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General Comment

The attached Note published in the Vanderbilt Law Review suggests there is little difference in how the two distinct claim construction standards are implemented in practice and, therefore, supports this proposal.

The publication is attached to this comment and can also be accessed at this URL: https://s3.amazonaws.com/vu-wp0/wp-content/uploads/sites/89/2017/04/20134240/A-Distinction-Without-a-Difference-Convergence-in-Claim-Construction-Standards.pdf

Attachments

A-Distinction-Without-a-Difference-Convergence-in-Claim-Construction-Standards

A Distinction Without a Difference: Convergence in Claim Construction Standards

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INTRODUCTION

In 2007, a district court found a patent for a medical device valid. While the district court litigation was pending, however, the Patent and Trademark Office ("PTO") found the exact same patent invalid. The Court of Appeals for the Federal Circuit then affirmed both decisions. At first glance, the idea that a patent could be found valid in one forum but invalid in another seems absurd. Yet the law condones these results: district courts and the PTO apply different claim construction standards.

The Leahy-Smith America Invents Act of 2011 ("AIA") created new post-grant proceedings at the PTO to challenge patent validity, which increased the stakes of the dual claim construction regime.⁵ In particular, the inter partes review ("IPR") proceeding has become

^{1.} Fresenius USA, Inc. v. Baxter Int'l, Inc., 721 F.3d 1330, 1332–33 (Fed. Cir. 2013).

^{2.} Id. at 1334–35.

^{3.} *Id.* at 1333, 1335.

^{4.} Claim construction is the process of interpreting terms in a patent, similar to interpreting terms in a contract. Standards of claim construction are the legal rules used to interpret patent terms. See Flo Healthcare Sols., LLC v. Kappos, 697 F.3d 1367, 1382 (Fed. Cir. 2012) (Newman, J., additional views) ("[T]he same issue can be finally adjudicated to different appellate outcomes, depending on the tribunal from which it came.").

^{5.} See 35 U.S.C. § 311 (2012); William Hannah, Major Change, New Chapter: How Inter Partes Review and Post Grant Review Proceedings Created by the America Invents Act Will Shape Litigation Strategies, 17 INTELL. PROP. L. BULL. 27, 39–44 (2012) (describing advantages of post grant proceedings to litigants, such as lower costs, quicker time frames, and lower burdens of proof).

extremely popular. Over 5,200 interpartes review petitions have been filed at the PTO since the proceeding's inception in September 2012. The popularity is due, in part, to the fact that the proceedings have turned out to be surprisingly lethal to granted patents: eighty-four percent of final written decisions have invalidated some or all challenged claims, making the proceeding very attractive to patent challengers.8 This high invalidation rate sparked debate about the differing claim construction standards. The PTO applies the broadest reasonable interpretation ("BRI") standard, which liberally construes terms. District courts, in contrast, apply the *Phillips* standard, which more narrowly looks to the ordinary and customary meaning of a term based on the written patent document. The difference in construction has the potential to affect a patent's validity because when a term is construed broadly, the patent is more likely to cover preexisting ideas or inventions and to therefore be considered unworthy of patent protection. Thus, some commentators believe the BRI standard employed by the PTO is more likely to invalidate a patent than the Phillips standard applied in district courts. Yet others suggest there is little, if any, difference between the two standards. 10 The rising debate caught the attention of the Supreme Court, which affirmed the use of BRI standard during IPR proceedings in Cuozzo Speed Technologies, LLC^{11} in June 2016. With IPRs now commonplace in the

^{6.} IPR proceedings allow third parties to challenge a patent's validity at the PTO directly, rather than in a district court. Before the AIA, third parties could challenge patent validity during district court proceedings, but had very limited opportunities to do so at the PTO. For more information, see Section I.A.

^{7.} Patent Trial and Appeal Board Statistics 10/31/2015, U.S. PAT. & TRADEMARK OFF. 2 https://www.uspto.gov/sites/default/files/documents/aia_statistics_october2016.pdf (last visited Feb. 10, 2017) [https://perma.cc/57V2-4CQW] (statistics current as of Oct. 31, 2016).

^{8.} Neil C. Jones, *The Five Most Publicized Patent Issues Today*, Bus. L. Today 4 (May 2014), http://www.americanbar.org/content/dam/aba/publications/blt/2014/05/five-patent-issues-201405 .authcheckdam.pdf [https://perma.cc/5HQ8-NL9D] ("The reported high success rates will only add more fuel to the fire, resulting in even more challenges being filed."); *Patent Trial and Appeal Board Statistics 10/31/2015*, *supra* note 7; *see also* Tony Dutra, *Rader Regrets CLS Bank Impasse*, *Comments on Latest Patent Reform Bill*, BNA BLOOMBERG (Oct. 29, 2013), http://www.bna.com/rader-regrets-cls-n17179879684 [https://perma.cc/D28T-X8WJ] (quoting Judge Rader describing the administrative law judges in the post grant proceedings as "death squads, killing property rights").

^{9.} See Gregory Dolin, Dubious Patent Reform, 56 B.C. L. REV. 881, 916 (2015) (explaining that the broadest reasonable construction standard "make[s] it much easier for the patent challenger to prevail" in proceedings at the PTO than in district court litigation); Paul R. Michel, Why Rush Patent Reform?, 7 LANDSLIDE 49, 50 (2015) (noting that the post grant review proceedings at the PTO are "unfavorable" to patent owners because the PTO "applies the broadest reasonable construction, rather than the 'correct construction' applied by courts").

^{10.} See Thomas King & Jeffrey A. Wolfson, PTAB Rearranging the Face of Patent Litigation, 6 LANDSLIDE 18, 21 (2013) ("[I]t is difficult to say how the two standards are different, if at all.").

Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131 (2016).

patent litigation landscape, the difference between the claim construction standards is of vital importance. 12

This Note contributes to the debate by providing empirical evidence of the legal authority cited in IPR proceedings. Based on the empirical findings, this Note argues that the different claim construction standards have largely converged in practice, despite their differing rationales. Part I of this Note discusses the rise of IPR proceedings and the development of the dual claim construction regime. Part II presents empirical findings about how the Patent Trial and Appeal Board ("PTAB") applies the BRI standard in IPR proceedings to show that both standards employ the same legal tools. Part III analyzes why the two standards have converged in practice, suggesting the convergence is due to similar guidance and shared canons of construction. Part IV proposes that, because the BRI standard in practice operates similarly to the *Phillips* standard. Congress should abolish the BRI standard and adopt the Phillips standard. Though abolishing the BRI standard would likely make little practical difference in terms of how often patent claims are invalidated because the standards are already so similar, recognizing a unified claim construction system would better support the goals of the patent system, such as efficiency, uniformity, and confidence in patent rights.

I. THE DUAL CLAIM CONSTRUCTION REGIME

Patent claims are interpreted in two primary forums: the PTO and the federal court system.¹³ When an applicant submits a patent application, the PTO construes the claims to determine whether the claimed invention is patentable (i.e., novel and non-obvious). When a patentee sues a competitor for infringement or a competitor claims that a patent is invalid, courts construe the claim terms to determine the scope of the patented invention. Thus, the dual claim construction regime developed in response to differences between these two distinct forums. This Part explores how these two distinct forums gave rise to the dual claim construction system that sparked the *Cuozzo* controversy. Section A describes how the recent rise of IPR proceedings has blurred the distinction between the two forums and heated the debate about the dual claim construction system. Section B provides an overview of how claim construction operates in both forums. Section C

^{12.} See Aashish Kapadia, Inter Partes Review: A New Paradigm in Patent Litigation, 23 TEX. INTELL. PROP. L.J. 113, 115 (2015) ("[T]he IPR proceeding has rapidly grown into a necessary option for patent owners and challengers alike.").

^{13.} This dual system dates back to before the America Invents Act.

explains the distinct policy rationales behind the two standards, which are based on differences between the PTO and the courts.

A. The Rise of IPRs and Increasing Scrutiny of BRI

In the early 2000s, concerns arose about the issuing of low-quality patents, increasing frequency and cost of patent litigation, and resulting disincentives to innovation. ¹⁴ To improve patent quality and reduce litigation costs, the AIA created new proceedings at the PTO to challenge patent validity, including IPRs. ¹⁵ IPRs replaced a former system called inter partes reexamination, with the goal of converting these proceedings to be more like an adjudication than an examination. ¹⁶ The AIA also created the PTAB, a new board of administrative law judges, to hear these new litigation-like proceedings. ¹⁷

An IPR proceeding allows any person other than the patent owner to file a petition with the PTO to challenge the validity of a patent. ¹⁸ The petition must identify the grounds for the challenge, and the patent owner then files a preliminary response showing why the PTO should not institute an IPR. ¹⁹ The AIA places time constraints on the proceeding—the PTAB must decide whether to grant the petition and institute a proceeding within three months, and, if so, must issue a final written decision within twelve months. ²⁰ Either the patent owner or the patent challenger can appeal final written decisions to the Federal Circuit. ²¹ IPR proceedings are similar to litigation in many ways; for example, IPR proceedings provide limited discovery, permit

^{14.} See In re Cuozzo Speed Techs., LLC, 793 F.3d 1268, 1285 (Fed. Cir. 2015) (Newman, J., dissenting) ("[A] solution was sought to a major problem confronting United States industrial advance: the burgeoning patent litigation and the accompanying cost, delay, and overall disincentive to investment in innovation."); H.R. REP. No. 112-98(I), pt. 1, at 39 (2011), as reprinted in 2011 U.S.C.C.A.N. 67, 69 (discussing a "growing sense that questionable patents are too easily obtained and are too difficult to challenge"); Dolin, supra note 9, at 881–82.

^{15. 35} U.S.C. § 311 (2012); H.R. REP. No. 112-98(I), pt. 1, at 40 ("The legislation is designed to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs."). The AIA also created post grant review (PGR) proceedings and covered business method (CBM) proceedings. Since IPRs have been the most popular of the three proceedings and are the subject of the *Cuozzo* litigation, this Note focuses on IPR proceedings.

^{16.} H.R. REP. No. 112-98(I), pt. 1, at 46-47.

^{17. 35} U.S.C. § 311(a); H.R. REP. No. 112-98(I), pt. 1, at 48.

^{18. 35} U.S.C. § 311(a). The challenge may be based only on grounds that could arise under § 102 (novelty) or § 103 (lack of nonobviousness), and "only on the basis of prior art consisting of patents or printed publications." 35 U.S.C. § 311(b).

^{19. 35} U.S.C. §§ 312(a), 313 (2012).

^{20. 35} U.S.C. §§ 314(b), 316(a)(11) (2012).

^{21. 35} U.S.C. § 141(c) (2012).

requests for an oral hearing, and involve a trial before administrative law judges. Despite these similarities, IPR proceedings differ from litigation in that they allow a motion to amend and apply a lower evidentiary standard.²² Overall, IPR proceedings are similar to district court litigation because they provide third parties an opportunity to challenge the validity of an issued patent, but IPRs operate on a shorter timeframe and only permit challenges to validity, not other potential claims parties may bring in district court.

