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The "Broadest Reasonable Interpretation" and Applying Issue Preclusion to Administrative Patent Claim Construction

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NOTE

THE "BROADEST REASONABLE INTERPRETATION" AND APPLYING ISSUE PRECLUSION TO ADMINISTRATIVE PATENT CLAIM CONSTRUCTION

Jonathan I. Tietz*

Inventions are tangible. Yet patents comprise words, and words are imprecise. Thus, disputes over patents involve a process known as "claim construction," which formally clarifies the meaning of a patent claim's words and, therefore, the scope of the underlying property right. Adversarial claim construction commonly occurs in various Article III and Article I settings, such as district courts or the Patent Trial and Appeal Board (PTAB). When these proceedings ignore each other's claim constructions, a patent's scope can become inconsistent and unpredictable. The doctrine of issue preclusion could help with this problem. The Supreme Court recently reemphasized in B & B Hardware v. Hargis Industries that administrative decisions can have issue preclusive effect. But district courts and the PTAB use formally different legal standards in claim construction, where the district court takes a narrower view of a patent's scope. This Note contends that a claim construction determination made by the PTAB under the "broadest reasonable interpretation" standard should, indeed, be the broadest reasonable interpretation of a claim. To facilitate uniformity and public notice, issue preclusion should be applied such that the PTAB's "broadest reasonable interpretation" is an outer interpretive bound of a patent's scope in subsequent district court litigation.

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Introduction

The archetypical invention is a specific, tangible thing: an antibacterial chemical compound, a wine opener, a self-driving robot, a steam engine. But the patents that protect inventions are intangible and abstract reducing a physical thing to words creates uncertainty. The law endeavors to make the scope of patents reasonably certain, but this is difficult because

^{1.} See 35 U.S.C. § 101 (2012); MPEP § 2106 (9th ed. Rev. 08.2017, Jan. 2018).

^{2.} See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 731 (2002) ("An invention exists most importantly as a tangible structure or a series of drawings. A verbal portrayal is usually an afterthought written to satisfy the requirements of patent law. . . . Things are not made for the sake of words, but words for things." (quoting Autogiro Co. of Am. v. United States, 384 F.2d 391, 397 (Ct. Cl. 1967)).

language is unavoidably imprecise. Even with an established evidentiary hierarchy, a settled interpretive procedure, and a body of case law governing interpretive principles, there is room to disagree. At nearly every patent-related proceeding, an adjudicating body must determine what exactly the patent in question means.

Yet patent infringement is a strict-liability offense: it is more or less irrelevant whether an infringer knows ex ante the precise scope of a patent's protectable subject matter.³ This scope is fuzzy, and it can vary across time, space, legal doctrine, and branch of the government. Ultimately, liability can turn on what seem like minutiae.

To add to the confusion, a patent might be held invalid in one setting and valid in another—for instance, the Patent Trial and Appeal Board (PTAB) might find a patent invalid in one action while the International Trade Commission (ITC), in a second action, simultaneously finds it not only valid but infringed.⁴ Paul Gugliuzza calls these "Schrödinger['s] patents,"⁵ evoking the famous quantum-mechanics thought experiment involving a simultaneously alive-and-dead cat. ⁶ But there are other troubling opportunities for inconsistency beyond this extreme. For instance, a patent owner might ask a court to construe the scope of a patent narrowly when the validity of the patent is in question, so as to discourage the court from finding impermissible (unpatentable) overlap with inventions already in the public domain.⁷ The same patent owner might then argue for a broad construction when suing for infringement, hoping to expand the scope of protection.8 This might make strategic sense for a patent owner,9 but it is worrisome when considering that a patent is meant to involve a fair trade of limited exclusivity (for the patentee) for disclosure of something useful (for society). 10 That bargain is frustrated when the actual scope of a patent varies by the day and by the courtroom.

- 3. Direct infringement, that is. *See* Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 1920, 1926 (2015) ("Direct infringement is a strict-liability offense."). Induced infringement does contain a scienter requirement, but this concerns only the existence of the patent, not the validity of its claims. *See id.* at 1928–30.
 - 4. See infra notes 79-82 and accompanying text.
- 5. Paul R. Gugliuzza, (In)valid Patents, 92 Notre Dame L. Rev. 271, 272-73, 330 (2016).
- 6. E. Schrödinger, *Die gegenwärtige Situation in der Quantenmechanik [The Current Situation in Quantum Mechanics]*, 23 NATURWISSENSCHAFTEN 807, 812 (1935); *see also Schrödinger's Cat*, SIMPLE ENG. WIKIPEDIA, https://simple.wikipedia.org/wiki/Schrödinger%27s_cat [https://perma.cc/GDS2-Z4FM].
- 7. See Mark A. Lemley & Mark P. McKenna, Scope, 57 Wm. & Mary L. Rev. 2197, 2225, 2240–41 (2016) (describing problem of strategically inconsistent patent scope arguments between infringement and validity contexts).
 - 8. See id.
 - 9. See id.

^{10.} Brenner v. Manson, 383 U.S. 519, 534–35 (1966); Jacob S. Sherkow, *Patent Law's Reproducibility Paradox*, 66 Duke L.J. 845, 848 (2017) ("Patents serve as a quid pro quo: inventors publicly disclose their inventions in return for exclusionary rights.").

But the law has a general solution for such inconsistencies: issue preclusion (also known as collateral estoppel). Under this doctrine, a litigant generally has one—and only one—opportunity to try a given issue in court, and that issue is treated as already decided if raised later. ¹¹ Issue preclusion is especially appropriate in the context of property right delineation, including patent litigation. ¹² For instance, a patent owner is estopped from asserting a patent previously held invalid, even where the parties in the two actions are not mutual. ¹³ Similarly, preclusion can apply to subsidiary issues, such as determinations of patent meaning. ¹⁴

Patents, however, play a key role in contentious *administrative* determinations, and this presents a complication. Some judges, while comfortable with issue preclusion between courts, have been hesitant to recognize the principle in an administrative context, often articulating separation-of-powers concerns. This is perhaps intuitive when an administrative body is acting outside its core institutional competence. But it is less so when an administrative body is charged with subject-matter expertise. The Supreme Court recently emphasized in *B* & *B* Hardware, *Inc.* v. Hargis Industries,

- 11. Restatement (Second) of Judgments § 27 (Am. Law Inst. 1982) ("When an issue of fact or law is actually litigated and determined by a valid and final judgment, and the determination is essential to the judgment, the determination is conclusive in a subsequent action between the parties, whether on the same or a different claim."); see also Reese v. Verizon Cal., Inc., 498 F. App'x 980, 982 (Fed. Cir. 2012) ("[C]ollateral estoppel... prevents a plaintiff who previously litigated a claim... (and lost) from taking 'another bite at the apple'....").
- 12. See Restatement (Second) of Judgments ch. 3, topic 2, tit. E, intro. note ("The view has been expressed by some commentators that the applicability of issue preclusion ought perhaps to vary with the subject matter—broad in cases involving questions of property and status, where the need for stability is clearest...."); 35 U.S.C. § 261 (2012) ("Subject to the provisions of this title, patents shall have the attributes of personal property."); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 730–31 (2002) ("[A patent] is a property right; and like any property right, its boundaries should be clear.").
 - 13. See Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found., 402 U.S. 313, 349-50 (1971).
 - 14. See infra note 157 and accompanying text.
- 15. E.g., B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1318 (2015) (Thomas, J., dissenting) (questioning "whether applying administrative preclusion to a core factual determination in a private-rights dispute comports with the separation of powers"); see also David A. Brown, Note, Collateral Estoppel Effects of Administrative Agency Determinations: Where Should Federal Courts Draw the Line?, 73 CORNELL L. Rev. 817, 820 n.18 (1988) (noting more hesitation on issues of law).
- 16. See, e.g., Campbell v. Ark. Dep't of Correction, 155 F.3d 950, 960 (8th Cir. 1998) ("Issue preclusion does not apply with equal force to all administrative proceedings...."); Edmundson v. Borough of Kennett Square, 4 F.3d 186, 193 (3d Cir. 1993) ("[W]e do not think that an administrative agency consisting of lay persons has the expertise to issue binding pronouncements in the area of federal constitutional law. Our determination not to grant the Commission's ruling preclusive effect is based on the considerations listed in Astoria—the rights at stake, as well as the power and relative adequacy of state procedures in this highly specialized area.").

Inc. ¹⁷ that administrative determinations can, when appropriate, have preclusive effects in later judicial proceedings if a two-step test is met. ¹⁸ The impact of *B* & *B* Hardware on patent law has not been resolved, but in general, courts have been reluctant to apply it. ¹⁹ Yet *B* & *B* Hardware presents an opportunity to apply issue preclusion law to the administrative patent context. In doing so, courts can encourage consistency in interpretation of patent scope and vindicate the exclusivity–disclosure bargain that a patent is meant to strike.

This Note argues that claim construction by the PTAB—that is, administrative determinations of the scope of a given patent²⁰—should give rise to issue preclusion, forming a preclusive outer bound of a patent's scope. Part I explains how adjudication within various Article I and Article III proceedings has created inconsistency in the scope of patent rights and notes the reluctance of district courts and ITC administrative judges to afford an issue preclusive effect to PTAB decisions. Part II explores the Supreme Court's reasoning in B & B Hardware, in which the Court emphasized a functionalist, two-step approach to applying issue preclusion to the decisions of administrative bodies acting in an adjudicatory capacity. Part III applies this "B & B Two-Step" inquiry to the inter partes review (IPR) proceeding created by the America Invents Act (AIA) and concludes that such preclusion is consistent with the AIA. Part IV proposes an outer-bounds preclusion theory consistent with the policy goals underlying claim construction and faithful to the differences underlying judicial and administrative determinations of claim scope.

I. Schrödinger's Patent: How Can a Patent's Meaning Change?

This Part describes the legal and structural causes of the "Schrödinger's patent" problem. Section I.A explores the role of claim construction in patent law. Section I.B highlights the policy considerations that underlie claim construction and also notes the public reliance interest on patent scope determinations. Section I.C demonstrates how a patent may take on different meanings in different legal settings, due in part to inconsistencies in the weight district courts afford administrative claim construction decisions.

A. The Role of Claim Construction in Patent Law

In principle, a patent is a single document describing a single invention with clarity, staking out the inventor's claimed property rights.²¹ This is a

^{17. 135} S. Ct. at 1293.

^{18.} See infra Part II.

^{19.} See infra notes 73–75 and accompanying text.

^{20.} See infra notes 35-36 and accompanying text.

^{21.} See 35 U.S.C. § 112(a) (2012) ("The specification shall contain a written description of the invention . . . in such *full, clear, concise, and exact terms* as to enable any person skilled in the art . . . to make and use the same" (emphasis added)); § 112(b) ("The specification shall

trade: an inventor makes public a clear and enabling disclosure of a new and useful invention, and in exchange, the government grants a temporary right to exclude others from practicing that invention.²² Clarity is a virtue here. Because patent infringement is a strict-liability offense,²³ it is sound policy for the public to know ex ante whether a particular patent will be infringed by a given technology.²⁴

In practice, clarity is difficult to achieve.²⁵ Language is fuzzy, even when objective technical terms are employed.²⁶ Indeed, the inherent complexity of technology,²⁷ the ambiguity of language,²⁸ the changing meanings of technical terms over time,²⁹ and various idiosyncrasies of patent law³⁰ all play a synergistic role in this uncertainty. Thus, despite efforts by Congress and the

conclude with one or more claims *particularly pointing out and distinctly claiming the subject matter* which the inventor or a joint inventor regards as the invention." (emphasis added)).

