow application of *Shaw* further limits petitioners.
- 3) *Grounds Rejected for Procedural Reasons are Superior to Grounds Rejected on Abbreviated Merits*—The extremely narrow application of *Shaw* elevates procedural rejections of petition grounds, e.g., for redundancy, than those that fail to present a reasonable likelihood of unpatentability.

The disparate value of non-instituted grounds and the potential uncertainty with regard to estoppel effect will invite gaming by the relevant actors. The following hypothetical trends should be examined.

A. *Greater Forum Shopping by Plaintiffs*

With district courts taking very different views of estoppel, plaintiffs may seek to file suit in districts that apply a narrow interpretation of *Shaw* in an attempt to restrict defendant petitioners. Such a move may be difficult to detect, as estoppel considerations are not the only factors driving the rampant forum shopping in patent litigation. It is worth noting that the

Eastern District of Texas, the poster child for forum shopping and judge shopping³⁸ in matters of patent litigation, has seemingly embraced a narrow view of *Shaw*.³⁹ More importantly, the Supreme Court constrained the ability to forum shop in *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, further muddying the ability to detect a clear forum bias.⁴⁰

B. More Grounds Brought by Petitioners Spread Across More Petitions

As it is unclear whether non-petitioned grounds will be subject to estoppel, petitioners have much greater incentive to bring all available grounds across multiple petitions. Petitioners would also likely bring redundant grounds, as a non-institution on redundant grounds would be most immune from estoppel. As estoppel does not attach on non-instituted claims, petitioners could file multiple petitions, with each populated by claims of relatively the same strength.⁴¹ It would be worth exploring if the number of petitions per patent increases, while noting the number of claims per patent within those multiple petition challenges. Should this gaming become obvious, the Board may respond by denying multiple petitions based on duplicative art.⁴²

38. Jonas Anderson, *Judge Shopping in the Eastern District of Texas*, 48 LOY. U. CHI. L. J. 539, 544 (2016) (explaining how judge shopping occurs in the Eastern District of Texas).

39. See *Biscotti Inc. v. Microsoft Corp.*, No. 2:13-CV-01015-JRG-RSP, 2017 WL 2526231, at *7 (E.D. Tex. May 11, 2017); see also *Infernal Tech., LLC v. Elec. Arts Inc.*, No. 2:15-CV-01523-JRG-RSP, 2016 WL 9000458, at *4 (E.D. Tex. Nov. 21, 2016) (discussing lack of simplification inherent to a broad *Shaw* approach); *Network-1 Techs. Inc. v. Alcatel-Lucent USA, Inc.*, No. 6:11-CV-492-RWS-KNM, 2017 WL 4478236, at *2 (E.D. Tex. Sept. 26, 2017).

40. 137 S. Ct. 1514, 1520 (2017). Commentators differ as to the efficacy of this effort. Bryan A. Kohm & Jonathan T. McMichael, *Forum Shopping Tactics After TC Heartland*, LEXOLOGY.COM (July 27, 2017), <https://www.lexology.com/library/detail.aspx?g=d318fbd1-16e8-416b-9eeb-181e82ba720a>; see also Josh Landau, *TC Heartland Attacks The Heart Of Patent Forum Shopping*, PAT. PROGRESS (May 23, 2017), <https://www.patentprogress.org/2017/05/23/tc-heartland-attacks-heart-of-patent-forum-shopping/>; Tom McParland, *So Much for 'TC Heartland' Effect. One Apple Store Enough for Venue, Judge Says*, LAW.COM (Aug. 14, 2017) <https://www.law.com/sites/almstaff/2017/08/10/judge-single-apple-store-makes-delaware-venue-proper-for-patent-litigation-against-tech-giant/?sreturn=20180017135716>. A common concern is that *TC Heartland* is merely overloading the District of Delaware. Lauren H. Cohen, Umit G. Gurun & Scott Duke Kominers, *Patent Trolling Isn't Dead—It's Just Moving to Delaware*, HARV. BUS. REV. (June 28, 2017), <https://hbr.org/2017/06/patent-trolling-isnt-dead-its-just-moving-to-delaware>.

41. Jason German & Wayne Stacy, *Prepare for More Estoppel if the Supreme Court Reverses Federal Circuit on Partial IPR Institutions*, IP WATCHDOG (June 25, 2017), <http://www.ipwatchdog.com/2017/06/25/prepare-more-estoppel-supreme-court-reverses-federal-circuit-partial-institutions/id=84826/>.

42. See *id.*

C. District Courts Requiring Judicial Estoppel For Stays

District courts may seek to limit the impact of *Shaw* by requesting that parties stipulate to be estopped in line with Pre-*Shaw* or very Narrow *Shaw* approaches. This appears to have been the case in *Infernal Tech., LLC v. Elec. Arts Inc.*⁴³ There, the court noted, “the question of issue simplification in a case emerging from IPR with claims withstanding challenge depends on whether the Court will be required to assess the uncertain scope of IPR estoppel, and whether the parties will be required to relitigate invalidity issues already litigated at the PTAB.”⁴⁴ Accordingly, the only way that, “the Court can ensure that the issues would truly be simplified under the current state of the law” was if

[defendant] stipulates that for any claims surviving IPR, [defendant] will not assert a defense under §§ 102 or 103 based on prior art that it raised or reasonably could have raised in its IPR petitions, including any applicable references cited in [defendant]’s invalidity contentions or relied upon by [defendant]’s expert witness in his opening expert report regarding invalidity.⁴⁵

CONCLUSION

The *Shaw* rift will eventually need to be addressed, either directly by the Federal Circuit or obliquely by the Supreme Court. As IPR estoppel is an issue with high salience to repeat players, one would expect dynamic strategies to result. Empirical study of filings can test for these hypothetical patterns and provide opportunities for additional insight into actors in the patent ecosystem.

43. No. 2:15-CV01523-JRG-RSP, 2016 WL 9000458, at *4 (E.D. Tex. Nov. 21, 2016); *see also* *Lighting Sci. Grp. Corp. v. Shenzhen Jiawei Photovoltaic Lighting Co.*, No. 16-CV-03886-BLF, 2017 WL 2633131, at *5 (N.D. Cal. June 19, 2017).

44. *Infernal*, 2016 WL 9000458, at *4.

45. *Id.* at *5.