The AIA is silent on which claim construction standard to apply during IPRs. ²³ The statute does, however, grant the PTO authority to promulgate procedural rules to govern IPRs. ²⁴ Under this authority, the PTO promulgated a rule in August 2012 that applies the BRI standard during IPR proceedings. It justified this rule based on both the longstanding practice of applying the BRI standard in PTO proceedings to determine patentability and the congressional silence as an implicit approval of the BRI standard. ²⁵

Though the Supreme Court recently affirmed the validity of this rule, the Federal Circuit was divided about whether the AIA grants authority to the PTO to apply the BRI standard for claim construction during IPR proceedings. ²⁶ In the *Cuozzo* panel opinion, the majority found that the use of BRI for over one hundred years in PTO proceedings meant that Congress implicitly approved using BRI in IPRs. ²⁷ Additionally, the majority found in the alternative that the PTO regulation governing claim construction was a procedural rule for which the PTO has rulemaking power and thus passed muster under *Chevron* deference. ²⁸ Conversely, the dissent found that congressional silence

^{22.} In district courts, patent challengers must provide clear and convincing evidence to invalidate a patent claim. Yet in PTAB proceedings, patent challengers only need to prove invalidity by preponderance of the evidence. 35 U.S.C. § 316(e) (2012); 37 C.F.R. § 42.121(a) (2016); Jonathan Tamimi, *Breaking Bad Patents: The Formula for Quick, Inexpensive Resolution of Patent Validity*, 29 BERKELEY TECH. L.J. 587, 617–18 (2014).

^{23.} See In re Cuozzo Speed Techs., LLC, 793 F.3d 1268, 1275 (Fed. Cir. 2015) ("[T]he statute on its face does not resolve the issue of whether the broadest reasonable interpretation standard is appropriate in IPRs; it is silent on that issue.").

^{24. 35} U.S.C. § 316(a)(4).

^{25. 37} C.F.R. § 42.100(b); Changes to Implement Inter Partes Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents, 77 Fed. Reg. 48,680, 48,697 (Aug. 14, 2012) (codified at 37 C.F.R. § 42.100(b)).

^{26.} See Cuozzo, 793 F.3d at 1285 (Newman, J., dissenting) (disagreeing with the majority and arguing that "[t]he [AIA] plainly contemplated that the new PTO tribunal would determine validity of issued patents on the legally and factually correct claim construction, not on a hypothetical 'broadest' expedient . . .").

^{27.} Id. at 1275–78.

^{28.} *Id.* at 1278–79. The PTO only has rulemaking authority to promulgate procedural rules, not substantive rules. *See* 35 U.S.C. § 316 (describing the regulations the PTO can prescribe).

did not implicitly approve using BRI because the IPR is a completely new type of proceeding. ²⁹ Since IPRs are adjudicatory proceedings created to function as a "surrogate for district court litigation," the dissent reasoned that Congress intended the PTO to apply the same claim construction standard as district courts. ³⁰ Additionally, the dissent would not have deferred to the regulation under *Chevron* because it went against the congressional purpose of "substituting administrative adjudication for district court adjudication." ³¹ By a vote of 6-5, the Federal Circuit denied a petition for rehearing en banc, with opinions that reiterated the disagreement over congressional intent and deference to the PTO's regulation. ³²

In January 2016, the Supreme Court granted certiorari on *Cuozzo*. In the petition for certiorari, appellants argued that use of the BRI standard in IPRs undermines the patent system's goals of uniformity in claim construction and finality in district court litigation.³³ Moreover, appellants argued the BRI standard creates uncertainty, which both devalues patent rights and invites forum shopping between the PTO and district courts.³⁴ Ultimately, the Supreme Court deferred to the PTO rule applying the BRI standard under *Chevron*.³⁵

Outside of the courtroom, Congress also has debated the issue. Proposed legislation seeks to amend the AIA to require the PTAB to apply the *Phillips* standard to construe claims during IPR proceedings.³⁶ While this controversy continues, the PTAB currently applies the BRI claim construction standard.

B. The Mechanics of Claim Construction

The debate regarding the appropriate claim construction standard for IPRs attracted so much attention because of the vital role

^{29.} Cuozzo, 793 F.3d at 1284-89.

^{30.} Id. at 1290.

^{31.} Id. at 1290–91. For a detailed discussion of the debate over whether the Federal Circuit should defer to PTO interpretations in light of the AIA, see Samiyyah R. Ali, Note, The Great Balancing Act: The Effect of the America Invents Act on the Division of Power Between the Patent and Trademark Office and the Federal Circuit, 69 VAND. L. REV. 217, 221–48 (2016).

 $^{32.\} In\ re$ Cuozzo Speed Techs., LLC, 793 F.3d 1297, 1298–1306 (Fed. Cir. 2015) (order denying petition for rehearing en banc).

^{33.} Petition for a Writ of Certiorari at 18, Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131 (2016) (No. 15-446), 2015 WL 5895939, at $^*14-19$.

^{34.} Id.

^{35.} Cuozzo, 136 S. Ct. at 2142-45.

^{36.} See PATENT Act, S. 1137, 114th Cong. § 11(a)(4)(A)(vii) (as reported by S. Comm. on the Judiciary, June 4, 2015, with Manager's Amendment in the nature of a substitute); STRONG Patents Act of 2015, S. 632, 114th Cong. § 102(a) (as introduced on March 3, 2015).

claim construction plays in the patent system. Claim construction is a "bedrock principle" of patent law.37 Claims define the scope of a patentee's right to exclude in both the examination and litigation contexts, and claim construction is how one determines the scope of a claim.³⁸ Claim construction refers to the process of interpreting the terms in a patent, similar to interpreting the terms of a statute.³⁹ In a patent, the claims define the invention that receives patent protection. 40 Thus, an inventor can exclude others from making, using, or selling only his *claimed* invention.⁴¹ In a patent infringement lawsuit, a defendant is considered to infringe if he makes, uses, or sells every element of the patent owner's claimed invention. Therefore, claim construction is the necessary first step to interpret what exactly the inventor claimed before determining whether the defendant potentially infringed. 42 Beyond the infringement analysis, claim construction is also essential to determine the validity of a patent. A patent is valid only if the claimed invention is new, non-obvious, and clearly described. Here, claim construction again serves as the first step to define the claimed invention. If all elements of the claimed invention can be found in prior art⁴³ or if the claimed invention would have been obvious to make based on the prior art, the patent is invalid and, therefore, unenforceable. Thus, claim construction is of central importance to both patent owners and competitors, as it is a threshold question in virtually every patent dispute.44

To construe claims, courts and the PTO apply claim construction standards. These standards of interpretation guide the process of

^{37.} Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111 (Fed. Cir. 2004)).

^{38.} *Id.*; see also Merill v. Yeomans, 94 U.S. 568, 570 (1876) (noting claims are "of primary importance, in the effort to ascertain precisely what it is that is patented").

^{39.} See J. Jonas Anderson & Peter S. Menell, Informal Deference: A Historical, Empirical, and Normative Analysis of Patent Claim Construction, 108 Nw. U. L. Rev. 1, 3 (2013) (defining claim construction).

^{40.} *Merill*, 94 U.S. at 570 (noting claims are "of primary importance, in the effort to ascertain precisely what it is that is patented").

^{41.} See id. at 570–74 (analyzing an inventor's claims to determine what is protected).

^{42.} See Anderson & Menell, supra note 39, at 3–4 ("When patentees seek to enforce their rights in court, the interpretation of patent claim boundaries guides both infringement and validity analysis.").

^{43.} Prior art refers to all evidence that an invention is already known. It may include other patents, printed publications, industry knowledge, and commercially available products.

^{44.} In the IPR context, the PTAB reviews the validity of patents but does not make judgments about infringement. Thus, this Note focuses on claim construction for validity purposes. In the validity context, a broader claim interpretation has potential to encompass a broader array of prior art, and thus is more likely to lead to a finding of invalidity. This is why many patent owners are concerned about applying the BRI standard in IPRs—the BRI is considered broader than the *Phillips* standard.

interpreting claim terms. 45 Two primary evidentiary sources are used to construe claims: intrinsic and extrinsic evidence. 46 Intrinsic evidence refers to evidence from the patent document itself. This includes the language of the claims, the specification, and the prosecution history. The specification is a detailed, written description of the claimed invention.⁴⁷ The prosecution history is a written record of the back and forth between the patent examiner and the patent owner during the application process. For example, the prosecution history may contain statements by the patent owner explaining the meaning of a claim term in response to a rejection by the examiner. These three sources of intrinsic evidence are analogous to statutory interpretation tools: the claims are similar to the language of a statute; the specification is similar to the committee reports; and the prosecution history resembles legislative history. 48 In contrast, extrinsic evidence refers to sources outside the patent document, such as dictionaries, treatises, expert testimony, and inventor testimony. In some cases, claim construction is straightforward and merely involves applying a commonly understood definition. However, most cases that spark litigation involve disputed terms that require examining their particular meaning in a specialized field.49

C. Differing Policies for Differing Forums

The two different contextual backdrops—determining whether a patent should be granted at the PTO and determining whether a patent should be enforced in the courts—led to the doctrinal development of the differing BRI and *Phillips* standards. The BRI standard developed in the patent prosecution context to allow the patent examiner and the applicant to explore claim scope and to clarify meaning during the interactive process of examining the patent application.⁵⁰ The *Phillips* standard, however, developed in the litigation context based on the need to find the "correct" claim construction and to balance that need with efficient judicial administration.⁵¹ Thus, while both standards

^{45.} See Andrew J. Fischer & David A. Jones, The Bow Tie of Patent Claim Construction, 4 LANDSLIDE 21, 22 (2012) (describing standards of interpretation). But see Anderson & Menell, supra note 39, at 4 (noting claim construction standards "are notoriously amorphous and uncertain").

^{46.} Anderson & Menell, supra note 39, at 43.

^{47.} This written description may also include figures and drawings.

^{48.} Anderson & Menell, supra note 39, at 43 n.251.

^{49.} Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc).

^{50.} Flo Healthcare Sols., LLC v. Kappos, 697 F.3d 1367, 1378 (Fed. Cir. 2012).

^{51.} See Phillips, 415 F.3d at 1318-19 (discussing the merits of allowing extrinsic evidence in claim interpretation).

seek to determine whether a claimed invention is novel compared to all existing prior art, the BRI standard aims to develop a written record that clearly defines claim scope, while district courts aim to interpret that written record to discern what the inventor actually intended to claim.

1. District Courts: Searching for the Correct Construction

In a 2005 en banc decision, the Federal Circuit articulated the current controlling standard, known as the *Phillips* standard, for claim construction in litigation proceedings. 52 This standard aims to discern the "correct" construction of patent claim terms based on the inventor's intent.⁵³ The *Phillips* standard directs that words of a claim are given their "ordinary and customary meaning" as the meaning of "the term would have to a person of ordinary skill in the art in question at the time of the invention."54 The emphasis on the person of ordinary skill in the art comes from the "well-settled understanding" that patents are typically "addressed to and intended to be read by" people skilled in the field of invention. 55 Thus, the standard's goal is to interpret the claims as the inventor intended and as the interested public (those of ordinary skill in the art) would interpret them. Moreover, the standard supports construing claims to show the invention that the inventor actually intended to claim and cautions against overly broad interpretations.⁵⁶ The Federal Circuit has, however, noted that the desire to interpret claims according to the inventor's intent warranted some overlap with the PTO construction, emphasizing that part of the reason courts

^{52.} *Id.* at 1311–24. Though principles of claim construction had been outlined in previous decisions, the Federal Circuit noted that some aspects of claim construction required clarification, particularly the role of dictionaries in interpreting claims. *Id.* at 1312. For simplicity, this Note refers to the district court jurisprudence on claim construction all together as the *Phillips* standard. *See* Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1581–86 (Fed. Cir. 1996) (providing construction principles that *Phillips* draws on); Markman v. Westview Instruments, Inc., 52 F.3d 967, 979–81 (Fed. Cir. 1995) (en banc) (exploring how specification relates to claims), *affd*, 517 U.S. 370 (1996).

^{53.} Phillips, 415 F.3d at 1316 (noting that the inventor's intention, as expressed in the specification, is regarded as dispositive).

^{54.} Id. at 1313. The time of invention is the effective filing date of the patent. Id.