- 22. See Sherkow, supra note 10, at 865–66 (discussing the disclosure "quid pro quo"); see also Universal Oil Prods. Co. v. Globe Oil & Ref. Co., 322 U.S. 471, 484 (1944) ("As a reward for inventions and to encourage their disclosure, the United States offers a seventeen-year monopoly But the quid pro quo is disclosure . . . in sufficient detail to enable one skilled in the art to practice the invention . . . and the same precision of disclosure is likewise essential to warn the industry concerned of the precise scope of the monopoly asserted.").
 - 23. See supra note 3 and accompanying text.
- 24. See Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2129 (2014) (remarking that a patent must be clear enough to "appris[e] the public of what is still open to them," so as to avoid a "zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims" (cleaned up)).
- 25. *See, e.g.*, Haemonetics Corp. v. Baxter Healthcare Corp., 607 F.3d 776, 783 (Fed. Cir. 2010) ("[C]laim construction frequently poses difficult questions over which reasonable minds may disagree . . . ").
- 26. See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 730–31 (2002) ("Unfortunately, the nature of language makes it impossible to capture the essence of a thing in a patent application.... The language in the patent claims may not capture every nuance of the invention or describe with complete precision the range of its novelty.").
- 27. See, e.g., Donna M. Gitter, Should the United States Designate Specialist Patent Trial Judges? An Empirical Analysis of H.R. 628 in Light of the English Experience and the Work of Professor Moore, 10 Colum. Sci. & Tech. L. Rev. 169, 174–82 (2009); Peter Lee, Patent Law and the Two Cultures, 120 Yale L.J. 2, 9–17 (2010).
- 28. See, e.g., Q-Pharma, Inc. v. Andrew Jergens Co., 360 F.3d 1295, 1301 (Fed. Cir. 2004) ("[I]t is not unusual for parties to offer competing definitions of even the simplest claim language.").
- 29. See generally Mark A. Lemley, *The Changing Meaning of Patent Claim Terms*, 104 MICH. L. REV. 101 (2005) (exploring how courts approach patent claim interpretation when words change over time).
- 30. For instance, patent law has its own conventions for the meaning of "a" or "an" (sometimes meaning "one," see, e.g., N. Am. Vaccine, Inc. v. Am. Cyanamid Co., 7 F.3d 1571, 1575–76 (Fed. Cir. 1993), and sometimes meaning "one or more," see, e.g., Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1342–43 (Fed. Cir. 2008)) as well as "comprising," see Antonin Scalia & Bryan A. Garner, Reading Law 133 (2012) (characterizing synonymy of "comprise" and "include" as an "anomalous" feature of patent law).

courts to improve clarity by legislation and judicial doctrine, ambiguity and uncertainty persist.³¹

Resolving the scope of a patent is essential to determining both infringement and validity.³² Doing so determines which possible inventions are or are not included within the language of a patent's claims.³³ A claim is overbroad when it comprises subject matter previously available to the public³⁴—that is, where the public does not receive its end of the disclosure bargain: a new and useful invention.

The legal process of determining what the words of a patent claim mean is known as "claim construction" and is in many ways analogous to statutory construction. Claim construction determines the scope of the patent right. In the litigation context, claim construction is adversarial and subject to tensions even between alternative goals of the same party. This querying of the precise "metes and bounds" of a utility patent frequently arises not only in different actions but also in different jurisdictional settings. For instance, the same patent owner might sue various defendants for individual instances of infringement. Or the same patent may appear in IPR proceedings before the PTAB to contest validity, Section 337 investigations before the ITC to determine infringement by imported goods, or district court proceedings to resolve issues of infringement or validity.

The question of a patent's meaning is not only an ex post adjudicative consideration, because the inventing public must also look to patent claims to determine ex ante any risk of infringement. Somewhere between these ex post and ex ante considerations is patent examination, where the Patent Of-

^{31.} See generally Gary M. Fox, Note, Understanding Nautilus's Reasonable-Certainty Standard: Requirements for Linguistic and Physical Definiteness of Patent Claims, 116 Mich. L. Rev. 329 (2017) (discussing the Supreme Court's reinterpretation of the statutory definiteness requirement for patent claims).

^{32.} See generally 3-8 Donald S. Chisum, Chisum on Patents § 8.01 (2018) (discussing patent claims and noting that patent claims serve the dual functions of "defin[ing] the invention for the purpose of applying the conditions of patentability" and "for the purpose of determining infringement").

^{33.} See id.

^{34.} See 35 U.S.C. § 102(a) (2012).

^{35.} Or, alternatively, "claim interpretation." *E.g.*, 5-18A Сніѕим, *supra* note 32, § 18.01.

^{36.} See generally 5-18A Chisum, supra note 32, §§ 18.01, 18.03 (discussing claim interpretation); Christian E. Mammen, Patent Claim Construction as a Form of Legal Interpretation, 12 J. Marshall Rev. Intell. Prop. L. 40 (2012) (comparing patent interpretation and legal interpretation).

^{37.} See Lemley & McKenna, *supra* note 7, at 2225 (describing problem of patent owners arguing for inconsistent scope depending on the doctrinal context and cautioning that "[w]ithout a single integrated scope proceeding, there is no easy way to constrain this behavior").

^{38.} $See MPEP \S 2173.02 (9th ed. Rev. 08.2017, Jan. 2018).$

^{39.} See Gugliuzza, supra note 5, at 278–87.

fice looks at an application's claims and determines their meaning as measured against already-known inventions, or "prior art." ⁴⁰

B. Policy Considerations Underlying Claim Construction

Certain policy considerations in claim construction emphasize the importance of clarity and uniformity in defining a patent's scope. These include the public notice function of patents and the desire for uniformity. There are also equitable considerations. Third parties should be able to rely on prior adjudications determining the boundaries of patent rights. It is also desirable to prevent patent owners from molding their patents in real time based on the current legal context.

The public notice function aims to warn potential infringers and the public of the scope of a patent's claims. 41 This not only enables commercializers to avoid liability but also marks the edge of protected patent space for innovators, signaling the frontiers at which patentable innovation can be pursued. Similarly, the normative goal of uniformity in patent interpretation has been articulated in the case law 42 and in the literature. 43 The Supreme Court has also emphasized the importance of clarity in the boundaries of patent rights—as with *any* property right. 44 Together, these goals vindicate the fundamental exclusivity—disclosure trade in patent law. 45

Cognizant of this trade, the Court has emphasized the need for the public to know what is and what is not infringement, seeking to minimize any risk-laden "zone of uncertainty." ⁴⁶ But the Court has also cautioned against strict literalism. For instance, the "doctrine of equivalents" seeks to avoid underprotection of patent rights. ⁴⁷ This, however, lessens certainty ex ante. ⁴⁸

^{40.} See generally MPEP ch. 700 (providing procedure for examination of applications); 1-3 Chisum, supra note 32, § 3.01.

^{41.} Phillips v. AWH Corp., 415 F.3d 1303, 1312, 1319 (Fed. Cir. 2005) (en banc) (invoking public notice function and considerations of justice to the public in interpretation).

^{42.} See Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996) ("[W]e see the importance of uniformity in the treatment of a given patent as an independent reason to allocate all issues of construction to the court.").

^{43.} Scholars have advocated for consistent interpretations of a patent's scope across time and across doctrines. *See* Lemley, *supra* note 29 (across time); Lemley & McKenna, *supra* note 7 (across doctrines). This Note argues for consistent interpretations across branches of the government.

^{44.} *E.g.*, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 730 (2002) (emphasizing that a patent is "a property right; and like any property right, its boundaries should be clear"); *Markman*, 517 U.S. at 373 ("It has long been understood that a patent must describe the exact scope of an invention and its manufacture").

^{45.} See Sherkow, supra note 10, at 865–66 (discussing this "quid pro quo").

^{46.} See supra note 24.

^{47.} See Festo, 535 U.S. at 731-32 ("If patents were always interpreted by their literal terms.... [u]nimportant and insubstantial substitutes for certain elements could defeat the patent....").

As a result, the public has a heightened reliance interest on legal decisions as to patent scope⁴⁹—especially decisions that are formally part of the patent's prosecution history.⁵⁰ Claim construction doctrine supports the public's reliance interest—for instance, a patent's prosecution history is accorded heavy evidentiary weight by district courts.⁵¹

C. The Changing Meaning of a Single Patent in Various Settings

Despite these policy considerations, claim construction is not unified between proceedings, and so neither is patent scope. Questions of patent meaning arise in distinct adjudicatory bodies—namely, federal courts, the PTAB, and the ITC. These bodies all oversee questions of patent scope, and all patents in question are grounded in the same Patent Act.⁵² Yet, as described below, each has a distinct set of procedural rules and a hesitation to apply preclusion. Hence, "Schrödinger's patent" may arise because of conflicting decisions.⁵³

Questions of patent meaning arise in various legal settings. Article III courts hear disputes over patent infringement claims, patent invalidity counterclaims, and declaratory judgments of noninfringement or invalidity, among others. Article I bodies adjudicate patent rights too. For instance, Section 337 investigations before the ITC are accelerated inter partes proceedings in which the ITC determines whether imported articles infringe the intellectual property rights of domestic parties (and whether such articles are to be barred from import). ⁵⁴ The ITC is governed by its own rules of proce-

^{48.} See id. ("The scope of a patent is not limited to its literal terms but instead embraces all equivalents to the claims described. It is true that the doctrine of equivalents renders the scope of patents less certain." (citation omitted)).

^{49.} See Lauren Drake, Note, Preventing Inequity: Extending Issue Preclusion to Claim Construction During Reexamination of Previously Litigated Patents, 44 Loy. L.A. L. Rev. 749, 766 (2011) ("[The reliance] rationale extends to the public's reliance on claim construction as determined during a Markman hearing. In the same way that public policy is promoted through the public's ability to look only to non-disclaimed claims in the original patent to determine the patent's scope, public policy is also promoted through the public's ability to look at a patent's litigation history to determine the meaning of the patent's claims.").

^{50.} See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996) ("The claims, specification, and file history . . . constitute the public record of the patentee's claim, a record on which the public is entitled to rely.").

^{51.} See Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc) ("The prosecution history, which we have designated as part of the 'intrinsic evidence,' consists of the complete record of the proceedings before the PTO [T]he prosecution history provides evidence of how the PTO and the inventor understood the patent." (citation omitted)).

^{52.} The "Patent Act" generally refers to Title 35 of the U.S. Code.

^{53.} See Gugliuzza, supra note 5, at 287-92 (describing the nature of conflicting decisions between courts and the USPTO).

^{54.~} See 19 U.S.C. \S 1337 (2012) (empowering the ITC to conduct Section 337 investigations).

dure.⁵⁵ But these rules resemble the Federal Rules of Civil Procedure in many respects,⁵⁶ and the ITC is subject to the same Federal Circuit body of patent law as any other tribunal.⁵⁷ Section 337 investigations before administrative law judges are in many ways trial-like, requiring formal evidentiary hearings and involving exceptionally high-stakes, expensive disputes.⁵⁸

The United States Patent and Trademark Office (USPTO) also adjudicates some patent disputes. The most prominent of the USPTO's adjudicative forms is IPR, an adversarial post-grant validity challenge procedure before the PTAB established by the AIA in 2012.⁵⁹ Under the AIA, a party may petition the PTAB to institute an IPR; the party must establish that a patent is more likely than not invalid on the grounds of either novelty or obviousness.⁶⁰ If the PTAB institutes the IPR, the patent owner and petitioner participate in an abbreviated but trial-like proceeding.⁶¹ The PTAB ultimately issues a "final written decision" on patentability, including claim construction when necessary.⁶² Final decisions of the PTAB are appealable to the Federal Circuit.⁶³ As with ITC Section 337 investigations, proceedings at the PTAB follow a set of procedures that resemble the Federal Rules.⁶⁴

Because of the procedural and substantive similarities of district court, ITC, and PTAB claim construction, issue preclusion would be aptly applied between these settings. The commonality of the patent right, the prospect of judicial efficiency, and the weight of the policy underpinnings of patent law

- 61. See id. § 314(a).
- 62. Id. § 318(a).
- 63. Id. §§ 141(c), 319.