^{55.} *Id.* The person of ordinary skill is not a judge, jury, or technical expert. *See In re* Nelson, 280 F.2d 172, 181 (C.C.P.A. 1960) ("The descriptions in patents are not addressed to the public generally, to lawyers or to judges, but, as section 112 says, to those skilled in the art to which the invention pertains or with which it is most nearly connected.").

^{56.} Phillips, 415 F.3d at 1321–22 (explaining that the "risk of systemic overbreadth is greatly reduced" if the court focuses claim construction on intrinsic evidence).

should rely heavily on the specification is because the PTO also does so when determining whether to grant the patent.⁵⁷

The policy justifications underlying the *Phillips* standard include the public notice function of patents, the desire for uniformity in patent jurisprudence, and the need for efficient judicial administration. 58 The public notice function of patents, a central policy goal in patent law, states that a patent should put the interested public on notice about what is covered by the patent. ⁵⁹ By focusing the inquiry on the intrinsic evidence, the *Phillips* standard aims to incentivize the patent owner to clearly describe the invention in the patent document, which in turn allows the public to easily understand the boundaries of the patent owner's claimed invention upon reading the patent document. This therefore enables the public take steps to avoid infringement. 60 Moreover, judges, rather than juries, conduct claim construction in order to support uniformity. 61 The hope is that judges applying a uniform standard of claim construction will further the public notice function of patents, as it puts both inventors and the interested public on notice of how claims will typically be interpreted. 62 Additionally, the *Phillips* standard responds to the need for efficient judicial administration by focusing the inquiry on intrinsic evidence and limiting the exploration of extrinsic sources. 63

2. The Patent Office: Exploring the Boundaries of the Claims

The PTO applies the BRI standard during claim construction, which gives claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." ⁶⁴ This standard aims to interpret claims broadly, while staying grounded in the written description and the perspective of one of ordinary skill in the art. Procedural differences between court litigation

⁵⁷. Id. at 1316-17 (emphasis added) (quoting $In\ re\ Am$. Acad. of Sci. Tech Ctr., $367\ F.3d\ 1359,\ 1364$ (Fed. Cir. 2004)).

^{58.} See Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996); Phillips, 415 F.3d at 1318–19.

^{59.} *Phillips*, 415 F.3d at 1312 ("[I]t is 'unjust to the public, as well as an evasion of the law, to construe [terms] in a manner different from the plain import of the terms.'" (quoting White v. Dunbar, 119 U.S. 47, 52 (1886))).

^{60.} Id. at 1321 (citing Merill v. Yeomans, 94 U.S. 568, 570 (1876)).

^{61.} Markman, 517 U.S. at 390.

^{62.} See id.

^{63.} *Phillips*, 415 F.3d at 1319 ("[T]here is a virtually unbounded universe of potential extrinsic evidence of some marginal relevance...leaving the court with the considerable task of filtering the useful extrinsic evidence from the fluff.").

^{64.} In re Am. Acad. of Sci. Tech Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004).

and the patent examination process partially justify the use of a different standard in PTO proceedings. Before the PTO, the applicant has the opportunity to amend claims during the prosecution process—an opportunity not available in litigation. Moreover, patent applications before the PTO do not receive the same presumption of validity that they receive in court. Additionally, unlike judges in litigation proceedings who base claim construction analysis on a fully developed written record, a patent examiner does not yet have a fully developed written record for pending patent applications. Thus, the BRI standard seeks to "establish a clear record of what [the] applicant intends to claim."

The policy justifications underlying the BRI standard include the public notice function of patents and the desire to limit the risk of issuing an invalid patent. As noted earlier, the public notice function of patents aims to put the interested public on notice about what a patent covers. 69 To support the public notice function, the BRI standard emphasizes the importance of the specification as well as interpreting claims from the perspective of a person of ordinary skill in the art.⁷⁰ Similar to *Phillips*, this incentivizes patent applicants to clearly describe their inventions in the patent document itself, which then allows the interested public to clearly discern the scope of the patented invention from reading the patent document. 71 Moreover, the BRI standard interprets claims broadly during the interactive process with the examiner to promote development of a written record that will "provide[] the requisite written notice to the public as to what the applicant claims as the invention."72 In particular, the prosecution process aims to produce claims that are "precise, clear, correct, and unambiguous."73 Thus, the BRI standard promotes the public notice function of patents by emphasizing the importance of the specification

^{65.} In re Yamamoto, 740 F.2d 1569, 1571 (Fed. Cir. 1984).

^{66.} In re Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

^{67.} MPEP § 2111 (9th ed. Rev. 7, Nov. 2015).

^{68.} Id.; Joel Miller, Claim Construction at the PTO—the "Broadest Reasonable Interpretation," 88 J. PAT. & TRADEMARK OFF. SOC'Y 279, 280 (2006).

^{69.} See supra Section I.C.1.

^{70. 37} C.F.R. § 1.75(d)(1) (2016); MPEP, *supra* note 67, § 2111.01 ("When the specification sets a clear path to claim language, the scope of claims is more easily determined and the public notice function of the claims is best served."); *see also In re* Suitco Surface, Inc., 603 F.3d 1255, 1260 (Fed. Cir. 2010); *In re* Hyatt, 211 F.3d 1367, 1372 (Fed. Cir. 2000).

^{71.} See Phillips v. AWH Corp., 415 F.3d 1312, 1312 (Fed. Cir. 2004); Morris, 127 F.3d at 1054.

^{72.} Morris, 127 F.3d at 1054 ("[P]ublic notice is an important objective of patent prosecution.").

^{73.} Miller, supra note 68, at 289.

and aiming to produce a clear written record. ⁷⁴ In addition to the public notice function, the BRI standard "reduce[s] the possibility that the claim, once issued, will be interpreted more broadly than is justified." ⁷⁵ By giving claims broad interpretations, the PTO responds to fears that it may allow a claim for an invention not truly deserving of patent protection (i.e., obvious or not novel), thus limiting the risk that the PTO will issue a patent that is in fact invalid. ⁷⁶ When the PTO interprets a claim broadly, it encompasses more prior art and is therefore more likely to be rejected (i.e., the PTO will not grant a patent on the application because the invention is not novel or obvious). Therefore, interpreting claims more broadly decreases the chances that the PTO will issue a patent that will later be found invalid.

3. But Does the Distinction Make a Difference?

The Federal Circuit has stated that the divergence between the *Phillips* standard and the BRI standard is "a distinction with a difference." Recently, the Federal Circuit reiterated that "[t]he 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." A broader construction under the BRI standard threatens to make it more likely a patent will be invalidated because a broader construction encompasses more prior art. The expanded universe of prior art makes it more likely that a patent claim will be anticipated (i.e., considered not novel) and therefore invalidated. Some commentators have suggested that the broad nature of the BRI standard contributes to the high invalidation rate of claims during IPRs. Others, however, have suggested that the difference between applying BRI and *Phillips* in IPR proceedings is minimal because the difference between the standards is vague and

^{74.} See Morris, 127 F.3d at 1054; Miller, supra note 68, at 289.

^{75.} MPEP, *supra* note 67, § 2111.

^{76.} See Miller, supra note 68, at 288 ("Perhaps the most frequently mentioned basis for the rule is a fear that without such a standard the PTO might allow a claim anticipated by or obvious in view of the existing art."); see also supra Section I.A (describing concerns about low-quality patents).

^{77.} *Morris*, 127 F.3d at 1054 (describing the difference between validity determinations in a patent infringement suit and a PTO proceeding).

^{78.} Facebook, Inc. v. Pragmatus AV, LLC, 582 F. App'x 864, 869 (Fed. Cir. 2014) (nonprecedential).

^{79.} See Dolin, supra note 9, at 916.

^{80.} Id.; Michel, supra note 9, at 50.

often of little practical effect.⁸¹ Both standards have similar directions for how to interpret claims, as both instruct claims should be read in the context of the entire patent document, with a particular focus on the written description. Moreover, both standards emphasize that claims should be interpreted from the perspective of a person of ordinary skill in the art.⁸²

This Note adds to the scholarly debate by conducting an empirical study of the legal authority cited during claim construction analysis in IPR proceedings. Citations to legal authority provide insight into the actual legal tools of interpretation the PTAB applies during claim construction, which sheds light on whether the BRI standard operates differently than the *Phillips* standard. The next Part provides the findings, suggesting that the legal standards applied in IPR claim constructions closely resemble the legal standards applied in *Phillips* claim constructions.

II. THE BRI STANDARD IN PRACTICE

This Part presents findings of an empirical study that show the legal authority and claim construction principles cited under the BRI standard overlap significantly with the *Phillips* standard, ultimately arguing that the standards have in fact converged in practice. To analyze how the PTAB applies the BRI standard, I developed a database of 411 IPR final written decisions, beginning in February 2015 when the *Cuozzo* case affirmed the PTAB's authority to apply the BRI standard. ⁸³ The data demonstrates that in practice, the BRI operates in a circular manner, largely citing legal authority that originates from the *Phillips* regime. Section A describes the methodology used to create the database and its limitations. Section B presents the results to show how the two claim construction standards have converged in practice.

^{81.} Maya Eckstein et al., Putting "Reasonable" Back in "Broadest Reasonable Interpretation," HUNTON & WILLIAMS 1 (June 2015), https://www.hunton.com/files/News/4dfb7279-5892-4bdb-b06e-9dbf6f17d8c6/Presentation/NewsAttachment/07cad96d-73ef-49e6-a0ab-2e47ae9ebfb4/ Putting_reasonable_in_broadest_reasonable_interpretation_June2015.pdf [https://perma.cc/A634-VDJN] ("The distinction between the 'broadest reasonable interpretation' standard used by the Patent Office and the Phillips claim construction adopted by the courts is vague."); King & Wolfson, supra note 10, at 21; Jacob Oyloe et al., Claim Construction in PTAB vs. District Court, LAW 360 (Oct. 6, 2014, 10:50 AM) http://www.law360.com/articles/581715/claim-constructions-in-ptab-vs-district-court [https://perma.cc/JA8K-6Z5C] (suggesting that even when the district court and the PTAB adopt different claim constructions, the practical effect remains largely the same).

^{82.} See *infra* Section III.A for a more detailed description of the specific guidance on implementation of the standards.

^{83.} In re Cuozzo Speed Techs., LLC, 793 F.3d 1268, 1275 (Fed. Cir. 2015). The database consists of all final written decisions for IPRs from February 5, 2015 through February 4, 2016.

A. An Empirical Look at Claim Construction in IPRs

The database created for this study consists of final written decisions issued by the PTAB in IPR proceedings over a one-year period following the *Cuozzo* decision in February 2015. In order to identify relevant decisions, I performed a search on Westlaw to capture all final written decisions issued under 35 U.S.C. § 318(a).84 Then, I read the portion of each final written decision that dealt with claim construction and coded the case law cited in each claim construction section.85 The purpose of coding the case law is to observe the origin of the legal authority that the PTAB applied during claim construction analysis. At times, the PTAB, while applying the BRI standard, cited cases that were actually applying the *Phillips* standard. Therefore, this study aims to track the overlap between the two standards in practice by observing how frequently the PTAB cited legal authority deriving from *Phillips* when it applied the BRI standard to construe claims in IPRs.

To code the case law, I divided citations into three major categories: direct district court-originated citations, indirect district court-originated citations, and pure PTO-originated citations. Most of the case law cited in IPR decisions comes from the Federal Circuit, which hears appeals from both the PTO and district courts. Under the dual claim construction regime, an appeal from a PTO proceeding is reviewed applying the BRI standard (as that is the standard the PTO applies in all proceedings), while an appeal from a district court proceeding is reviewed applying the *Phillips* standard (as that is the standard district courts apply). Therefore, I assumed that appeals from district court decisions were applying the *Phillips* claim construction standard and appeals from PTO decisions were applying the BRI standard. Thus, if a case cited in an IPR was either a district

^{84.} This statute states, "If an inter partes review is instituted and not dismissed under this chapter, the Patent Trial and Appeal Board shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added under section 316(d)." Thus, all final written decisions cite this statute. I clicked on "Citing References" of this statute, then performed a search for "final written decision" and filtered by date to identify the decisions that have issued since *Cuozzo*.