^{55.} See Section 337 Rules, U.S. Int'l Trade Commission, https://www.usitc.gov/intellectual_property/section_337_rules.htm [https://perma.cc/AT43-6KLR].

^{56.} See William P. Atkins & Justin A. Pan, An Updated Primer on Procedures and Rules in 337 Investigations at the U.S. International Trade Commission, 18 U. Balt. Intell. Prop. L.J. 105, 112 (2010) (observing that "[a]n investigation resembles private litigation and the Commission's Rules of Practice and Procedure (Rules) are based on the Federal Rules of Civil Procedure").

^{57.} See Laura G. Pedraza-Fariña, Understanding the Federal Circuit: An Expert Community Approach, 30 Berkeley Tech. L.J. 89, 98–104 (2015).

^{58.} See generally Understanding Investigations of Intellectual Property Infringement and Other Unfair Practices in Import Trade (Section 337), U.S. Int'l Trade Comm'n, https://www.usitc.gov/press_room/us337.htm [https://perma.cc/6N64-4QQC].

^{59.} Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 6(a), 125 Stat. 284, 299–305 (2011) (codified at 35 U.S.C. §§ 311–19 (2012)) (establishing inter partes review). Two similar procedures—so-called post-grant review (PGR) and covered business method review (CBM)—operate in largely the same way, with differences in timing, grounds to challenge a patent, challengeable subject matter, and standing. *See* Gugliuzza, *supra* note 5, at 281–85 (comparing and contrasting these proceedings).

^{60. 35} U.S.C. \S 311(b) (2012). IPR is limited to the body of prior art consisting of patents and written publications. *Id.*

^{64.} See, e.g., 37 C.F.R. \S 42.62(a) (2017) (adopting Federal Rules of Evidence as default rules in PTAB proceedings).

all should encourage these bodies to share claim construction determinations. Moreover, the doctrine of issue preclusion is a way the law generally endeavors to provide consistency between judgments, especially regarding property,⁶⁵ and courts have applied the doctrine to each others' claim construction decisions where appropriate.⁶⁶ Such preclusion should be expanded to include the PTAB and ITC.⁶⁷

Yet actual practice varies. For instance, district courts have no clear rule for claim construction following a proceeding at the PTAB for deference or for issue preclusion. Some courts give PTAB claim construction decisions "reasoned deference." District courts sometimes use PTAB interpretations when doing so would "simplify the claim construction issues" or would provide guidance. Other courts use PTAB claim construction decisions merely for "comfort." But some district courts consider PTAB claim construction to be extrinsic evidence entitled to no deference at all. The Federal Circuit has suggested in dicta that PTAB claim construction decisions do not satisfy the ordinary elements of issue preclusion.

- 65. See supra notes 11-12 and accompanying text.
- 66. E.g., In re Freeman, 30 F.3d 1459, 1469 (Fed. Cir. 1994).
- 67. This Note contends that issue preclusion as to *claim construction* would be appropriate. Preclusion as to *patent validity* is a separate question, and scholars such as Professor Paul Gugliuzza have generally cautioned against such preclusion because of the varying legal standards and burdens of proof on the issue of validity. *See* Gugliuzza, *supra* note 5, at 289. Even so, despite a separate burden of proof, success in an effort at invalidation at the PTAB or in district court results in the same legal outcome: invalidation of the patent. One cannot assert a PTAB-cancelled patent (if such cancellation is affirmed on appeal) in a later district court action. Gugliuzza responds by noting that in such cases, it is the certificate of cancellation (removing a patent owner's standing), not the doctrine of issue preclusion, that bars the later action. *Id.* at 312.
- 68. See, e.g., Contentguard Holdings, Inc. v. Amazon.com, Inc., Nos. 2:13-CV-1112-JRG, 2:14-CV-61-JRG, 2015 WL 8073722, at *11 (E.D. Tex. Dec. 4, 2015) ("On balance, Plaintiff has failed to justify departing from the PTAB's construction, which is entitled to 'reasoned deference.'" (quoting Maurice Mitchell Innovations, L.P. v. Intel Corp., No. 2:04-CV-450, 2006 WL 1751779, at *4 (E.D. Tex. June 21, 2006)).
- 69. See, e.g., MASA LLC v. Apple Inc., No. 4:15-CV-00889-AGF, 2016 U.S. Dist. LEXIS 60953, at *7-8 (E.D. Mo. May 9, 2016); Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd., No. 2:15-cv-00011-RSP, 2016 U.S. Dist. LEXIS 37502, at *13-14 (E.D. Tex. Mar. 23, 2016).
- 70. See, e.g., BTG Int'l Ltd. v. Actavis Labs. FI, Inc., No. 15-cv-5909 (KM)(JBC), 2016 U.S. Dist. LEXIS 157586, at *39 (D.N.J. Nov. 10, 2016) (noting that an IPR decision adopting a party's claim construction "would be relevant, but not dispositive").
- 71. E.g., Memory Integrity, LLC v. Intel Corp., No. 3:15-cv-00262-SI, 2016 WL 1122718, at *16 n.9 (D. Or. Mar. 22, 2016) ("This Court uses the PTAB decision on this issue not for guidance, but for comfort.").
- 72. E.g., Pragmatus AV, LLC v. Yahoo! Inc., No. C-13-1176 EMC, 2014 WL 1922081, at *4 (N.D. Cal. May 13, 2014) ("[T]his Court owes no deference to the PTAB's claim construction done as part of an inter partes review."); Depuy Orthopaedics, Inc. v. Orthopaedic Hosp., No. 3:12-CV-299-CAN, 2016 WL 96164, at *5 (N.D. Ind. Jan. 8, 2016) (same).
- 73. See SkyHawke Techs., LLC v. DECA Int'l Corp., 828 F.3d 1373, 1376 (Fed. Cir. 2016); see also Rembrandt Wireless Techs., LP v. Samsung Elecs. Co., 853 F.3d 1370, 1377 (Fed.

least one district court *has* applied issue preclusion, finding that the ordinary elements of issue preclusion are met with respect to IPRs.⁷⁴ Nevertheless, other courts have found that issue preclusion cannot apply.⁷⁵

Concurrent proceedings in district courts and the PTAB are another example of when claim construction judgments provide uncertain issue preclusive effects. The PTAB may invalidate a patent during the pendency of a district court case, yet the district court may forge ahead and submit the question of infringement to the jury anyway. District courts often stay their proceedings pending resolution of a PTAB proceeding, but they are under no obligation to do so, and the PTAB cannot stay its own proceeding.

What is the result of this inconsistency? Schrödinger's patent. For example, in *Intellectual Ventures I LLC v. Toshiba Corp.*, a district court considered a question of patent infringement despite the defendant's prior invalidation of the patent in an IPR.⁷⁹ There, the court interpreted a separate *statutory* estoppel provision to prevent the patent challenger from raising any ground that could have been raised in the IPR.⁸⁰ The lack of issue preclusion and the presence of the statutory estoppel provision essentially meant that a patent challenger could *lose* in district court precisely *because* they brought an action at the PTAB, despite winning there.⁸¹ In another example, the ITC found infringement of a patent based on claims that had

Cir. 2017) (noting that broader PTAB claim construction did not bind court but that issue was immaterial, as it would not have changed outcome)

- 75. See, e.g., Illumina, Inc. v. Qiagen, N.V., 207 F. Supp. 3d 1081, 1089 (N.D. Cal. 2016).
- 76. See Gugliuzza, supra note 5, at 292-305.
- 77. See, e.g., Intellectual Ventures I LLC v. Toshiba Corp., 221 F. Supp. 3d 534, 553–54 (D. Del. 2016) (applying *statutory* estoppel *against* party that had successfully invalidated patent at the PTAB).
- 78. See Gugliuzza, supra note 5, at 273, 285–86 (observing that "[a]cross all post-issuance proceedings, district courts grant motions seeking stays of litigation roughly sixty percent of the time").
 - 79. 221 F. Supp. 3d at 553-54, 559 (also denying a stay).
- 80. Intellectual Ventures I, 221 F. Supp. 3d at 553–54, 559; see also 35 U.S.C. § 315(e)(2) (2012) ("The petitioner in an inter partes review . . . that results in a final written decision . . . may not assert . . . in a civil action . . . that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during that inter partes review.").
- 81. See also Certain Hybrid Electric Vehicles and Components Thereof, USITC Inv. No. 337-TA-1042, at 1 (Nov. 8, 2017) (Respondent Ford's Petition for Review of Order No. 30 on Complainant's Motion for Summary Determination of Estoppel). In Certain Hybrid Electric Vehicles, complainant brought its ITC complaint after the PTAB finding of invalidity in an IPR. See id.

^{74.} See Princeton Dig. Image Corp. v. Konami Dig. Entm't, Inc., Nos. 12-1461-LPS-CJB, 13-335-LPS-CJB, 2017 U.S. Dist. LEXIS 92894, at *9–10 (D. Del. June 16, 2017).

been concurrently found unpatentable by the PTAB in an IPR; the ITC refused to lift its exclusion order on the basis of the IPR decision.⁸²

Patent scope, as a key aspect of a novelty or obviousness determination, can be determinative of patent validity.⁸³ Thus, inconsistent scope means inconsistent validity. A reluctance to apply issue preclusion to administrative decisions may frustrate not only the consistency goals of the doctrine but also those of the patent system generally.

II. Administrative Issue Preclusion: The *B & B Hardware* Two-Step

This Part explores the doctrine of administrative issue preclusion. Section II.A introduces the Court's jurisprudence on the grounding of issue preclusion in administrative decisions, as most recently expressed in $B \not e B$ Hardware. Section II.B examines the reasoning underlying $B \not e B$ Hardware and argues that the Court has adopted a functionalist two-step inquiry. Then, in the context of the same case, Section II.C examines the Court's application of ordinary issue preclusion law, focusing in particular on how the Court evaluates the identity of legal issues and materiality of procedural differences.

A. Administrative Issue Preclusion and the B & B Two-Step

In 2015, the Supreme Court reemphasized in B & B Hardware that administrative bodies acting in a judicial capacity presumptively give rise to issue preclusion if the ordinary elements of issue preclusion are satisfied. The Court formulated a two-part test, asking first whether there is an evident reason why Congress would not want particular administrative decisions to receive preclusive effect (B & B Step One) and second whether the ordinary elements of issue preclusion are met (B & B Step Two).

B & *B* Hardware was not the only time federal courts have found that administrative decisions can trigger issue preclusion. It is, however, the strongest articulation of the principle that unless expressly disclaimed, Congress "presumptively intends that an agency's determination... has preclusive effect." The Court has adopted the elements and underlying law of is-

^{82.} Certain Network Devices, Related Software and Components Thereof (II), USITC Inv. No. 337-TA-945 (July 20, 2017) (Notice of Commission Determination to Deny Respondent's Petitions to Suspend or Temporarily Rescind Remedial Orders).

^{83.} See, e.g., KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 427 (2007) (considering, with respect to patent validity, "the content of the prior art, the scope of the patent claim, and the level of ordinary skill in the art").

^{84.} B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1302-03 (2015).

^{85.} E.g., Univ. of Tenn. v. Elliott, 478 U.S. 788, 798 (1986); United States v. Utah Constr. & Mining Co., 384 U.S. 394, 421–22 (1966). See generally 18B Charles Alan Wright et al., Federal Practice and Procedure: Jurisdiction and Related Matters § 4475 (2d ed.), Westlaw (database updated April 2017).