^{85.} Most decisions have a specific section called "Claim Construction," though some just discussed it as part of the overall decision.

^{86.} Compare Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1298 (Fed. Cir. 2015) (applying the BRI standard when reviewing an appeal of a PTAB decision), with Thorner v. Sony Comput. Entm't Am. LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (applying the *Phillips* standard when reviewing an appeal of a district court decision).

^{87.} Though some district court decisions came before *Phillips*, the *Phillips* standard endorsed past claim construction principles and just provided clarification. Phillips v. AWH Corp., 415 F.3d 1303, 1324 (Fed. Cir. 2005) (en banc). Thus, all of these decisions represent the district

court case or a Federal Circuit case reviewing a district court case, I labeled it as a "direct" district court citation. If a case cited in an IPR was either a PTO decision or a Federal Circuit case reviewing a PTO decision, I checked the specific pincite for further information. If the pincite referred to a line that was directly quoting or citing another PTO opinion or applying its own reasoning, I labeled the decision as a "pure PTO" citation. If the pincite referred to a line that was directly quoting or citing a district court-originated opinion, I labeled the decision as an "indirect" district court citation. The citations in this category are in essence circular citations. They cite a PTO decision, but the actual law cited comes directly from the district court. Since the district court was presumably applying the *Phillips* standard, the legal principles still stem from the district court claim construction jurisprudence.

Most of the final written decisions cited Cuozzo for the proposition that the AIA provided statutory authority for the PTO to apply the BRI standard. Because this conclusory statement did not provide direction on how to implement the BRI standard, I did not include those citations. This study aims to track the citations to substantive guidance about how to implement the BRI standard. Moreover, there are two situations where the PTAB did not apply the BRI standard: (1) if a patent expired, the PTAB applied the *Phillips* standard;88 and (2) if the PTAB determined no claim construction was required.⁸⁹ Therefore, I only coded final written decisions that applied the BRI standard. However, I still tracked the number of cases applying Phillips or finding no construction necessary to examine the practical effect of the different standards because when decisions apply the Phillips standard directly or do not need to construe claims at all, the claim construction is not legally different from how it would be in a district court, lowering the distinction between claim construction in the two different forums.

A number of limitations should be acknowledged about this approach. First, this database only reviewed final written decisions, even though claims are also construed during decisions to institute

court claim construction standard, but I commonly refer to them all as the *Phillips* standard for simplicity.

^{88.} The PTAB applies the *Phillips* standard to expired patents because patent owners do not have an opportunity to amend claims. *See In re CSB-Sys. Int'l, Inc., 832 F.3d 1335, 1341 (Fed. Cir. 2016); In re Rambus Inc., 694 F.3d 42, 46 (Fed. Cir. 2012) ("[T]he Board's review of the claims of an expired patent is similar to that of a district court's review."); Universal Remote Control, Inc. v. Universal Elec., Inc., No. IPR2014-01102, 2015 WL 9098805, at *4 (P.T.A.B. Dec. 15, 2015).*

^{89.} When an opinion determined no express claim construction was required, I did not include legal citations from those final written decisions in the tracking citations that applied the BRI standard because the PTAB did not actually construe any terms.

IPRs. 90 Thus, this study does not capture the legal reasoning behind claim construction in initial determinations. However, this study does capture the legal authority cited for the claim terms that were disputed throughout the proceedings by focusing on the final written decisions. Second, I sorted the citations into categories based only on one level of background checks. When a PTO decision cited a district court opinion, I did not continue searching to see if the district court opinion was citing another opinion. Though perhaps this method could have overlooked times when reasoning that in fact originated at the PTO was subsequently adopted by a district court, the purpose of this study is to analyze the overlap between the BRI and Phillips standards. Thus, once the citation appears in a district court opinion, it is part of the *Phillips* jurisprudence and relevant to show convergence between the standards, regardless of where the initial citation originated. Additionally, there is potential for human error, as I sorted the data by hand.⁹¹ Finally, there is an inherent limitation in measuring these standards by the legal authority quoted. Claim construction is by nature a fact-specific inquiry, and legal citations cannot fully capture the idiosyncratic judgments made by individual PTAB judges. Yet this study addresses the general claim construction principles that the PTAB applies when it analyzes the ambiguous terms using these legal rules as a proxy for how the two standards operate in practice. 92

B. Circular Citations

On the whole, the legal authority cited during claim construction analysis in IPR decisions looks very similar to that applied in district court litigation because (1) the majority of legal authority applied during IPRs originated from district courts, and (2) the PTAB only applied the BRI standard in 83% of total proceedings. This Part analyzes the overlap in legal authority cited when proceedings applied the BRI standard and then discusses the limited application of the BRI standard.

To analyze the general trends in decisions that applied the BRI standard, I sorted the data in two ways: by total number of citations and by each final written decision. The final written decisions contained 1,389 total case citations. Of the total citations in decisions applying the

^{90.} James Stein et al., Spotlight on Claim Construction Before the PTAB, 11 BUFF. INTELL. PROP. L.J. 73, 81–91 (2015).

^{91.} To guard against human error, I double-checked each citation, though there is still potential for human error.

^{92.} See *infra* Section III.C for a more in-depth discussion on the fact-specific nature of the claim construction inquiry.

BRI standard, 72% traced back to district court claim construction jurisprudence—49% were "direct" citations to district court cases, and 23% were "indirect" citations to district court cases. Only 28% of total citations were "pure PTO" citations. These data suggest that the vast majority of PTAB judges look to *Phillips*, and not the PTO's own guidance, when implementing the BRI standard through statements of legal rules. Moreover, the "indirect" citations to district court cases demonstrate a circular phenomenon—the decisions appear to be citing PTO authority, but in reality, the substantive doctrine comes from the district court sphere.⁹³

However, some final written decisions contained numerous legal citations, while others contained only one or two. Therefore, I also sorted the data by final written decision to view the authority per decision—and a similar trend emerged. To view the data per decision, I sorted the final written decisions that applied the BRI standard into four categories: (1) decisions that cited only "direct" or "indirect" district court authority; (2) decisions that cited at least one "direct" or "indirect" district court authority, but also cited at least one "pure PTO" authority; (3) cases that cited only "pure PTO" authority; and (4) cases that provided only conclusory guidance. 94 Overall, 36% of final written decisions cited only district court authority; 56% of final written decisions cited a mix of district court authority and pure PTO authority; 2% cited only pure PTO authority; and 6% contained only conclusory citations. Thus, over 90% of the decisions applied legal principles that derived exclusively or partially from the district court realm, yet only six decisions applied legal principles that derived purely from the PTO. Overall, data suggest that in IPR proceedings, the BRI standard functions as a circular standard that appears to be distinct from *Phillips*, yet returns to district court-originated jurisprudence for most of its substantive guidance. The fact that in practice the two standards look to substantially similar legal authority questions the value of retaining two nominally different claim construction standards.

The similarity between claim construction in IPRs and in district courts is further enhanced by the fact that a significant portion of IPR proceedings did not even apply the BRI standard. Out of the total decisions, only 83% applied the BRI standard. In 7% of decisions, the PTAB applied the *Phillips* standard because the patents at issue were expired. Moreover, 10% of decisions applied no claim construction

^{93.} See Section II.B.

^{94.} I considered a decision to contain only conclusory guidance when it did not cite legal authority for implementing the standard or when it cited only *Cuozzo* or the PTO rule for the proposition that the BRI standard applies, without any additional legal citations.

standard because the PTAB determined no express claim construction was required. Thus, almost one-fifth of IPR decisions construed claims in a manner that legally did not differ from district court claim construction, as the PTAB either directly applied *Phillips* or did not need to construe claims at all. The fact that a significant portion of IPR decisions did not apply the BRI standard at all further illuminates the convergence between claim construction at the PTO and at district courts.

III. EXPLAINING THE CONVERGENCE

Despite the divergence in policy rationales, the two claim construction standards appear to have converged in practice. This Part analyzes the reasons for the convergence. First, Section A describes how the PTO and the courts have provided very similar legal guidance, employing shared canons of claim construction and operating in a circular manner similar to the legal citations in IPRs. Second, Section B looks at how the Federal Circuit has recently tightened the "reasonableness" requirement in IPRs, narrowing the BRI standard and bringing it more in line with *Phillips*. Yet, amidst the convergence in legal guidance, the PTAB and courts have settled on differing constructions for the same claim terms in a few cases. Section C takes a fact-specific look at PTAB and federal court cases construing the same patents to suggest that different conclusions about the same claim terms may be due to the inherent ambiguities in interpretation or litigant behavior rather than a difference between the legal standards.

A. Guidance from the PTO and Courts

Beyond the theoretical rationales for the two distinct forums' standards discussed in Part I, the federal court system and the PTO also developed analytical frameworks to implement the claim construction standards in practice. The district court standard developed primarily through case law, while the BRI standard is explained in the PTO's interpretive guidance. However, since the Federal Circuit reviews appeals from the PTO, case law sheds some light on the BRI standard as well. The Federal Circuit has recognized that "there is no magic formula or catechism for conducting claim construction." Yet courts and the PTO have developed guiding principles and canons of claim construction to improve predictability. Despite the differing policy justifications behind the two standards, the

guidance on how to apply each standard is actually quite similar. Both standards direct claim interpreters to read claims in the context of the entire patent document, to emphasize the specification, and to interpret claims from the perspective of a person of ordinary skill in the art. Moreover, both standards employ many of the same specific rules for claim construction. The similarity between guidance from the two forums explains why many IPRs cite legal authority stemming from district courts and casts doubt upon the practical importance of maintaining two separate claim construction standards.

1. Instructions from *Phillips*

The *Phillips* decision reaffirmed and clarified claim construction principles from other decisions. ⁹⁶ With the central focus on determining "ordinary and customary meaning" from the perspective of a "person of ordinary skill in the art," the Federal Circuit developed a step-by-step framework for construing claims. ⁹⁷ This analytical framework emphasizes the importance of intrinsic evidence, with relevant sources including the language of the claims themselves, the specification, the prosecution history, and relevant extrinsic evidence. ⁹⁸ The central message is that a claim construction cannot contradict the unambiguous meaning of the words of a claim in light of the intrinsic evidence. ⁹⁹

The *Phillips* inquiry begins with "how a person of ordinary skill in the art understands a claim term," based on the assumption that the person of ordinary skill read the claim term in the context of the entire patent. ¹⁰⁰ Since a person of ordinary skill is a member of the field of invention, terms are given any special meaning or usage in the field, unless the patentee acted as his own lexicographer and explicitly defined a term. ¹⁰¹ Since claim meaning is often not immediately apparent in disputed terms that give rise to litigation, courts look to publicly available sources that show what a person of ordinary skill in the art would have understood the disputed language to mean. ¹⁰² To

^{96.} *Id.* ("Today, we adhere to that approach and reaffirm the approach outlined in [*Vitronics*], in *Markman*, and in *Innova*."); *see also* Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111 (Fed. Cir. 2004); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); Markman v. Westview Instruments, Inc., 52 F.3d 967, 979–81 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

^{97.} Phillips, 415 F.3d at 1313-24.

^{98.} Id.

^{99.} Id. at 1322.

^{100.} Id. at 1313.

^{101.} Id.

^{102.} Id. at 1314.

conduct this inquiry, Phillips directed courts to first consult intrinsic evidence and then to consider extrinsic evidence, though it is given less weight. 103

a. Intrinsic Evidence

Within the category of intrinsic evidence, the Federal Circuit articulated a hierarchy: first courts must consult the claim language itself, then the written description, and finally the prosecution history. 104 Claims do not stand alone, but rather are read in context of the "fully integrated written instrument." 105 The Federal Circuit emphasized that the specification is "always highly relevant" to claim construction, is usually dispositive, and is "the single best guide to the meaning of a disputed term." ¹⁰⁶ Within the specification, the inventor's own lexicography governs if the inventor defined the term, and statements about claim scope, such as an intentional disavowal or disclaimer, are dispositive. 107 Courts should also consider the prosecution history, including cited prior art, because it provides evidence of how the PTO and the inventor understood the patent and whether the inventor limited the invention during examination. 108 However, the prosecution history is less helpful than the specification because it lacks finality and is often ambiguous. 109

b. Extrinsic Evidence

Phillips then authorized use of extrinsic evidence, such as expert and inventor testimony, dictionaries, and treatises, but emphasized that such evidence is less significant and cannot be used to contradict intrinsic evidence. Within the class of extrinsic evidence, the Federal Circuit noted that technical dictionaries may be particularly helpful in understanding the underlying technology and the perspective of a

^{103.} See id. at 1314–15.

^{104.} Id. at 1314-17.

^{105.} Id. at 1315.

^{106.} *Id.* at 1315–16 (describing how the Federal Circuit has long emphasized the importance of the specification as the "primary basis" for construing claims, the Supreme Court has endorsed the emphasis on the specification, and § 112 places importance on the specification by requiring the inventor to describe the invention in "full, clear, concise, and exact terms").

^{107.} Id. at 1316.

^{108.} *Id.* at 1317 ("[L]ike the specification, the prosecution history was created by the patentee in attempting to explain and obtain the patent.").

^{109.} *Id.* (noting that prosecution history is "an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation").

^{110.} \it{Id} . at 1317–18 (citing C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004)).

person of ordinary skill. ¹¹¹ The court also condoned the use of expert testimony to provide background on technology, to explain how an invention works, to ascertain the understanding of a person of ordinary skill, or to establish a particular meaning in the field; however, it cautioned that conclusory, unsupported assertions are not useful. ¹¹² Therefore, any expert testimony clearly at odds with the intrinsic evidence should be discounted. ¹¹³ Moreover, though general dictionaries are permitted to define commonly understood meanings of words, the Federal Circuit reiterated that the focus of the *Phillips* inquiry must be from the perspective of a person of ordinary skill in the art and that such evidence cannot be used to contradict any definition ascertained from the intrinsic evidence. ¹¹⁴

2. Guidance from the PTO

The PTO published guidance for patent examiners on how to implement the BRI standard in the Manual of Patent Examining Procedure ("MPEP"). The PTO has noted that the broadest reasonable interpretation "does not mean the broadest possible interpretation." Instead, the meaning assigned to a term must be consistent with the ordinary and customary meaning of the term and with the specification and drawings. Moreover, the broadest reasonable interpretation must focus on what is reasonable from the perspective of a person of ordinary skill in the art. Similar to Phillips, the central focus of the BRI standard is on the meaning a person of ordinary skill would infer from the intrinsic evidence of the patent document.

Because dictionaries, and especially technical dictionaries, endeavor to collect the accepted meanings of terms used in various fields of science and technology, those resources have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention.

^{111.} Id. at 1318:

^{112.} Id.

^{113.} *Id*.

^{114.} Id. at 1322.

^{115.} MPEP, supra note 67, § 2111.

^{116.} Id.

^{117.} Id.

^{118.} Id.

a. Interpretation Sources

The MPEP's guidance on claim interpretation makes it clear that the BRI standard is effectively the same as *Phillips*. After describing the theoretical framework of BRI, the MPEP states claim terms are given their "plain meaning," unless such meaning is inconsistent with the specification. ¹¹⁹ Quoting *Phillips*, it further explains that "plain meaning" refers to the ordinary and customary meaning given to the term by those of ordinary skill in the art. ¹²⁰ Thus, the BRI standard starts to become circular: the MPEP articulates a different name for the standard but returns directly to *Phillips* to actually put the standard into practice. ¹²¹ Therefore, the PTAB judges are merely following the PTO's lead when they employ legal citations deriving from the district court arena.

In addition to quoting *Phillips*, the MPEP adopts guiding principles similar to *Phillips*, such as focusing on intrinsic evidence and the perspective of one of ordinary skill in the art. Just as *Phillips* explains that the specification is usually dispositive, the MPEP states the specification is the "best source" for determining the meaning of a claim term. Additionally, the MPEP states that extrinsic evidence (i.e., prior art) can be considered as long as it is consistent with the use of a term in the specification. However, "when the specification is clear about the scope and content of a claim term, there is no need to turn to extrinsic evidence." This principle again mirrors the *Phillips* directive that extrinsic evidence cannot be used to contradict any definition ascertained from the intrinsic evidence and should accordingly be given less weight. The Federal Circuit echoed this implicit endorsement of the *Phillips* standard—while applying the BRI standard to a PTO appeal, the court noted that *Phillips* "set forth the

^{119.} Id. at § 2111.01.

^{120.} *Id.* ("[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." (quoting Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc))).

^{121.} See Phillips, 415 F.3d at 1312–13; MPEP, supra note 67, § 2111.01; see also Dawn-Marie Bey & Christopher A. Cotropia, The Unreasonableness of the Patent Office's "Broadest Reasonable Interpretation" Standard, 37 AIPLA Q.J. 285, 309–10 (2009) (noting that the MPEP recites the same methodology as district courts); Fischer & Jones, supra note 45, at 24 (noting an implicit endorsement of the Phillips approach in claim interpretation before the PTO).

^{122.} See Phillips, 415 F.3d at 1315; MPEP, supra note 67, § 2111.01 ("[T]he greatest clarity is obtained when the specification serves as a glossary for claim terms.").

^{123.} MPEP, supra note 67, § 2111.01 (citing 3M Innovative Props. Co. v. Tredegar Corp., 725 F.3d 1315, 1326–28 (Fed. Cir. 2013)).

^{124.} See Phillips, 415 F.3d at 1318 (stating courts should discount expert testimony that is clearly at odds with the claims, written description, and prosecution history).

best practices for claim construction" and applied those best practices without any reference to how the interpretation was broader or somehow different from a *Phillips* interpretation. ¹²⁵ The instructions to use interpretation sources in the same manner as the *Phillips* standard help explain why the PTAB cites district court authority with such frequency during claim construction under the BRI standard.

b. The Reasonableness Requirement

Despite the similarities between the standards, the phrase "broadest reasonable" facially distinguishes the BRI standard from Phillips, providing an opportunity for the PTO to articulate how the BRI standard differs in practice. However, commentators have noted guidance on what constitutes a "reasonable" of interpretation. 126 The MPEP provides little specific guidance on how to determine whether an interpretation is "reasonable" under the BRI standard; case law rarely discusses "reasonableness" as an independent factor; and the Federal Circuit has not articulated any independent test to determine reasonableness. 127 In noting that the broadest reasonable interpretation does not mean the broadest possible interpretation, the MPEP specifies that instead, a claim term must be given a meaning consistent with "the ordinary and customary meaning of the term" and the written description. 128 It further explains that the broadest reasonable meaning must be consistent with the perspective of a person of ordinary skill in the art. 129 Again, these explanations return to the concepts underlying *Phillips*. Thus, despite the difference in language, the MPEP's guidance underlying the reasonableness requirement—like its guidance on the BRI framework generally—is also circular. The lack of concrete guidance on the component of the BRI standard that facially distinguishes it from *Phillips* further explains why the PTAB cited district court-originated authority with such frequency during claim construction in IPRs.

^{125.} In re Translogic Tech., Inc., 504 F.3d 1249, 1257 (Fed. Cir. 2007).

^{126.} Bey & Cotropia, *supra* note 121, at 309 (noting it is difficult to find examples in Federal Circuit case law of how to implement the BRI standard); Miller, *supra* note 68, at 281 ("An understanding of 'reasonable' is elusive, as none of the cases reviewed for this article define this term or provide any objective parameters for determining reasonableness.").

^{127.} See Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1298 (Fed. Cir. 2015) (describing the "broadest reasonable interpretation" standard); MPEP, supra note 67, § 2111; Bey & Cotropia, supra note 121, at 309; Miller, supra note 68, at 281.

^{128.} MPEP, supra note 67, § 2111.

^{129.} Id. (citing In re Suitco Surface, Inc., 603 F.3d 1255, 1260 (Fed. Cir. 2010)).

3. Shared Canons of Claim Construction

Unsurprisingly, given 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 standards, which I term "shared canons of claim construction," are used with particular frequency.

The first canon is that a patentee's own lexicography governs. 130 Thus, if a patentee explicitly defines a term or clearly defines a term by consistently using it a certain way in the patent document, the term is given that meaning regardless of any other evidence. 131 The second canon is that limitations cannot be imported from the specification into the claim. 132 Therefore, if a written description refers to certain preferred embodiments, the claims cannot be narrowly construed to only encompass those specific embodiments. 133 For example, if the patent claimed "coffee mugs" and the written description said, "in one embodiment, coffee mugs are made out of clay," the claim would not necessarily be limited to only clay coffee mugs. The third canon is that a preamble (the introductory element in a claim) is only a limitation when it breathes life and meaning into the claim. 134 If the preamble describes the purpose or intended use of the invention, it is not a limitation. 135 A fourth canon is that terms are used consistently throughout a patent document. 136 Thus, when looking to claim language, the context in which a term is used is "highly instructive," and use of a term in other claims or in the specification can help define

^{130.} Phillips v. AWH Corp., 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc); Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1249 (Fed. Cir. 1998); $In\ re$ Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (quoting Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1387–88 (Fed. Cir. 1992)) (holding that an inventor may define terms but must do so with "reasonable clarity, deliberateness, and precision"); MPEP, supra note 67, § 2111.01.

^{131.} See Phillips, 415 F.3d at 1316-17; MPEP, supra note 67, § 2111.01.

^{132.} SuperGuide Corp. v. DirecTV Enters., Inc., 358 F.3d 870, 875 (Fed. Cir. 2004); Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004); MPEP, supra note 67, § 2111.01.

^{133.} Specialty Composites v. Cabot Corp., 845 F.2d 981, 987 (Fed. Cir. 1988) ("Where a specification does not *require* a limitation, that limitation should not be read from the specification into the claims."); MPEP, *supra* note 67, § 2111.01.

^{134.} Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999); MPEP, supra note 67, \S 2111.02.

^{135.} Catalina Mktg. Int'l v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002); MPEP, supra note 67, § 2111.02.

^{136.} In re Rambus Inc., 694 F.3d 42, 48 (Fed. Cir. 2012) ("'[U]nless otherwise compelled . . . the same claim term in the same patent' . . . 'carries the same construed meaning.'"); Phillips, 415 F.3d at 1314.

a claim term. ¹³⁷ A fifth canon is known as claim differentiation. ¹³⁸ This canon states that differences among claims present a presumption that limitations in one dependent claim do not exist in the independent claim. ¹³⁹ For example, if the independent claim covered a coffeemaker with individual serving cups, and the dependent claim covered a coffeemaker with individual serving cups made of plastic, the independent claim would not be limited to merely coffeemakers with plastic serving cups. Finally, the sixth canon is that though a patent owner can disavow claim scope in the patent document, the disavowal must be clear and unmistakable. ¹⁴⁰ Here, even when claim language may be broad enough to encompass certain features when read in isolation, the claim term is considered to disclaim the features if the specification makes clear that the invention does not include said features. ¹⁴¹

Therefore, part of the reason why the standards are converging in practice is because the two different standards use the same major canons of construction. The shared canons explain why many IPR decisions cited direct or indirect district court authority during claim construction sections. But the overlap is even greater because many of the "pure PTO" citations also stated these shared canons. For example, two of the most commonly cited propositions in the pure PTO category were that limitations should not be read from the specification into the claims 142 and that a patent owner can act as "his own lexicographer" by providing a definition with reasonable clarity, deliberateness, and precision—the first and second of the shared canons. 143 Overall, the frequency of overlapping citations suggests that these shared canons constitute the majority of the legal tools cited during claim construction analysis and casts doubt on any real difference between the two legal standards in practice.