^{86.} B & B Hardware, 135 S. Ct. at 1304–05.

sue preclusion from the Restatement of Judgments.⁸⁷ Thus, aside from certain exceptions, "[w]hen an issue of fact or law is actually litigated and determined by a valid and final judgment, and the determination is essential to the judgment, the determination is conclusive in a subsequent action between the parties, whether on the same or a different claim."⁸⁸

In *B* & *B* Hardware, Hargis Industries sought to register a trademark but ran into trouble when B & B Hardware filed an opposition proceeding before the Trademark Trial and Appeal Board (TTAB), alleging a likelihood of confusion with its own trademark.⁸⁹ The TTAB found Hargis's trademark likely to cause confusion with that of B & B Hardware, and Hargis did not appeal the TTAB decision, despite availability of judicial review.⁹⁰ B & B Hardware's opposition proceeding was concurrent with a district court infringement action between the same parties, and B & B Hardware argued that Hargis was precluded in the district court from contesting likelihood of confusion as a matter of issue preclusion.⁹¹ Below, the Eighth Circuit held that differences between the two proceedings (especially legal standards and procedure) made issue preclusion inappropriate.⁹² The Supreme Court disagreed.

B. The Court's Reasoning Underlying the B & B Two-Step

The Court's reasoning underlying this question can be divided into two parts: (1) can an agency's decisions *ever* provide a basis for issue preclusion? (" $B \not\leftarrow B$ Step One"); and, if so, (2) *when* can an agency's decision provide such a basis? (" $B \not\leftarrow B$ Step Two").

In establishing $B \not e B$ Step One, the Court first asked whether an agency decision could ever ground issue preclusion. 93 The Court articulated a broad policy goal of preventing relitigation and conserving time and resources, 94 emphasizing that "a losing litigant deserves no rematch after a defeat fairly suffered." 95 The majority also acknowledged case law indicating that "where

^{87.} Id. at 1303.

^{88.} Id . (quoting Restatement (Second) of Judgments § 27 (Am. Law Inst. 1982) (alteration in original)).

^{89.} *Id.* at 1299. The USPTO, under the Lanham Act, provides for an opposition proceeding before the Trademark Trial & Appeal Board (TTAB) wherein the pending registration of a trademark may be challenged. *See generally* TMEP § 1503 (Oct. 2017).

^{90.} B & B Hardware, 135 S. Ct. at 1302.

^{91.} Id.

^{92.} Id.

^{93.} Id.

^{94.} *Id.* at 1298–99 ("Allowing the same issue to be decided more than once wastes litigants' resources and adjudicators' time, and it encourages parties who lose before one tribunal to shop around for another. The doctrine of collateral estoppel or issue preclusion is designed to prevent this from occurring."); *see also id.* at 1302–03.

^{95.} $\it Id.$ at 1302–03 (quoting Astoria Fed. Sav. & Loan Ass'n v. Solimino, 501 U.S. 104, 107 (1991)).

a single issue is before a court and an administrative agency, preclusion . . . often applies." Because issue preclusion was such a "well established" principle at common law, the Court reiterated, courts may "take it as given" that when Congress has authorized agencies to resolve disputes, it "legislated with the expectation that the principle . . . will apply except when a statutory purpose to the contrary is evident." Accordingly, the Supreme Court articulated a baseline presumption that issue preclusion applies to the decisions of administrative bodies authorized to resolve disputes unless Congress clearly articulated otherwise. 98

Next, $B \not\in B$ Step Two. The Court asked "whether there is a categorical reason why [particular administrative] decisions can never meet the ordinary elements of issue preclusion." The Court emphasized that this inquiry is not defeated by the fact that sometimes the elements will not be met—it is aimed at whether they can never be. Thus, preclusion may apply in the administrative context if the ordinary elements of issue preclusion can be met. That is not to say that issue preclusion will always apply to the administrative decisions in question, but that is also true of judicial decisions.

C. The Court's Application of the Two-Step in B & B Hardware

Applying $B \not color B$ Step One ("statutory purpose to the contrary"), the Court examined the Lanham Act to discern whether there was "an 'evident' reason why Congress would not want TTAB decisions to receive preclusive effect, even in those cases in which the ordinary elements of issue preclusion are met." The Court found no such reason, noting that neither the Lanham Act's text nor structure "forbid issue preclusion." Likewise, the Court noted that judicial review of TTAB decisions is provided for and underscored the point that a party who *chooses* not to appeal is subject to preclusion, even if the conclusion would have been reviewed de novo. Turning to $B \not color B$ Step Two, the court found no categorical reason why the "ordinary elements" of issue preclusion could never be met at the TTAB. The Eighth Circuit had held that there could never be identity of the issues to the court for the issues to the court found the could never be identity of the issues.

^{96.} Id. at 1303.

^{97.} Id. (quoting Astoria v. Fed. Sav. & Loan Ass'n v. Solimino, 501 U.S. 104, 108 (1991)).

^{98.} *Id.* at 1302–05. This is referred to here as the "statutory purpose to the contrary" test, or $B \not \circ B$ Step One.

^{99.} *Id.* at 1306–10. That is, the elements set out in the Restatement. *Id.*

^{100.} *Id.* ("Although many registrations will not satisfy those ordinary elements, that does not mean that none will.").

^{101.} This question is referred to here as the "ordinary elements" test, or *B* & *B* Step Two.

^{102.} B & B Hardware, 135 S. Ct. at 1305.

^{103.} Id.

^{104.} Id.

^{105.} Id. at 1306.

^{106.} Identity of the issues is sometimes treated as a subsidiary consideration of the first element of preclusion from the Restatement (issue actually litigated), as in $B \not e B$ Hardware,

the TTAB and district courts because of different factors in assessing likelihood of confusion. ¹⁰⁷ The Court disagreed. In differentiating between legal standards and underlying factors, the Court acknowledged that issues "are not identical if the second action involves application of a different legal standard, even though the factual setting of both suits may be the same." ¹⁰⁸ But the Court also found that facially different issues, even with different statutory bases and underlying factors or tests, ¹⁰⁹ might be "in essence" the same legal standard. ¹¹⁰ Looking to the factors underlying the TTAB and the Eight Circuit tests, the Court concluded that they were "not fundamentally different." ¹¹¹

By emphasizing the "essence" of the underlying legal standards, the Court appears to have articulated a policy grounded more in functionalism than strict formalism, apparently concerned that technical differences in the wording of statutes might allow a party to practice "the very evils that issue preclusion helps to prevent." In looking at whether the two legal standards were the same, the Court considered "the operative language," the historical basis of each standard, and whether both tribunals apply the standards to achieve the same result. Rejecting the argument that the scope of the marks being compared typically differed, the Court declared that "a reason not to apply issue preclusion in some or even many cases" is not "a reason never to apply issue preclusion." 114

The Court also considered procedural differences between TTAB and district courts: namely, an absence of live testimony and narrower discovery. The Court held that this did not constitute a categorical reason why the "ordinary elements" should never be satisfied. And even in individual

but it is sometimes treated as a separate element, e.g., In re Trans Tex. Holdings Corp., 498 F.3d 1290, 1297 (Fed. Cir. 2007).

- 107. B & B Hardware, 135 S. Ct. at 1306.
- 108.~~Id. (quoting 18 Charles Alan Wright et al., Federal Practice and Procedure \$ 4417, at 449 (2d ed. 2002)).
- 109. See generally Jane C. Ginsburg et al., Trademark and Unfair Competition Law 255 (6th ed. 2017) (comparing likelihood of confusion in TTAB (i.e., registration) and district court (i.e., infringement) contexts).
 - 110. B & B Hardware, 135 S. Ct. at 1306-07.
 - 111. Id. at 1307.
- 112. *Id.* ("More important, if federal law provides a single standard, parties cannot escape preclusion simply by litigating anew in tribunals that apply that one standard differently.").
 - 113. Id.
 - 114. Id. at 1308.
- 115. *Id.* at 1309. The Court further noted that "the agency's procedures[are in] large part . . . exactly the same as in federal court. For instance, although the scope of discovery in Board proceedings is generally narrower than in court proceedings—reflecting the fact that there are often fewer usages at issue—the TTAB has adopted almost the whole of Federal Rule of Civil Procedure 26." *Id.* (cleaned up).
 - 116. Id.

hypothetical instances where procedural differences might be material, the exceptions of ordinary preclusion law could provide an equitable safety valve. 117

Thus, the Supreme Court in $B \not \circ B$ Hardware formulated a two-part test for whether administrative bodies acting in a quasi-judicial capacity may ground issue preclusion. The test is remarkably inclusive, relying on a strong default presumption of preclusion based on functionalist considerations but fine-tuned by the equitable safety valves of ordinary preclusion law. But in the few years since the Court's decision, $B \not \circ B$ Hardware has not yet seen broad application outside the trademark context. As the next Part explores, however, extension to the patent context is especially appropriate.

III. Applying the B&B Two-Step to Claim Construction in Inter Partes Review

This Part applies the *B* & *B* Hardware Two-Step to the administrative patent claim construction context. Can PTAB claim construction decisions in an IPR proceeding ground issue preclusion? The question is twofold. First, Section III.A considers whether Congress intended PTAB decisions not to have preclusive effect and finds no "statutory purpose to the contrary." Second, Section III.B examines in which situations (if any) PTAB claim construction decisions might satisfy the elements of issue preclusion. Although Congress does not seem to have indicated that preclusion should categorically not apply, some aspects of IPR point to the need for a specially tailored solution.

A. B & B Step One: No Statutory Purpose to the Contrary

Through the lens of $B \not \circ B$ Step One, the statutory context and policy considerations underlying the IPR process indicate no "statutory purpose to the contrary" regarding issue preclusion.

What can be discerned from the text and structure of the AIA?¹¹⁸ First, the AIA affirmatively grants the PTAB authority to cancel an already-issued patent.¹¹⁹ Second, it grants the USPTO authority to set the legal standards through promulgation of regulations.¹²⁰ Congress structurally limited the ability of courts to relitigate IPR issues. Congress also explicitly provided for judicial review of PTAB decisions by the Federal Circuit, but not district

^{117.} See id. The exceptions to the general rule of issue preclusion appear in the Restatement and include, for instance, unavailability of review of the first judgment, the need for a new determination of law in light of an intervening change in context, differences in quality or extensiveness of procedures, serious differences in the burden of persuasion, and considerations of public interest. Restatement (Second) of Judgments § 28 (Am. Law Inst. 1982).

^{118.} Cf. B & B Hardware, 135 S. Ct. at 1302–06 (examining text and structure of Lanham Act).

^{119. 35} U.S.C. §§ 311–319 (2012).

^{120.} Id. § 316(a).

courts.¹²¹ In addition to limiting the pathways for review of final decisions, the AIA withdraws from judicial review the PTAB's decisions to institute IPRs at all.¹²² On the whole, this illustrates a structure designed by Congress to limit judicial oversight and bolster the competence of the PTAB. Although this does not explicitly endorse issue preclusion, it is far from a "statutory purpose of the contrary."

The AIA affirmatively provides for some preclusion, establishing that a petitioner may not assert in a civil action or ITC investigation "any ground that the petitioner raised or reasonably could have raised" during the IPR. 123 Essentially, this has the effect of preventing a challenger from repeating the same arguments in a later action. The significance of the statutory reference estoppel provisions might be read in several ways. Under a permissive reading, one could view them as a signal of Congress's affirmative conferral of general competence regarding preclusion upon the PTAB. A neutral reading might view them as simply a choice-of-forum provision. But a restrictive reading might view them as an enumeration of the only kinds of preclusion permitted. 124 Indeed, statutory reference estoppel has been construed to be narrow in scope, 125 and there is a strong presumption in favor of judicial review. 126 Thus, this jurisprudence might caution against the expansion of preclusion beyond that enumerated. 127 The presumption that Congress intends preclusion "absent a contrary indication," 128 however, suggests a propreclusion reading. That is, Congress does not need to explicitly endorse administrative estoppel if it has not forbidden it.

Additional considerations support the competence of PTAB decisions to have preclusive effect. First, as a matter of legislative purpose, IPR was in-

^{121.} Id. §§ 141(c), 319.

^{122.} Id. § 314(d).

^{123.} *Id.* § 315(e)(2). For the purpose of this Note, this will be referred to as "statutory reference estoppel." This is because § 315(e)(2) operates with respect to a combination of a particular statutory ground (i.e., novelty or obviousness) and particular prior art references (i.e., a particular set of patents and printed publications). *See, e.g.*, Intellectual Ventures I LLC v. Toshiba Corp., 221 F. Supp. 3d 534, 554 (D. Del. 2016) (estopping challenger, on § 315(e)(2) grounds, from raising obviousness based on three specific prior art patents).

^{124.} See Scalia & Garner, supra note 30, at 107-11 (expressio unius).

^{125.} For instance, because of AIA text limiting statutory reference estoppel to grounds that could have been raised "during" IPR, statutory reference estoppel does not apply to an invalidity ground included in an IPR petition but not instituted. Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc., 817 F.3d 1293, 1300 (Fed. Cir. 2016); HP Inc. v. MPHJ Tech. Invs., LLC, 817 F.3d 1339, 1347 (Fed. Cir. 2016).

^{126.} See Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2140 (2016).

^{127.} Some courts have pushed back against this, hesitant to give a "second bite at the apple." *E.g.*, Parallel Networks Licensing, LLC v. IBM, No. 13-2072 (KAJ), 2017 U.S. Dist. LEXIS 28461, at *30 (D. Del. Feb. 22, 2017).

^{128.} B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1302-03 (2015).

tended to be an alternative to litigation. ¹²⁹ If relitigation of the same issues is permitted in both an IPR and district court context, the actions are duplicative, not alternative. ¹³⁰ Of course, the argument could be made that the claim construction issue is *not* the same, but as discussed later, this does not foreclose preclusion; it simply changes its character. ¹³¹ Second, the PTAB is also of technical competence, which is important to resolving the meaning of claim terms. Indeed, deference to agencies is most appropriate within their area of expertise—especially when it comes to technical matters ¹³²—and administrative issue preclusion doctrine considers regulatory context. ¹³³ The USPTO has special expertise in "resolving patent claims" ¹³⁴ and has the "primary responsibility for sifting out unpatentable material." ¹³⁵ IPR proceedings are presided over by administrative patent judges who resemble an intermediate between technically qualified patent examiners and legally qualified judges. ¹³⁶

Two policy considerations underlying patent law also support issue preclusion: the public notice function of patents and the desire for uniformity. The notice function aims to warn potential infringers and the public of the scope of the patent's claims. This supports the conclusiveness of PTAB determinations, such that a potentially infringing practitioner may rely on all proper adjudications of a patent's meaning. The very fact that claim construction consists of questions of law and not questions for the jury also reflects a fundamental concern for uniformity in patent interpretation. As a doctrine, issue preclusion generally furthers uniformity by reducing the number of conflicting alternative judgments on a given issue.

The close integration of the USPTO's administrative authority and patent rights has also led to two *judicial* estoppel doctrines—prosecution histo-

^{129.} E.g., Aqua Prods., Inc. v. Matal, 872 F.3d 1290, 1298 (Fed. Cir. 2017) ("With its enactment of the AIA in 2011, Congress created IPRs to provide 'quick and cost effective alternatives to litigation.'" (quoting H.R. Rep. No. 112-98, pt. 1, at 48 (2011))).

^{130.} See, e.g., ePlus, Inc. v. Lawson Software, Inc., 790 F.3d 1307, 1315 (Fed. Cir. 2015) (Moore, J., dissenting from denial of petition for rehearing en banc) ("Congress intended the IPR/CBM/reexam route to be an alternative to district court litigation of certain validity issues, not duplicative of them.").

^{131.} See infra Section III.B.3.

^{132.} E.g., Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc., 462 U.S. 87, 103 (1983).

^{133.} See Restatement (Second) of Judgments §§ 29, 83(4) (Am. Law Inst. 1982).

^{134.} $\it E.g., Magna Donnelly Corp. v. Pilkington N. Am., Inc., No. 4:06-CV-126, 2007 WL 772891, at *2 (W.D. Mich. Mar. 12, 2007).$

^{135.} Graham v. John Deere Co., 383 U.S. 1, 18 (1966).

^{136.} See 35 U.S.C. § 6(a) (2012).

^{137.} See supra note 41.

^{138.} See supra note 42.

^{139.} See generally Monica Renee Brownewell, Note, Rethinking the Restatement View (Again!): Multiple Independent Holdings and the Doctrine of Issue Preclusion, 37 VAL. U. L. Rev. 879, 920 (2003) (observing that "collateral estoppel, as a procedural rule, seeks to create uniformity in judgments").

ry estoppel¹⁴⁰ and prosecution disclaimer.¹⁴¹ The doctrines limit the scope of a patent's claims based on statements made by a patent applicant to secure the patent's allowance. This implies that organs of the USPTO, including the PTAB, are generally competent to preclude. Indeed, the Federal Circuit has applied prosecution disclaimer against a patent owner on the basis of statements made during an IPR,¹⁴² invoking the public notice function of patents.¹⁴³

This administrative context, however, also highlights a possible strike against issue preclusion based on the materiality of a distinction between patent litigation and patent prosecution. Some courts have applied such a prosecution disclaimer because they regard IPR as part of patent *prosecution*. ¹⁴⁴ Indeed, a patent claim may (theoretically) be amended during an IPR, ¹⁴⁵ the same legal standards are used as are during patent examination, ¹⁴⁶ and the proceeding occurs under the ambit of the USPTO. If an IPR is formally patent prosecution, then is the PTAB truly "acting in a judicial capacity" as contemplated under $B \not\sim B Hardware$? ¹⁴⁷ Is that more akin to legislative ex ante rulemaking than ex post administrative adjudication? ¹⁴⁸ The Federal Circuit seems to view IPR somewhere in the middle, a creature that has characteristics of both prosecution and litigation, ¹⁴⁹ but the Supreme Court

^{140.} *See generally* Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 733–35 (2002) (discussing prosecution history estoppel).

^{141.} See generally Mass. Inst. of Tech. v. Shire Pharm., Inc., 839 F.3d 1111, 1119 (Fed. Cir. 2016) (defining prosecution disclaimer).

^{142.} Aylus Networks, Inc. v. Apple Inc., 856 F.3d 1353, 1360–61 (Fed. Cir. 2017) (holding that statements made by patent owner during IPR can be relied on to support finding of prosecution disclaimer during claim construction).

^{143.} *Id.* at 1360 ("Extending the prosecution disclaimer doctrine to IPR proceedings will ensure that claims are not argued one way in order to maintain their patentability and in a different way against accused infringers.").

^{144.} *See id.* Patent "prosecution" refers to the administrative process by which a patent application is filed at and examined by the USPTO and is essentially "a series of negotiations between the examiner and the inventor." *See generally* ROBERT PATRICK MERGES & JOHN FITZ-GERALD DUFFY, PATENT LAW AND POLICY 58–62 (7th ed. 2017).

^{145.} It could be argued that the ability to amend is essentially illusory, such motions almost never being granted. *See* Gugliuzza, *supra* note 5, at 284 n.87 (noting that PTAB only granted six motions to amend in three-and-a-half years). Recent Federal Circuit case law, however, suggests a trajectory toward a patent owner's ability to more readily amend claims during an IPR. *See*, *e.g.*, Aqua Prods., Inc. v. Matal, 872 F.3d 1290, 1324–25 (Fed. Cir. 2017) (allocating burden of proof of unpatentability of amended claims in IPR to petitioner).

^{146.} Examination also uses the BRI standard. See MPEP § 2111 (9th ed. Rev. 08.2017, Jan. 2018).

^{147.} See B & B Hardware, Inc. v. Hargis Indus., Inc. 135 S. Ct. 1293, 1303 (2015).

^{148.} See Wright et al., supra note 85, § 4475 (discussing balance of adjudicatory and legislative elements in administrative proceedings with respect to preclusion).

^{149.} *Compare* Aylus Networks, Inc. v. Apple Inc., 856 F.3d 1353, 1362 (Fed. Cir. 2017) ("[S]tatements made by a patent owner during an IPR proceeding... can be considered for claim construction and relied upon to support a finding of prosecution disclaimer."), with PPC

has recently noted that IPR is adjudicative.¹⁵⁰ Indeed, the fact that revocation of a patent right is at stake points to an adjudicative purpose of claim construction. Additionally, the existence of the two judicial estoppel doctrines seems to suggest that the prosecution–litigation distinction is not material.

Thus, the structure and text of the AIA do not indicate a "statutory purpose to the contrary." And although an IPR shares some characteristics of patent examination, it bears more structural features in common with an adversarial quasi-judicial proceeding. Moreover, the PTAB, as an arm of the technically qualified USPTO, is uniquely capable to make findings on the technical meaning of a patent's claims. Policy considerations—particularly, the public notice doctrine and uniformity—similarly support the application of issue preclusion to claim construction specifically. Although there is clearly no explicit *endorsement* by Congress, in the absence of a clear disapproval, it is reasonable to go with the default under $B \not \hookrightarrow B$ Step One in favor of administrative preclusion.

B. B & B Step Two: Ordinary Elements Could Be Satisfied

 $B \not S B$ Step Two asks whether the Restatement's "ordinary elements" of issue preclusion are satisfied. The elements include whether (1) "an issue of fact or law is actually litigated" (including identity of the issues); (2) that issue is "determined by a valid and final judgment;" and (3) "the determination is essential to the judgment." ¹⁵¹ These ordinary elements must then be balanced against any equitable exceptions to issue preclusion that arise. ¹⁵² Application of $B \not S B$ Step Two reveals that the "ordinary elements" test will often be largely satisfied due to the similarity between PTAB and judicial claim construction. Indeed, only the doctrinal difference in legal standards between claim constructions in district courts and IPRs is a potentially significant barrier.

1. General Application of the "Ordinary Elements" Test

To begin, whether a claim construction is "actually litigated" in an IPR is seemingly straightforward: was a claim construction determination made? If

Broadband, Inc. v. Corning Optical Commc'ns RF, LLC, 815 F.3d 747, 756 (Fed. Cir. 2016) ("IPRs... are litigation-like contested proceedings before the Board.").

^{150.} See SAS Inst., Inc. v. Iancu, 138 S. Ct. 1348, 1353–54 (2018) (observing that IPR "looks a good deal more like civil litigation," including "many of the usual trappings"); Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365, 1378 (2018) (noting that although IPR is not an exercise of the judicial power, it "includes some of the features of adversarial litigation"); Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2146 (2016) (describing IPR and the district court as alternative fora for "review and adjudication of patent claims").

^{151.} $B \not e B$ Hardware, 135 S. Ct. at 1303 (quoting Restatement (Second) of Judgments §§ 27, 28 (Am. Law Inst. 1982)).