^{137.} Rambus, 694 F.3d at 48; Phillips, 415 F.3d at 1314.

^{138.} Bancorp Servs., LLC v. Sun Life Assurance Co. of Can., 687 F.3d 1266, 1275 (Fed. Cir. 2012); ICU Med., Inc. v. Alaris Med. Sys., Inc., 558 F.3d 1368, 1376 (Fed. Cir. 2009).

^{139.} Phillips, 415 F.3d at 1314-15.

^{140.} In re Abbott Diabetes Care Inc., 696 F.3d 1142, 1149–50 (Fed. Cir. 2012); In re Am. Acad. of Sci. Tech Ctr., 367 F.3d 1359, 1365–67 (Fed. Cir. 2004); SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001); MPEP, supra note 67, § 2111.01.

^{141.} SciMed, 242 F.3d at 1341.

^{142.} In re Van Geuns, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

^{143.} *In re* Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994). This case went on to cite a district court-originated case in the following sentence when it further elaborated on how a patent owner could act as his own lexicographer. *Id.*

B. Reigning in the Reasonableness Requirement

In addition to the similar legal guidance and shared canons of interpretation behind the two standards, another reason for the convergence of the two standards in practice could be recent efforts by the Federal Circuit to add force to the "reasonable" requirement to narrow claim constructions under the BRI standard. Despite the lack of interpretive guidance about the meaning of "reasonable" in the BRI standard, the Federal Circuit recently weighed in on what constitutes a "reasonable" construction in the IPR context. By narrowing "reasonableness" under the BRI standard using bedrock principles of the *Phillips* standard, the Federal Circuit further converged the two standards. In *Microsoft v. Proxyconn*, an appeal from an IPR final written decision, the Federal Circuit suggested the scope of what is considered reasonable should be limited: "That is not to say, however, that the [PTAB] may construe claims during IPR so broadly that its constructions are unreasonable under general claim construction principles."144 Though the opinion did not articulate a specific test for determining reasonableness, the court went on to emphasize claim construction principles that appear to bring the reasonableness requirement within the scope of *Phillips*.

By narrowing what is considered reasonable, the Federal Circuit further placed IPR proceedings under the jurisprudential umbrella of *Phillips*. ¹⁴⁵ The court directed that claims should "always be read in light of the specification" and that the PTO should consult prosecution history during IPRs. ¹⁴⁶ The court then reiterated the importance of the specification and the perspective of a person of ordinary skill in the

^{144.} Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1298 (Fed. Cir. 2015); see also SAS Inst., Inc. v. ComplementSoft, LLC, 825 F.3d 1341, 1348 (Fed. Cir. 2016) ("While we have endorsed the Board's use of the broadest reasonable interpretation standard in IPR proceedings, we also take care to not read 'reasonable' out of the standard."); In re Man Mach. Interface Techs. LLC, 822 F.3d 1282, 1286–87 (Fed. Cir. 2016) (finding PTAB claim constructions unreasonable in light of the specification); Dell Inc. v. Acceleron, LLC, 818 F.3d 1293, 1298–1301 (Fed. Cir. 2016) (relying on district court-originated authority to find a PTAB construction unreasonable because it ran counter to the claim construction principle that an interpretation must give meaning to all claim terms). But see PPC Broadband, Inc. v. Corning Optical Comme'ns RF, LLC, 815 F.3d 734, 740–46 (Fed. Cir. 2016), vacated, 815 F.3d 747, 751–57 (finding one claim term interpretation differed under BRI than it would under Phillips, but that other terms would have the same interpretation under either standard).

^{145.} See Microsoft, 789 F.3d at 1298 (applying the broadest reasonable interpretation as explained in *Phillips*); Eckstein et al., supra note 81, at 1.

^{146.} Microsoft, 789 F.3d at 1298.

art.¹⁴⁷ Overall, the construction cannot be "unreasonably broad," and a construction that does not reasonably reflect the plain language and disclosure does not pass muster because the broadest reasonable interpretation does not include a "legally incorrect" interpretation. ¹⁴⁸ Thus, the Federal Circuit used the "reasonableness" requirement in the BRI standard to emphasize the central importance of the specification and the perspective of a person of ordinary skill—both of which are central focuses of the *Phillips* standard.

After this clarification of the reasonableness requirement, the Federal Circuit then applied the BRI standard to construe three claim phrases relying only on intrinsic evidence, providing a few examples of how to implement the BRI standard. 149 Proxyconn involved a patent covering a system for transmitting data signals between two computers. In the initial IPR proceeding, the PTAB found claims unpatentable as anticipated (i.e., not novel) and obvious. Yet on appeal, the Federal Circuit disagreed with some of the PTAB's claim constructions, explaining why these constructions were incorrect. construed the first phrase, "two other computers," to mean "any two computers." However, the Federal Circuit found that the claim language and the specification clearly limited the phrase to more specific types of computers, thus finding the PTAB construction "unreasonably broad." 150 The PTAB construed the second phrase, "sender/computer" and "receiver/computer," to include intermediaries connecting the two computers. 151 The Federal Circuit, however, found this interpretation unreasonably broad because the specification clearly referred to the elements as independent components of an overall system. 152

Finally, the Federal Circuit affirmed the PTAB's construction of the third term: "searching for data." ¹⁵³ The PTAB interpreted this term to mean searching from "among a set of data objects," rather than merely comparing two values. ¹⁵⁴ The Federal Circuit found this construction consistent with the way the term "searching for data" was

^{147.} *Id.* ("Even under the broadest reasonable interpretation, the [PTAB]'s construction 'cannot be divorced from the specification and the record evidence,' and 'must be consistent with the one that those skilled in the art would reach.'").

^{148.} See id. Note that the use of the phrase "incorrect" is reminiscent of the Phillips court's goal of finding the "correct" construction.

^{149.} Id. at 1298-1302.

^{150.} Id. at 1298-99.

^{151.} Id. at 1300.

^{152.} *Id.* ("Stated simply, the Board's construction . . . does not reasonably reflect the language and disclosure of the '717 patent.").

^{153.} Id. at 1301.

^{154.} Id.

used throughout the specification and figures.¹⁵⁵ In affirming that the PTAB's construction passed muster under BRI, the Federal Circuit made an interesting move—in a footnote, it commented, "We would reach the same result if we were to apply the traditional claim construction framework set forth in *Phillips*." Thus, it recognized that the claim construction standards overlap—the Federal Circuit reigned in "unreasonably broad" constructions, but allowed a construction that conforms to the *Phillips* framework as reasonable. The property of the prope

It is worth noting that the practical effect of these narrower constructions seems to be minimal. On remand, the PTAB used the Federal Circuit's narrower constructions to reconsider the validity challenges of eight patent claims. ¹⁵⁸ All eight claims were still found unpatentable. ¹⁵⁹ The PTAB affirmed five claims on the same grounds as its initial decision. ¹⁶⁰ The remaining three claims were no longer anticipated by prior art under the new construction, but they were still obvious and thus still deemed invalid. ¹⁶¹ Therefore, given that the Federal Circuit noted that the BRI construction it affirmed would be the same under *Phillips*, and that the end result was the same for claims applying the narrowed constructions, it appears the differences between claim constructions may not have a large practical effect in terms of changing whether a specific claim is ultimately found valid or invalid. ¹⁶²

C. Alternative Explanations for Differences in Constructions

Since the standards apply the same legal principles and the reasonableness requirement may be narrowing constructions under BRI, the difference between the two standards is likely one of mindset—similar to the difference between the "substantial evidence" standard and "clearly erroneous" standard as articulated in *Dickinson v*.

^{155.} Id.

^{156.} *Id.* at 1301 n.1 (citing Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc)). This opinion was written by Chief Judge Prost, who filed a dissent from the denial to rehear *Cuozzo* en banc. In that dissent, she expressed that the *Phillips* standard should be applied in IPRs. Thus, this footnote may reflect the current division at the Federal Circuit, with some judges trying to bring IPR claim construction in uniformity with traditional district court claim construction.

^{157.} See Eckstein et al., supra note 81, at 1-2.

^{158.} See Microsoft Corp. v. Proxyconn, Inc., Nos. IPR2012-00026, IPR2013-00109, 2015 WL 8536725, at *6–8 (P.T.A.B. Dec. 9, 2015).

^{159.} Id. at *8.

^{160.} Three of the claims were obvious and two were anticipated. *Id.* at *6–8.

^{161.} *Id*. at *4–6.

^{162.} See also Micrografx, LLC v. Google Inc., 2016 WL 6958652, at *3 (Fed. Cir. Nov. 29, 2016) (finding a PTAB construction incorrect but affirming the invalidity result due to harmless error).

Zurko. 163 In that opinion, the Supreme Court noted that the difference between the two standards for reviewing factual findings at district courts versus the PTO was subtle. The Court explained that the difficulty in finding cases where the standard made a difference may be due to the "difficulty of attempting to capture in a form of words intangible factors such as judicial confidence in the fairness of the factfinding process" and "comparatively greater importance of case-specific factors," ultimately concluding that practical experience of the judges may play a more important role in assuring proper review than does the specific standard. 164

Similarly, differences in ultimate claim constructions at the PTAB and district courts may be based on grounds other than the differing claim construction standards, such as idiosyncratic interpretations or litigants' arguments. To compare how ultimate outcomes may vary between the two forums through a more fact-specific lens, this Section discusses a few IPR final written decisions that expressly mentioned district court constructions of identical claim terms. These decisions suggest that the PTAB recognizes an overlap between the BRI and *Phillips* standards, is willing to consider district court constructions, and may reach different constructions based on a different interpretation of the facts under the common canons of construction. This Section contends that different constructions may be due to inherent ambiguities in interpretation or individual litigants' behavior rather than an actual difference between the standards.

1. Inherent Ambiguities in Interpretation

In statutory interpretation cases, though judges apply the same canons of construction, they often split on the ultimate interpretation of terms. ¹⁶⁵ For example, in *Muscarello v. United States*, ¹⁶⁶ the majority applied traditional statutory interpretation canons to find that the term "carry" in a criminal statute included carrying weapons in one's car. ¹⁶⁷ The dissent also employed traditional statutory interpretation tools, but concluded that "carry" was limited to carrying weapons on one's

^{163. 527} U.S. 150, 156-58 (1999).

^{164.} Id. at 163.

^{165.} See Muscarello v. United States, 524 U.S. 125 (1998) (where the majority and dissent came to opposite conclusions about the meaning of the word "carry" in a statute using similar statutory interpretation tools); see also Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687 (1995) (where the majority and dissent came to opposite conclusions about the meaning of "harm" in the Endangered Species Act while applying traditional statutory interpretation tools).

^{166.} Muscarello, 524 U.S. at 125.

^{167.} Id. at 126-27.

person. ¹⁶⁸ In general, disputes arise because terms are ambiguous and reasonable minds could differ on interpretations. Thus, it is unsurprising that judges frequently come to different conclusions when applying the same legal standards. ¹⁶⁹ This suggests that the difference in constructions may not be due to different standards, but rather due to the inherent nature of interpreting ambiguous terms. The following two cases suggest that when claim constructions come out differently, the divergence may be due to the ambiguous nature of the terms rather than any difference in the legal construction standards.