^{152.} See Restatement (Second) of Judgments § 28. Such equitable exceptions might include the materiality of procedural differences in the two settings, for instance.

so, the issue of claim construction was litigated. Indeed, claim construction is required in a petitioner's brief before the PTAB, a patent owner has the opportunity to supply its own claim construction arguments, and the PTAB decides claim construction in its final written decision. Two exceptions do arise. First, the PTAB may decide a claim term does not actually need construction and declare that it takes its "plain and ordinary meaning. In such a case, the parties would be free in a subsequent proceeding to litigate a precise construction. Second, because certain grounds of invalidity cannot be asserted in an IPR (e.g., indefiniteness under 35 U.S.C. § 112), certain claim construction arguments cannot actually be advanced in an IPR. This does not affect issue preclusion against patent owners, but it does caution against its application against petitioners in certain cases. Importantly, however, differences in legal standards can nullify this first element, as discussed below in Section III.B.3.156

Because final validity or infringement judgments in patent litigation rest on claim construction, claim construction determinations can frequently be essential for preclusion purposes. ¹⁵⁷ Determination of essentiality of claim constructions to the final judgment is seemingly no different before the PTAB than across subsequent district court actions. ¹⁵⁸

^{153. 37} C.F.R. § 42.104(b)(3) (2017) (requiring that petition propose claim construction); see also id. § 41.120 (allowing for patent owner response); id. § 42.100(b) (requiring claims be given their broadest reasonable construction).

^{154.} See Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012) ("Regarding the need for a claim construction, where appropriate, it may be sufficient for a party to provide a simple statement that the claim terms are to be given their broadest reasonable interpretation ").

^{155.} See 35 U.S.C. § 311(b) (2012) (establishing that a petitioner in an *inter partes* review may challenge a claim of a patent only on the basis of novelty under § 102 or obviousness under § 103). For instance, the PTAB cannot find a claim indefinite under § 112 during an IPR. Merges & Duffy, supra note 144, at 310. This should not preclude a later court from seeking an interpretation broader than the IPR's claim construction if a § 112 invalidity argument is advanced in a later proceeding.

^{156.} See Restatement (Second) of Judgments § 27, cmt. c (discussing evaluation of the dimensions of an issue). This identity-of-the-issues requirement is often formulated separately. See, e.g., In re Trans Tex. Holdings Corp., 498 F.3d 1290, 1297 (Fed. Cir. 2007) (noting that issue preclusion requires "(1) identity of the issues in a prior proceeding; (2) the issues were actually litigated; (3) the determination of the issues was necessary to the resulting judgment; and, (4) the party defending against preclusion had a full and fair opportunity to litigate the issues" (emphasis omitted) (citation omitted)).

^{157.} See, e.g., Hemphill v. Proctor & Gamble Co., 85 F. App'x 765, 767 (Fed. Cir. 2004) (applying issue preclusion to claim construction where the "record show[ed] that the district court's determination of the meaning of identical terms in the earlier case was essential to the judgment in that case"); cf. RF Del., Inc. v. Pac. Keystone Techs., Inc., 326 F.3d 1255, 1261 (Fed. Cir. 2003) (holding that claim construction issued in interlocutory order was not sufficiently final to permit issue preclusion).

^{158.} See generally Matthew A. Ferry, Different Infringement, Different Issue: Altering Issue Preclusion as Applied to Claim Construction, 19 Tex. Intell. Prop. L.J. 361, 375–77 (2011)

Judgments are generally "valid and final" for issue preclusion purposes when they constitute a deliberated, nontentative decision of an issue, even prior to any appeal. Determining whether an IPR decision constitutes a "valid and final judgment" requires a more careful analysis given the unique statutory context of IPR proceedings. At the conclusion of an IPR, the PTAB first issues a "final written decision" on patentability of the claims for which review was instituted. The final written decision may be appealed to the Federal Circuit. If an appeal is not successful (or does not happen), the USPTO issues a certificate of cancellation of the challenged claims, removing a patent owner's standing to sue. If 2

Procedurally, a "final written determination" by the PTAB is probably "final" for preclusion purposes. 163 A PTAB written decision is "final" in that a successfully challenged claim will be cancelled if a patent owner loses and fails to appeal to the Federal Circuit (or does appeal but loses there). 164 And even if an appeal is pending, the norm in federal courts is that judgments are generally immediately effective for preclusion purposes notwithstanding an appeal. 165 The Supreme Court has seemingly suggested a baseline presumption that "ordinary preclusion law" is imported nearly wholesale into the administrative context.¹⁶⁶ One procedural facet of IPR, however, suggests that this norm might not apply in this particular context: whereas patent invalidity arising from district courts is effective immediately upon a judgment (requiring no action by the USPTO), a successful IPR results in a cancellation certificate only after resolution of any appeal. 167 In the reexamination procedure that IPR replaced, finality for statutory reference estoppel did not occur until exhaustion of an appeal. 168 But the plain text of the AIA suggests that statutory reference estoppel attaches as of the "final written decision"

(reviewing concept of essentiality of claim construction in district court issue preclusion context).

- 160. 35 U.S.C. § 318(a).
- 161. Id. §§ 141(c), 319.
- 162. Id. § 318(b).

^{159.} See Restatement (Second) of Judgments § 13 & cmt. g ("[T]he court should determine that the decision . . . was adequately deliberated and firm, even if not final in the sense of forming a basis for a judgment already entered.").

^{163.} *Cf.* Dana v. E.S. Originals, Inc., 342 F.3d 1320, 1323 (Fed. Cir. 2003) ("[T]he finality requirement is less stringent for issue preclusion than for claim preclusion." (quoting Christo v. Padgett, 223 F.3d 1324, 1339 (11th Cir. 2000))); Restatement (Second) of Judgments § 13 cmt. g ("The test of finality . . . is whether the conclusion in question is procedurally definite").

^{164.} See 35 U.S.C. § 318(b).

^{165.} See, e.g., Dana, 342 F.3d at 1323; Rice v. Dep't of the Treasury, 998 F.2d 997, 999 (Fed. Cir. 1993) ("The law is well settled that the pendency of an appeal has no effect on the finality or binding effect of a trial court's holding."); SSIH Equip. S.A. v. U.S. Int'l Trade Comm'n, 718 F.2d 365, 370 (Fed. Cir. 1983).

^{166.} See B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1302-06 (2015).

^{167.} See 35 U.S.C. § 318(b).

^{168.} See Bettcher Indus., Inc. v. Bunzl USA, Inc., 661 F.3d 629, 642-43 (Fed. Cir. 2011).

before appeal.¹⁶⁹ Thus, the certificate, which also confirms patentable claims and any amendments, may represent the point of finality or may simply represent administrative bookkeeping.¹⁷⁰ Indeed, a curious result emerges if the PTAB's decision results in statutory reference estoppel¹⁷¹ but does not result in issue preclusion. A *successful* petitioner is estopped from challenging a patent in a parallel litigation; until an appeal is resolved, the defeated patent owner may continue to assert the patent, safe from any assault on the grounds already used to invalidate it before the PTAB.¹⁷² Accordingly, in the interests of uniformity, finality should attach as of the final written decision.

2. Differences in Procedure Do Not Warrant a Categorical Exception to Preclusion

Even when an issue has been "actually litigated," ordinary preclusion law provides an exception upon a showing of material procedural differences. ¹⁷³ This highlights one seemingly significant objection to affording preclusive effect to IPR decisions: in some respects, the procedures are quite different. For instance, district court case schedules are much longer—usually by a few years—than an IPR, which must be completed within twelve months of institution. ¹⁷⁴ IPR proceedings lack the summary judgment procedures and settlement options available in district courts. ¹⁷⁵ The array of legal grounds of

^{169.} Reading the PTAB final-decision statute, 35 U.S.C. § 318(a) ("If an inter partes review is instituted... the [PTAB] shall issue a *final written decision* with respect to the patentability of any patent claim challenged...." (emphasis added)), in conjunction with the reference estoppel statute, *id.* § 315(e)(2) ("The petitioner in an inter partes review... that results in a *final written decision* under section 318(a)... may not assert... in a civil action... that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during that inter partes review." (emphasis added)), strongly suggests this result under ordinary principles of statutory interpretation. *See* Scalia & Garner, *supra* note 30, at 170–73 (presumption of common usage). Overall, courts remain split on when exactly finality attaches to PTAB decisions in an IPR for statutory reference estoppel purposes. *See* Merck & Cie v. Gnosis S.P.A., 808 F.3d 829, 840 (Fed. Cir. 2015); Ignite USA, LLC v. Pac. Mkt. Int'l, LLC, No. 14 C 856, 2014 WL 2505166, at *1 (N.D. Ill. May 29, 2014). *But see* Va. Innovation Scis., Inc. v. Samsung Elecs. Co., 983 F. Supp. 2d 713, 752–53 (E.D. Va. 2014), *vacated on other grounds*, 614 F. App'x 503 (Fed. Cir. 2015).

^{170.} See 35 U.S.C. § 318(b).

^{171.} See supra note 123.

^{172.} See supra notes 79-80 and accompanying text.

^{173.} RESTATEMENT (SECOND) OF JUDGMENTS § 28(3) (AM. LAW INST. 1982) (noting that preclusion is inappropriate where "[a] new determination of the issue is warranted by differences in the quality or extensiveness of the procedures followed in the two courts").

^{174.} See Michael J. Flibbert & Maureen D. Queler, 5 Distinctions Between IPRs and District Court Patent Litigation, Finnegan (Dec. 16, 2015), https://www.finnegan.com/en/insights/5-distinctions-between-iprs-and-district-court-patent-litigation.html [https://perma.cc/9D8W-YKEK].

^{175.} Id.

patent validity that may be raised are much fewer. ¹⁷⁶ The scope of discovery is much narrower in an IPR, but only in an IPR may a patent owner move to amend claims. ¹⁷⁷ And while district courts use live testimony, the PTAB prefers written declarations with cross-examination of deponents. ¹⁷⁸

These procedural differences matter less when it comes to claim construction. Restricted discovery and absence of live testimony have little relevance. Under patent law doctrine, a standard evidentiary hierarchy is followed, with the most important evidence being the patent's specification and plain meanings of a claim term—both available in an IPR. ¹⁷⁹ Additionally, burden-of-proof differences are irrelevant to claim construction, which is a question primarily of law, albeit based on underlying factual determinations. ¹⁸⁰ Overall, these differences echo those raised (and rejected as insufficient) in *B* & *B* Hardware. ¹⁸¹

Even where IPR procedure differs, mere difference does not defeat preclusion unless there is a categorical "reason to doubt the quality, extensiveness, or fairness" of the proceeding. ¹⁸² The Court has offered little guidance on what such a categorical reason might be, but it has indicated that in such a case the burden of persuasion rests with a party claiming unfairness. ¹⁸³

Importantly, the USPTO has generally adopted the Federal Rules of Evidence for IPRs. 184 The Federal Circuit has also generally found procedural

^{176.} *Id.* For example, district court issues include infringement, various affirmative defenses, and any ground of invalidity, whereas IPRs are limited to unpatentability on the grounds of novelty or obviousness.

^{177.} Id.

^{178.} Id.

^{179.} See generally Phillips v. AWH Corp., 415 F.3d 1303, 1311–19 (Fed. Cir. 2005) (en banc) (detailing evidentiary hierarchy); see also id. at 1315 ("[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." (cleaned up)).

 $^{180.\} E.g.,$ Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 838 (2015); AK Steel Corp. v. Sollac & Ugine, 234 F. Supp. 2d 711, 718 n.6 (S.D. Ohio 2002) (noting that as a question of law, evidentiary burdens generally do not apply to claim construction).

^{181.} *Cf.* B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1309 (2015) ("No one disputes that the TTAB and district courts use different procedures. Most notably, district courts feature live witnesses. Procedural differences, by themselves, however, do not defeat issue preclusion. Equity courts used different procedures than did law courts, but that did not bar issue preclusion.").

^{182.} *Id.* at 1309 (quoting Montana v. United States, 440 U.S. 147, 164 n.11 (1979)); *see also id.* ("Rather than focusing on whether procedural differences exist—they often will—the correct inquiry is whether the procedures used in the first proceeding were fundamentally poor, cursory, or unfair.").

^{183.} Id.

^{184. 37} C.F.R. § 42.62(a) (2017) (adopting Federal Rules of Evidence as default for PTAB proceedings); *cf. B & B Hardware*, 135 S. Ct. at 1300 (noting that TTAB procedures "are largely governed by the Federal Rules of Civil Procedure and Evidence").

sufficiency at the PTAB, ¹⁸⁵ and the Supreme Court has endorsed the fairness of using different legal standards in IPR than in a district court. ¹⁸⁶ Further, the PTAB is governed by the provisions of the Administrative Procedure Act meant to ensure procedural fairness. ¹⁸⁷

Granted, some do doubt the procedural fairness of the PTAB—sometimes colorfully. But if procedures for claim construction at IPR are *categorically* unfair, this raises bigger concerns about the constitutionality of IPR in general. Sometimes Conversely, if the procedure at the PTAB is sufficiently fair for patent cancellation, it should seemingly be enough for preclusion regarding claim scope. Additionally, if in individual cases the PTAB procedure is inadequate, the ordinary law of issue preclusion already accounts for those rare cases where a 'compelling showing of unfairness' can be made"—an equitable safety valve. Some doubt the procedure is inadequate, the ordinary law of issue preclusion already accounts for those the procedure at the procedure is inadequate, the ordinary law of issue preclusion at IPR are categorically unfairness of the procedure at the

3. Identity of the Issues: A Stumbling Block?

Perhaps the biggest concern in application of preclusion is the identity of the issues. If the issues are not actually the same, preclusion does not apply. ¹⁹¹ Formally, the PTAB and district courts apply two different legal standards in claim construction. The PTAB uses the "broadest reasonable"

^{185.} See, e.g., Belden Inc. v. Berk-Tek LLC, 805 F.3d 1064, 1080 (Fed. Cir. 2015) ("[T]he rules and practices of the Board generally protect against loss of patent rights without the required notice and opportunity to respond.").

^{186.} Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2145 (2016).

^{187.} See, e.g., Belden, 805 F.3d at 1080 (characterizing inter partes review as formal adjudication subject to the APA); 5 U.S.C. § 554 (2012) (formal adjudications); Rapp v. U.S. Dep't of the Treasury, 52 F.3d 1510, 1519 (10th Cir. 1995) ("Section 554 of the APA requires procedural fairness in the administrative process."); United States v. Meyer, 808 F.2d 912, 919 (1st Cir. 1987) (characterizing APA's adjudicatory rules as "designed to ensure procedural fairness").

^{188.} See, e.g., Gene Quinn, The Only Solution for the Transgressions of the PTAB Is to Disband This Runaway Tribunal, IPWATCHDOG (Sept. 11, 2017), http://www.ipwatchdog.com/2017/09/11/solution-ptab-disband-runaway-tribunal/ [https://perma.cc/6562-P3AR] (questioning procedural sufficiency of the PTAB and opining that "the PTAB is a kangaroo court . . . that you might expect in a third world nation suffering from a complete collapse of the judiciary").

^{189.} However, the constitutionality of IPR was recently upheld by the Supreme Court as not contrary to Article III. Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365 (2018). Only two justices—Justice Gorsuch and Chief Justice Roberts—dissented, lamenting the majority's opinion as "a retreat from Article III's guarantees." Id. at 1386 (Gorsuch, J., dissenting).

^{190.} B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1309 (2015) (quoting RESTATEMENT (SECOND) OF JUDGMENTS § 28, cmt. g & j (Am. Law Inst. 1982)).

^{191.} This is often treated as an independent enumerated element of issue preclusion. *See supra* note 106.

interpretation," 192 whereas district courts use the narrower *Phillips* standard, which inquires of a word's meaning "to a person of ordinary skill in the art." 193

Given their similarity in both theory and practice, the two standards seem, at first, essentially the same. The Phillips standard prioritizes giving words their "ordinary and customary meaning... to a person of ordinary skill in the art" informed by the "context of the entire patent, including the specification."194 Likewise, the broadest reasonable interpretation (BRI) seeks "the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification."195 In implementing *Phillips*, courts turn to "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." 196 But the specification and words of the claims themselves are usually dispositive. 197 Indeed, the main considerations of the Phillips standard—consistency with the specification, the perspective of one of ordinary skill, and preference for plain meaning—are also integral to the BRI. 198

What, then, *is* the difference? Essentially, a district court seems to read a patent in the way it thinks a skilled practitioner probably would (perhaps the "most likely" reasonable interpretation), whereas the PTAB seems to read a patent in the most expansive way a skilled practitioner might (the "broadest" reasonable interpretation). ¹⁹⁹ Practical differences do occur. ²⁰⁰ For example, "computer display window" was construed more broadly in an IPR (the por-

^{192.} Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2139 (2016); 37 C.F.R. \S 42.100(b) (2017) (requiring that a patent claim "shall be given its broadest reasonable construction in light of the specification of the patent in which it appears").

^{193.} Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

^{194.} Id.

^{195.} *In re* Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997); *see also In re* Smith Int'l, Inc., 871 F.3d 1375, 1382–83 (Fed. Cir. 2017).

^{196.} Phillips, 415 F.3d at 1314.

^{197.} See supra note 179.

^{198.} See Laura E. Dolbow, Note, A Distinction Without a Difference: Convergence in Claim Construction Standards, 70 Vand. L. Rev. 1071, 1097–98 (2017) ("[G]iven the similarity of the guiding principles, interpreters apply many of the same interpretation rules to construe claims under both the *Phillips* and BRI standards. Some specific interpretation rules common to both . . . are used with particular frequency.").

^{199.} But the theoretical differences in the standards are vague at best. See id. at 1083-84.

^{200.} But see id. at 1089, 1100–03 (suggesting that differences arise from "inherent ambiguities in interpretation or litigant behavior rather than a difference between the legal standards").

tion of a display screen in which a set of information is displayed) than in a prior district court action (also requiring a graphical user interface).²⁰¹

As a matter of law, the PTAB's BRI may be the same as the *Phillips* construction or may be broader; it may not be narrower.²⁰² Thus, the two are subject to a one-directional legal relationship, but they may also come out the same way in a particular instance.²⁰³ Both require consistency with the patent specification,²⁰⁴ and the Federal Circuit has clarified that the PTAB is not to adopt the "broadest *possible* interpretation."²⁰⁵

Moreover, B & B Hardware implies that sufficient identity of the issues may exist when two purportedly different legal standards formally rooted in different texts are nonetheless "in essence" the same standard. For example, in B & B Hardware, although district court and TTAB standards typically examined different breadth of a mark's usage, 207 this question of narrow or broad usage was not present in the case at hand because the TTAB had con-

^{201.} *Compare* Rackspace Hosting, Inc. v. Rotatable Techs. LLC, No. IPR2013-00248, 2014 WL 4732552, at *4–6 (P.T.A.B. Sept. 19, 2014), *with* Rotatable Techs. LLC v. Nokia, No. 2:12-CV-265-JRG, 2013 WL 3992930, at *9 (E.D. Tex. Aug. 2, 2013).

^{202.} Facebook, Inc. v. Pragmatus AV, LLC, 582 F. App'x 864, 869 (Fed. Cir. 2014) ("The broadest reasonable interpretation of a claim term may be the same as or broader than the construction of a term under the *Phillips* standard. But it cannot be narrower.").

^{203.} E.g., Dolbow, supra note 198 (arguing based on empirical evidence that the different claim construction standards have "largely converged in practice"); see also Timothy R. Holbrook, The Patent Trial and Appeal Board's Evolving Impact on Claim Construction, 24 Tex. Intell. Prop. L.J. 301, 330–31 (2016). Dolbow developed a database of IPR final written decisions and showed that in practice, "the BRI operates in a circular manner, largely citing legal authority that originates from the Phillips regime." Dolbow, supra note 198, at 1084.

^{204.} Compare In re Smith Int'l, Inc., 871 F.3d 1375, 1382–83 (Fed. Cir. 2017) (clarifying that the BRI "is an interpretation that corresponds with what and how the inventor describes his invention in the specification, i.e., an interpretation that is 'consistent with the specification.'" (quoting In re Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997))), with Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc) ("Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.").

^{205.} E.g., Smith Int'l, 871 F.3d at 1383.

^{206.} B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1306–07 (2015) ("For one thing, the factors are not fundamentally different, and '[m]inor variations in the application of what is in essence the same legal standard do not defeat preclusion.' "(alteration in original) (quoting Smith v. Bayer Corp., 564 U.S. 299, 312 n.9 (2011))). The comments to the Restatement also suggest that identity-of-issue requirements are not strict and formalistic. See Restatement (Second) of Judgments § 27, cmt. c (Am. Law Inst. 1982) ("When there is a lack of total identity between the particular matter presented ... there are several factors that should be considered ... for example: Is there a substantial overlap between the evidence or argument ...? Does the new evidence or argument involve ... the same rule of law ...? ... How closely related are the claims involved ...?").

^{207.} See supra note 109.

sidered the mark's actual use.²⁰⁸ There, the Court concluded that for identical uses, the question was essentially the same between the TTAB and a district court.²⁰⁹ So differing breadth was arguably absent. This is not necessarily so between the PTAB and district courts. In addition to different nomenclature and definitions, varying policy goals underlie the two. The district court standard seeks to divine the construction that is most correct in light of the inventor's intent, motivated by the public notice function of patents, uniformity, and judicial efficiency.²¹⁰ In contrast, the BRI seeks to divine the reasonable outer bounds of a claim's scope.²¹¹ And where the BRI is usually prospectively employed before a patent issues, district courts operate retrospectively under a presumption of patent validity.²¹²

Thus, the difference between the BRI and *Phillips* standards may seem to be a nuance, but it is real. Consequently, if issue preclusion is to be applied to IPR claim construction decisions, a solution is needed which reconciles the two standards.

IV. THE "Broadest Reasonable Interpretation" as a Preclusive Outer Bound on District Court Claim Construction

Can a theory of issue preclusion for claim construction be maintained in the face of the tension between the BRI and *Phillips* standards? This Part asserts that the "ordinary elements" of issue preclusion would be satisfied by treating the PTAB's broadest reasonable interpretation (BRI) of a patent claim term as a preclusive outer bound in subsequent district court claim construction. Section IV.A considers whether wholesale issue preclusion as to claim meaning is appropriate given the substantively similar practical outcomes under both the BRI and *Phillips* standards. Section IV.B proposes an alternative outer-bounds preclusion theory that satisfies both the policy considerations underlying claim construction as well as the principles of issue preclusion.

A. Wholesale Issue Preclusion as to Claim Construction is Inappropriate

Issue preclusion could apply to the entire *content* of a claim's construction, rather than simply the outer bounds. The doctrinal and pragmatic similarity of claim constructions under the BRI and district court standards suggest this might be appropriate.²¹³ It is tempting to rely on this similarity and to treat claim construction under the BRI and under *Phillips* as the same is-

^{208.} See $B \not \odot B$ Hardware, 135 S. Ct. at 1308 (cautioning against applying issue preclusion where usages not the same).

^{209.} Id.

^{210.} See Dolbow, supra note 198, at 1081.

^{211.} See id. at 1081-83.

^{212. 35} U.S.C. § 282 (2012) (presumption of validity); see also Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 102 (2011) (discussing common law origins of presumption).

^{213.} See supra Section III.B.3.

sue—after all, the outcome would likely be the same under either in many cases. But ultimately, such wholesale issue preclusion would be inappropriate. The BRI and *Phillips* standard are analytically different and have separate underlying policy goals.