When the intrinsic evidence is clear, the constructions are likely to be the same. In *LG Display Co. v. Innovative Display Tech. LLC*, a patent owner argued the *Phillips* standard should be applied in the final written decision because the patent expired during the trial. ¹⁷⁰. Yet the PTAB noted it was "not persuaded . . . that applying the *Phillips* standard would affect our determination of this case." ¹⁷¹ The dispute involved a patent that claimed a light emitting panel assembly, which included a panel with a "pattern of light extracting deformities." ¹⁷² Based on an express definition in the specification, the district court construed "deformities" to mean "any change in the shape or geometry of the panel surface . . . that causes a portion of light to be emitted." ¹⁷³ Since the specification clearly defined the term, and the patent owner offered no evidence to support a different construction, the PTAB maintained the same construction. ¹⁷⁴

Yet when the intrinsic evidence is less clear, the differences may be based on judges' individual readings of the factual record. In *Ford Motor Co. v. Paice LLC*, ¹⁷⁵ the PTAB came to a different construction of the same term as a district court while explicitly applying *Phillips* legal authority during an IPR. The IPR involved a patent that covered a hybrid vehicle, which included a combustion engine and an electric motor. A certain amount of torque is required to operate the vehicle and that amount may vary, so a microprocessor measured the vehicle's current torque requirements against a predefined "setpoint" to determine whether to operate the vehicle through the engine, electric

^{168.} Id. at 140.

^{169.} See id. at 126-27, 140.

^{170.} No. IPR2014-01096, 2015 WL 9275207 (P.T.A.B. Dec. 18, 2015).

^{171.} Id. at *2.

^{172.} Id. at *1.

^{173.} Id. at *2.

^{174.} Id.

^{175.} No. IPR 2014-00884, 2015 WL 8536739 (P.T.A.B. Dec. 10, 2015). This case is an example of where the PTAB is applying the BRI standard, but cites the *Phillips* case directly for legal authority when construing the claims.

motor, or both at any given time. Parties disputed whether the claim term "setpoint" required data about torque specifically or could include other types of data. A district court had recently construed the claim term and found "setpoint" did not require a torque-based data point, so the patent owner argued a construction that limited the data to torquebased values would conflict with this construction. 176 The PTAB indicated that though it construed claims under a different standard than the district court, it was willing to consider the district court's construction.¹⁷⁷ The district court found the data was not limited to torque-based values because the specification provided examples of other types of measurement. 178 However, the PTAB still came to a different conclusion—and it did so by applying Phillips. 179 Since Phillips counseled that claim terms should be read in context of the language of the claim itself, the PTAB found that the claim language itself limited the setpoint data to torque-based values, despite other examples in the specification. 180 This seems to conflict with the theoretical rationales behind the two standards because by adding a limitation, the PTAB construction appears to be narrower than the district court construction. However, ultimately, this example shows that the difference in constructions does not come from the legal interpretation standard, but rather on a different view of the ambiguous terms based on differing readings of the intrinsic evidence. Since the PTAB applied *Phillips* legal principles, the different construction is not due to an actual distinct legal standard. Instead, the difference in the district court and PTAB constructions is analogous to the difference between the majority and dissent interpretations in Muscarello, 181

2. Litigant Behavior

Beyond inherent ambiguities in textual interpretation, differences in constructions may be due to litigants' behavior. The PTAB has noted that the arguments a litigant presents in the

^{176.} Id. at *4.

^{177.} *Id.* ("Given that [patent owner's] principal argument to the board . . . was expressly tied to the district court's claim construction, we think that the board had an obligation, in these circumstances, to evaluate that construction." (quoting Power Integrations, Inc. v. Lee, 797 F.3d 1318, 1327 (Fed. Cir. 2015))).

^{178.} Id. at *5.

^{179.} Id. (citing Phillips v. AWH Corp., 415 F.3d 1312, 1315 (Fed. Cir. 2004) (en banc)).

^{180.} Id.

^{181.} See Muscarello v. United States, 524 U.S. 125 (1998).

proceeding influence the ultimate construction. ¹⁸² For example, in *Apple Inc. v. Virnetx Inc.*, a dispute arose over whether a "secure domain service" was required to "recognize and resolve" computer addresses or merely "resolve" addresses. ¹⁸³ The PTAB began its analysis with the claim language, quoting *Phillips*, and found that the claims did not require the service to recognize addresses. ¹⁸⁴ The patent owner pointed to the prosecution history to argue it disclaimed embodiments of the invention that merely resolve addresses. ¹⁸⁵ However, the PTAB found that the prosecution history did not amount to an unambiguous disclaimer. ¹⁸⁶ In adopting this construction, the PTAB emphasized that the patent owner made different arguments before the district court and that the PTAB was deciding on a different record. ¹⁸⁷ Thus, the information presented in front of the PTAB affected the ultimate construction.

IV. COMING FULL CIRCLE: RECOGNIZING A SINGLE CLAIM CONSTRUCTION SYSTEM

Since the BRI standard and the *Phillips* standard apply mostly the same legal principles, officially changing the standard is unlikely to have much practical effect on ultimate rates of invalidation. However, there are still reasons that the PTAB should officially adopt the *Phillips* standard because maintaining the separate standards still presents potential problems with inefficiency, lack of uniformity, and decreased confidence in patent rights. For example, despite the similarity in analytical tools, the PTAB and district courts engage in new claim construction analysis even when one forum has already construed the exact same patent because of the nominally different standards. Moreover, the official use of the BRI standard contributes to concerns amongst patent owners that their patents are more likely to be invalidated in IPR proceedings than in district court litigation. This Part argues that officially applying the *Phillips* standard in IPR proceedings will better support the goals of patent law by increasing

^{182.} See LG Display Co. v. Innovative Display Techs. LLC, No. IPR2014-01096, 2015 WL 9275207, at *2 (P.T.A.B. Dec. 18, 2015); Apple Inc. v. Virnetx Inc., No. IPR2014-00481, 2015 WL 5047986, at *8–9 (P.T.A.B. Aug. 24, 2015).

^{183.} Apple, 2015 WL 5047986 at *8-9.

^{184.} Id. at *9.

^{185.} Id. at *12-14.

^{186.} Id. at *14.

^{187.} *Id.* The PTAB seemed to be implying the district court would have adopted the same standard if the court had the same arguments and evidence now available to the PTAB.

^{188.} See supra Part III.

efficiency, uniformity, and confidence in patent rights. This Part then suggests that Congress is the best actor to formally adopt the *Phillips* construction standard. Finally, this Part provides suggestions for practitioners and administrative law judges while the proposed legislation is pending.

A. The PTAB Should Apply the Same Standard as District Courts

Officially applying the *Phillips* standard in IPR proceedings would better support the overarching goals of patent policy in three ways: increasing efficiency, promoting uniformity, strengthening confidence in patent rights. One of the AIA's major aims in creating IPRs was to reduce litigation costs. 189 Applying the *Phillips* standard in IPR proceedings would decrease litigation costs by allowing the PTAB to adopt district court constructions directly rather than relitigating the issue when a district court has already construed a claim term. 190 Officially recognizing the same standard would allow the two forums to utilize the same construction without having to separately wade through the fact-intensive record to construe the same terms. 191 However, applying the same claim construction standard would not necessarily require the PTAB to adopt a district court's construction—the PTAB may still re-evaluate all factual information while applying the same standard. Thus, to promote efficiency, Congress should consider amending the AIA to also provide estoppel for

^{189.} H.R. REP. No. 112-98(I), pt. 1, at 40 (2011) ("The legislation is designed to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.").

^{190.} The PTAB has cited the different claim construction standards as the reason it is not bound by district court constructions. See Endo Pharm. Inc. v. Depomed, Inc., No. IPR2014-00654, 2015 WL 5636413, at *5 (P.T.A.B. Sept. 21, 2015) ("Given our different claim construction standard, however, we are not bound by the prior district court constructions or any alleged agreements between the parties made in district court."). However, the PTAB currently does consider district court constructions and sometimes adopts those constructions directly. See, e.g., Oracle Corp. v. Crossroads Sys., Inc., No. IPR2014–01207, 2016 WL 380195, at *4 (P.T.A.B. Jan. 29, 2016); Cisco Sys., Inc. v. Crossroads Sys., Inc., No. IPR2014-01544, 2016 WL 380233, at *4 (P.T.A.B. Jan. 29, 2016).

^{191.} Professor Tim Holbrook has argued that district courts could apply issue preclusion to PTAB claim constructions even under the dual claim construction regime, and issue preclusion would almost certainly apply if both forums applied the *Phillips* standard. Timothy R. Holbrook, *The Patent Trial and Appeal Board's Evolving Impact on Claim Construction*, 24 TEX. INTELL. PROP. L.J. (forthcoming 2017) (manuscript at 3), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2828962 [https://perma.cc/9UQR-CZQP]. In light of the similarity of the two standards in practice, applying issue preclusion when one forum has already construed a term would promote the goals of patent law and could be a beneficial option for district courts. *See id*.

claim construction issues already decided under the same standard in district courts. 192

The patent law system also favors uniformity, on the ground that predictability increases the value of intellectual property rights. 193 Officially recognizing a singular claim construction standard would promote uniformity by expressly communicating that the PTAB and the federal courts are applying the same claim construction standards. Directing patent owners and competitors to one clear line of reasoning for claim construction—rather than to an alternate, circular system—would increase predictability for patent owners and litigants on how claims will be construed. Though judges interpret facts differently even under the same legal standard, officially applying the same legal standard would bring predictability to the legal tools used during claim construction because the current lack of clarity about what the BRI standard entails creates uncertainty for patent owners about what legal tests will be used to construe their patent claims.

Finally, another aim of the AIA was to take away disincentives to innovation. ¹⁹⁴ Even though it appears the BRI is unlikely to make a practical difference, the standard has caused concerns among patent owners and is cited as a reason that patents may be more likely to be invalidated during IPRs. ¹⁹⁵ Thus, an official adoption of the *Phillips* standard would calm these fears that threaten confidence in patent rights.

B. Potential Methods to Change the Standard

The PTAB could begin applying the *Phillips* standard through two mechanisms: (1) Congress could amend the AIA, or (2) the PTO could promulgate a new regulation. Congress is the best branch to make this change. If the PTO promulgated a new regulation stating it would apply the *Phillips* standard during IPRs, it may not be able to actually require the PTAB to adopt district court constructions because such a rule may go against congressional intent, as discussed below. ¹⁹⁶ Changing the construction standard without requiring the PTAB to explicitly adopt district court constructions would still help the patent

^{192.} See infra Section IV.B.

^{193.} See Petition for a Writ of Certiorari at 18, Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131 (2016) (No. 15-446), 2015 WL 5895939, at *18 (explaining that the Supreme Court has recognized the importance of uniformity in claim construction).

^{194.} See H.R. REP. No. 112-98(I), pt. 1, at 39 (discussing a "growing sense that questionable patents are too easily obtained and are too difficult to challenge").

^{195.} Dolin, supra note 9, at 916; Michel, supra note 9, at 50.

^{196.} See infra notes 198-200 and accompanying text.

system though, as recognizing a common claim construction framework would still increase predictability and confidence in the patent system. Yet going a step further and explicitly requiring the PTAB to adopt district court constructions would better promote efficiency, since the PTAB would not have to relitigate the same interpretation issues already considered by a district court. 197 Thus, if Congress—rather than the PTO—were to act, it could amend the AIA to expressly allow, or even require, the PTAB to adopt district court constructions.