The functionalist test for legal standard equivalence articulated in $B \not e B$ Hardware suggests that the two claim construction standards might be the same issue for preclusion purposes. Indeed, issue preclusion in the PTAB-district court context arguably might make more sense than in the TTAB-district court context, yet the Supreme Court endorsed the latter in $B \not e B$ Hardware. There, two different multifactor tests for likelihood of confusion between trademarks were at issue. But Robert Bone and Barton Beebe, among others, have argued that the differences in likelihood-of-confusion standards among circuit courts are in fact not the same and produce "inconsistent formulation[s] and application." Nonetheless, the Court found that "in essence" the same issue was being determined by the two tests at issue in $B \not e B$ Hardware—whether two marks are likely to be confused. One could also argue that the PTAB and a district court are seeking "in essence" to determine the same issue—what a patent claim term means—and are doing so largely using the same evidence with the same substantive results. 217

This, however, would run contrary to the Supreme Court's jurisprudence on the doctrinal basis of the BRI and *Phillips* standards themselves, as conveyed in *Cuozzo Speed Technologies*, *LLC v. Lee.*²¹⁸ There, the Court considered whether the Patent Office could promulgate regulations requiring the PTAB to use the BRI standard, as opposed to *Phillips*, in IPR proceedings.²¹⁹ In holding such regulations to be proper, the court implicitly recognized that the standards were doctrinally distinct. It noted that "inconsistent results" might be generated with two different standards in play but that the PTAB's use of the BRI standard "helps to protect the public" by encouraging patents to be drafted narrowly.²²⁰

This doctrinal difference parallels the policy differences that underscore each standard.²²¹ The BRI is concerned with encouraging narrow patent

^{214.} See supra Part II.

^{215.} Robert G. Bone, Taking the Confusion Out of "Likelihood of Confusion": Toward a More Sensible Approach to Trademark Infringement, 106 Nw. U. L. Rev. 1307, 1308–09 (2012) (noting likelihood of confusion tests); accord Barton Beebe, An Empirical Study of the Multifactor Tests for Trademark Infringement, 94 Calif. L. Rev. 1581, 1582, 1591 (2006).

^{216.} B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1306-07 (2015).

^{217.} See supra Section III.B.3.

^{218. 136} S. Ct. 2131 (2016).

^{219.} Cuozzo Speed Techs., 136 S. Ct. at 2142-46.

^{220.} Id. at 2144-46.

^{221.} See supra notes 210-212 and accompanying text.

drafting by broadly interpreting claims when ambiguities are present.²²² This standard, adopted not only by the PTAB in IPR but also by the Patent Office in both examination and reexamination, is primarily aimed at avoiding the anticompetitive effects of issuing patents with overbroad protection.²²³ In contrast, the *Phillips* standard has the technological practitioner in mind, directing the court to resolve ambiguities as they would be resolved by a person of ordinary skill in the art.²²⁴ The BRI standard thus applies to the patent in isolation; the *Phillips* standard occurs foremost in the context of the patent where a potentially infringing technology is also in question.

Nor are the equitable safety valves of issue preclusion law sufficient to endorse wholesale issue preclusion. These safety valves are largely based on questions of adequate *procedure*.²²⁵ Indeed, application of issue preclusion rules presupposes substantive identity of issues.²²⁶ But differences in application of the *Phillips* and BRI constructions, when they exist, are based on questions of *substance*—that is, the possible difference between a claim's interpretive outer bounds and its operative meaning. Where these standards diverge, they do not diverge for procedural reasons.

Thus, while it is tempting to endorse wholesale preclusion, the standards' differing policy justifications render this inappropriate. Deference might instead be fitting. ²²⁷ Some district courts do treat PTAB claim constructions this way, affording them "reasoned deference" and requiring justification to depart from the PTAB construction. ²²⁸ But wholesale preclusion is not suitable while the PTAB and district courts use formally different standards. ²²⁹

^{222.} Cuozzo Speed Techs., 136 S. Ct. at 2144–45 ("Because an examiner's (or reexaminer's) use of the broadest reasonable construction standard increases the possibility that the examiner will find the claim too broad (and deny it), use of that standard encourages the applicant to draft narrowly.").

^{223.} See Dolbow, supra note 198, at 1082–83.

^{224.} See id. at 1080.

^{225.} See RESTATEMENT (SECOND) OF JUDGMENTS § 28 (Am. Law Inst. 1982) (enumerating exceptions to issue preclusion, including unavailability of review, differences in quality and extensiveness of procedures, differences in burden of persuasion).

^{226.} See id. § 27.

^{227.} A more nuanced discussion of deference in the framework of administrative proceedings in general, and claim construction in particular, is beyond the scope of this Note. *See generally* Gavin P.W. Murphy, Note, *Revising* Markman: *A Procedural Reform to Patent Litigation*, 95 Tex. L. Rev. 1425, 1431–35 (2017) (discussing potential legal reforms to bolster court deference to the USPTO as a matter of administrative law).

^{228.} See, e.g., Contentguard Holdings, Inc. v. Amazon.com, Inc., Nos. 2:13-CV-1112-JRG, 2:14-CV-61-JRG, 2015 WL 8073722, at *11 (E.D. Tex. Dec. 4, 2015).

^{229.} Note that as of the time of this writing, the PTO has—in the wake of *Oil States*—issued a notice of proposed rulemaking seeking to unify the PTAB's claim construction with the *Phillips* standard. *See* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 21,221 (proposed May 9, 2018). Promulgation of this regulation *would* make wholesale issue preclusion palata-

B. An Outer-Bounds Preclusion Theory: Embracing the Differences Between the BRI and Phillips Standards

The prescribed legal relationship between the BRI and *Phillips* standards enables the adoption of an issue preclusion theory wherein the BRI is preclusive as an *outer bound* of a claim's meaning in a later *Phillips*-governed proceeding—here deemed "outer-bounds preclusion." Outer-bounds preclusion openly treats the BRI and the *Phillips* construction as two different issues.

As emphasized in the case law, there is a prescribed relationship between the BRI and the district court standard.²³⁰ The BRI may be broader than the district court construction.²³¹ The BRI may be equivalent to the district court construction.²³² But the BRI may not be narrower than the district court construction.²³³ Thus, because the district court standard may not be broader than the BRI, it follows that the BRI should at least be preclusive as an "outer bound" of claim construction in a subsequent district court setting. The BRI and the district court claim construction standards can be viewed as two closely related "shells" of scope (e.g., two concentric circles) rather than two distinct and unrelated standards that sometimes overlap (e.g., the two circles making up a Venn diagram).

Under this theory, the PTAB's BRI is preclusive in later litigation as to the *broadest* of all reasonable constructions. The district court then decides whether the *Phillips* construction is, too, the broadest reasonable one or whether a narrower reasonable construction is more appropriate. In other words, the PTAB's determination is preclusive as to the issue of *the BRI*, in which the BRI is a *subsidiary* issue which preclusively determines the outer bounds, as a matter of law, of the separate issue of the *Phillips* construction. This embraces, rather than disguises, the doctrinal differences between the BRI and the *Phillips* standard while also accommodating their doctrinal and pragmatic similarities.

For example, consider the previously discussed claim term "computer display window." One question might be whether, in the context of the claimed invention, such a display window needed to include a "graphical user interface"—a narrower patent claim scope than if such a requirement were omitted. Suppose an IPR on the patent came first, and the PTAB found that the broadest reasonable interpretation of the claim term did include this requirement. In a subsequent district court action, the patent owner would

ble. The question of district-court preclusion based on the BRI, however, would likely remain for patents that had undergone an IPR under the old standard.

^{230.} Facebook, Inc. v. Pragmatus AV, LLC, 582 F. App'x 864, 869 (Fed. Cir. 2014) ("The broadest reasonable interpretation of a claim term may be the same as or broader than the construction of a term under the *Phillips* standard. But it cannot be narrower.").

^{231.} See supra note 201 and accompanying text.

^{232.} See, e.g., Contentguard Holdings, 2015 WL 8073722, at *11.

^{233.} Facebook, 582 F. App'x at 869.

^{234.} See supra note 201 and accompanying text.

then be able to argue for a narrower interpretation (e.g., that the window included a "graphical user interface" *and* a "glass screen") but not a broader one (e.g., that the window did not require a "graphical user interface" at all).

A litigant might object that issue preclusion is inappropriate because the PTAB could get the determination of the BRI wrong, perhaps due to legal error or specific procedural inadequacies. Ordinary preclusion law, however, offers equitable safety valves to account for this possibility.²³⁵ A patent owner who felt that the PTAB erred in its BRI but who, having prevailed at the PTAB, was unable to appeal the construction, could point to the unavailability of review or a material procedural difference *in her specific case* as a reason to depart from preclusion.²³⁶ Importing existing issue preclusion case law into the PTAB context—as the Supreme Court did in the TTAB context²³⁷—also imports these equitable safety valves and accommodates fore-seeable objections to preclusion. Additionally, claim construction determinations by the PTAB are reviewable by the Federal Circuit, providing for lelegal review by an Article III court.²³⁸

Outer-bounds preclusion would further policy aims of claim construction and the patent system in general. In applying the BRI preclusively as an outer bound, a patent owner would be prevented from improperly benefiting from "Schrödinger's patent." A narrow construction in a validity analysis at the PTAB would prevent a broader construction in an infringement analysis in district court, for instance. Preventing such oscillation would vindicate the public notice function of patent law, as well as further the notion that a patent should have as unified a meaning as possible across jurisdictional settings. Indeed, *not* applying preclusion in this way could be harmful. If a patent owner were allowed to broaden their patent's coverage beyond the "broadest reasonable" scope, a technological practitioner (i.e., potential infringer) might detrimentally rely on the supposed "broadest reasonable interpretation" of a previous IPR proceeding on that patent.

Thus, the outer-bounds preclusion theory is consistent with the policy concerns at issue. It is aligned with the purpose of the AIA, the policy rationale behind claim construction doctrines, general principles of judicial economy and procedural fairness, and the Supreme Court's seemingly functionalist issue preclusion jurisprudence.

^{235.} E.g., Restatement (Second) of Judgments § 28 (Am. Law Inst. 1982).

^{236.} See id. § 28(1) (providing for exception to issue preclusion where review of first decision unavailable); id. § 28(3) (providing for exception to issue preclusion for reasons of procedural inadequacy).

^{237.} See B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1303 (2015).

^{238.} See, e.g., ClassCo, Inc. v. Apple, Inc., 838 F.3d 1214, 1223 (Fed. Cir. 2016) (delineating standard of review).

^{239.} See Lemley & McKenna, *supra* note 7 (examining varying scope of patent rights in various law patent law doctrines (validity, infringement, defenses) and arguing for an integrated doctrine of scope); Lemley, *supra* note 29, at 110 (arguing for a fixed meaning of patent terms over time).

Conclusion

The scope of patent rights is central to various Article I and Article III proceedings, but preclusive effect is not consistent across these settings. This increases the ex ante uncertainty of patent scope. So far, despite the establishment of the PTAB as a specialist body for adjudicating patent validity, courts have been hesitant to afford preclusive weight to PTAB claim construction prior to appeal. The Supreme Court's articulation in *B & B Hardware* of a functionalist two-step test for issue preclusion invites the application of this doctrine to the context of patent claim construction by the PTAB. The conflict between the two distinct legal standards for claim construction at district court and PTAB proceedings can be resolved by applying an "outer-bounds preclusion" theory wherein the PTAB's "broadest reasonable interpretation" serves as an outer bound for a patent's scope in subsequent litigation. Doing so would be consistent with the public notice function of patent law and would decrease the variability of a patent's scope across proceedings.