Pending legislation may do just that, though the text is not quite clear. Two pending pieces of legislation would amend the AIA to require that "each claim of a patent shall be construed as such claim would be in a civil action to invalidate the patent under section 282(b)," the statutory provision under which federal courts determine patent validity. 198 This legislation would also specify that the PTAB should construe the claim according to the ordinary and customary meaning as understood by one of ordinary skill in the art, consult prosecution history, and consider a previous claim construction or determination if another court has previously construed the term. 199 Thus, the proposed text merely requires the PTAB to "consider," not "adopt," district court constructions.²⁰⁰ By stating that claims should be construed as they would be under § 282(b), the text seems to say that the PTAB should apply exactly the same procedures as district courts for claim construction. However, the proposed legislation is not absolutely clear about whether congressional intent is for the PTAB to adopt previously made constructions. Congress should be clear about this before passing any amendments. Overall, any amendment that at least endorses the district court claim construction standard, even without requiring the PTAB to adopt the exact same construction, would still promote patent policies of efficiency, uniformity, and confidence in patent rights. However, the best solution would be an express adoption by Congress.

C. Practical Suggestions

While the debate over whether to officially apply the *Phillips* standard lingers before Congress, practitioners should frame their arguments for IPRs using the *Phillips* framework. This provides more

^{197.} See Endo Pharm. Inc. v. Depomed, Inc., No. IPR2014-00654, 2015 WL 5636413, at *5 (P.T.A.B. Sept. 21, 2015) (reviewing evidence to support a claim construction similar to evidence already reviewed by a district court).

^{198.} PATENT Act, S. 1137, 114th Cong. § 11(a)(4)(A)(vii) (2015) (as reported by S. Comm. on the Judiciary, Sept. 8, 2015).

^{199.} Id.

^{200.} See id.

concrete guidance and is likely to comport with the methodology the PTAB will apply.²⁰¹ Moreover, consistency in arguments before the PTAB and district court will help increase the likelihood of similar claim construction outcomes.²⁰² In the patent examination context, applicants should take special care to make sure terms are clearly defined in the patent document. The overlapping legal principles show that the claim construction inquiry focuses on the intrinsic evidence.²⁰³ Though it is impossible to anticipate every dispute that will arise in litigation, the IPRs have increased the likelihood of an interpreter later construing the claims and thus have increased the importance of providing a clear written description.²⁰⁴

Moreover, administrative law judges should be more explicit about how they determine what is "reasonable" in IPR final written decisions, as should the PTO in its administrative guidance. Providing more concrete, generalized guidance on how they determine what is reasonable would give more predictability to practitioners, which would, in turn, promote the patent law policies of efficiency, uniformity, and confidence in patent rights. Additionally, if Congress opts to maintain the distinction between the standards, such guidance could help illuminate the difference between the standards for practitioners to the extent any practical differences exist.

Going forward, questions remain for future research. If the PTAB's claim construction standard is not significantly different from the district court claim construction standard, perhaps other factors are contributing to the high rate of invalidation at the PTAB. Notably, the PTAB and district courts apply different evidentiary standards.²⁰⁵ Thus, a challenger in an IPR proceeding only has to prove unpatentability by preponderance of the evidence, and this lower standard could make it easier to invalidate patents in IPR contexts.²⁰⁶ More research should be done on whether similar evidence leads to differing results in the PTAB and the district court based on these evidentiary standards. Additionally, future research should compare the technical backgrounds of PTAB judges and federal court judges to determine whether such technical backgrounds have any effect on

^{201.} See supra Part II.

See Apple Inc. v. Virnetx Inc., No. IPR2014-00481, 2015 WL 5047986, at *6, *8 (P.T.A.B. Aug. 24, 2015).

^{203.} See supra Section III.A.

^{204.} See Kapadia, supra note 12, at 115.

^{205.} See Tamimi, supra note 22, at 617 (noting that patent challengers must prove invalidity by a preponderance of the evidence before the PTAB but by clear and convincing evidence before district courts).

^{206.} See id.

ultimate invalidation rates. Since IPRs are becoming a substantial part of the patent litigation landscape, researchers should continue observing PTAB actions and decisions.

CONCLUSION

A dual system of claim construction developed due to the need to broadly explore full claim scope at the PTO and the desire to accurately interpret terms based on the written record at the federal courts. Both standards sought to further the public notice function of patents, and thus both standards articulated similar guiding principles for interpretation—focusing on intrinsic evidence and others in the field of invention as the relevant audience. Yet as the two standards apply shared canons of construction, cross-cite authority, and provide little legal guidance on how "broadest reasonable" differs from "ordinary and customary," the distinction between the two standards has blurred in practice. Although the PTAB officially applies the BRI standard in IPR proceedings, the BRI standard is a circular standard that has little practical difference from the *Phillips* standard on ultimate validity determinations. In the confused claim construction jurisprudence, all roads lead to *Phillips*. Congress should go there too.

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APPENDIX A: TOTAL CASE CITATIONS IN INTER PARTES REVIEW PROCEEDINGS APPLYING BRI (FEBRUARY 5, 2015–FEBRUARY 4, 2016)

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Guangdong Xinbao Elec. Appliances Holdings Co. v. Rivera, No. IPR2014-00042 (P.T.A.B. Feb. 6, 2015).	0	1	1
Conopco, Inc. v. Procter & Gamble Co., No. IPR2013-00505 (P.T.A.B. Feb. 10, 2015).	0	1	1
Conopco, Inc. v. Procter & Gamble Co., No. IPR2013-00509 (P.T.A.B. Feb. 10, 2015).	0	1	1
Intelligent Bio-systems, Inc. v. Illumina Cambridge Ltd., No. IPR2013-00517 (P.T.A.B. Feb. 11, 2015).	0	0	1
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2013-00506 (P.T.A.B. Feb. 11, 2015).	0	1	1
Target Corp. v. Destination Maternity Corp., No. IPR2013-00532 (P.T.A.B. Feb. 12, 2015).	1	2	1
Target Corp. v. Destination Maternity Corp., No. IPR2013-00530 (P.T.A.B. Feb. 12, 2015).	1	1	1
Acco Brands Corp. v. Fellowes, Inc., No. IPR2013-00566 (P.T.A.B. Feb. 12, 2015).	0	1	1
Tandus Flooring, Inc. v. Interface, Inc., No. IPR2013-00527 (P.T.A.B. Feb. 12, 2015)	1	1	1
Samsung Elecs. Co. v. Innovation Scis., Inc., No. IPR2013-00570 (P.T.A.B. Feb. 17, 2015).	0	0	1
Samsung Elecs. Co. v. Innovation Scis., Inc., No. IPR2013-00569 (P.T.A.B. Feb. 17, 2015).	0	0	1
Smith & Nephew Inc. v. Bonutti Skeletal Innovations LLC, No. IPR2013-00629 (P.T.A.B. Feb. 18, 2015).	1	2	1
Delaval Int'l AB v. Lely Patent N.V., No. IPR2013-00575 (P.T.A.B. Feb. 20, 2015).	1	3	3
Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P'ship, No. IPR2013-00537 (P.T.A.B. Feb. 23, 2015).	1	0	1
Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P'ship, No. IPR2013-00535 (P.T.A.B. Feb. 23, 2015).	0	2	0
Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P'ship, No. IPR2013-00534 (P.T.A.B. Feb. 23, 2015).	1	0	1
Mexichem Amanco Holdings S.A. DE C.V. v. Honeywell Int'l, Inc., No. IPR2013-00576 (P.T.A.B. Feb. 26, 2015).	0	1	0
Dell, Inc. v. Elecs. & Telecomms. Research Inst., No. IPR2013-00635 (P.T.A.B. Feb. 27, 2015).	0	1	0
Microsoft Corp. v. Enfish, LLC, No. IPR2013-00563 (P.T.A.B. March 2, 2015).	2	3	0
Microsoft Corp. v. Enfish, LLC, No. IPR2013-00561 (P.T.A.B. March 2, 2015).	2	3	0
Microsoft Corp. v. Enfish, LLC, No. IPR2013-00560 (P.T.A.B. March 2, 2015).	2	3	0

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Int'l Secs. Exch., LLC v. Chi. Bd. Options Exch., Inc., No. IPR2014-00098 (P.T.A.B. March 2, 2015).	0	1	0
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2013-00539 (P.T.A.B. March 3, 2015).	1	0	1
Captioncall, LLC v. Ultratec, Inc., No. IPR2013-00550 (P.T.A.B. March 3, 2015).	1	1	2
Captioncall, LLC v. Ultratec, Inc., No. IPR2013-00549 (P.T.A.B. March 3, 2015).	1	0	1
Captioncall, LLC v. Ultratec, Inc., No. IPR2013-00545 (P.T.A.B. March 3, 2015).	1	0	1
Captioncall, LLC v. Ultratec, Inc., No. IPR2013-00544 (P.T.A.B. March 3, 2015).	1	1	1
Captioncall, LLC v. Ultratec, Inc., No. IPR2013-00542 (P.T.A.B. March 3, 2015).	1	0	1
Microsoft Corp. v. Enfish, LLC, No. IPR2013-00562 (P.T.A.B. March 3, 2015).	1	4	1
Microsoft Corp. v. Enfish, LLC, No. IPR2013-00559 (P.T.A.B. March 3, 2015).	1	4	1
Captioncall, LLC v. Ultratec, Inc., No. IPR2013-00543 (P.T.A.B. March 3, 2015).	1	0	1
Broadcom Corp. v. Wi-Fi One, LLC, No. IPR2013-00636 (P.T.A.B. March 6, 2015).	2	1	1
Broadcom Corp. v. Wi-Fi One, LLC, No. IPR2013-00602 (P.T.A.B. March 6, 2015).	2	0	1
Broadcom Corp. v. Wi-Fi One, LLC, No. IPR2013-00601 (P.T.A.B. March 6, 2015).	2	2	1
Nestle Oil OYJ v. Reg Synthetic Fuels, LLC, No. IPR2013-00578 (P.T.A.B. March 12, 2015).	2	3	1
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2014-00250 (P.T.A.B. March 13, 2015).	4	12	2
Baxter Healthcare Corp. v. Millenium Biologix, LLC, No. IPR2013-00590 (P.T.A.B. March 18, 2015).	2	5	2
Yamaha Corp. v. Black Hills Media, LLC, No. IPR2013-00598 (P.T.A.B. March 18, 2015).	0	0	1
Yamaha Corp. v. Black Hills Media, LLC, No. IPR2013-00597 (P.T.A.B. March 18, 2015).	0	0	1
Yamaha Corp. v. Black Hills Media, LLC, No. IPR2013-00594 (P.T.A.B. March 18, 2015).	0	0	1
Yamaha Corp. v. Black Hills Media, LLC, No. IPR2013-00593 (P.T.A.B. March 18, 2015).	0	0	1
Baxter Healthcare Corp. v. Millenium Biologix, LLC, No. IPR2013-00582 (P.T.A.B. March 18, 2015).	1	3	2
Unified Patents, Inc. v. Clouding IP, LLC, No. IPR2013-00586 (P.T.A.B. March 19, 2015).	1	0	0
Veeam Software Corp. v. Symantec Corp., No. IPR2014-00088 (P.T.A.B. March 20, 2015).	0	0	1
Aker Biomarine As & Enzymotec Ltd. v. Neptune Techs. & Bioressources Inc., No. IPR2014-00003 (P.T.A.B. March 23, 2015).	3	2	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Intri-Plex Techs., Inc. v. Saint-Gobain Performance Plastics Rencol Ltd., No. IPR2014-00309 (P.T.A.B. March 23, 2015).	0	3	1
Medtronic, Inc. v. Marital Deduction Tr. & Endotach LLC, No. IPR2014-00100 (P.T.A.B. March 24, 2015).	2	1	1
Laird Techs., Inc. v. Graftech Int'l Holdings, Inc., No. IPR2014-00024 (P.T.A.B. March 25, 2015).	0	6	1
Laird Techs., Inc. v. Graftech Int'l Holdings, Inc., No. IPR2014-00025 (P.T.A.B. March 25, 2015).	0	6	1
Laird Techs., Inc. v. Graftech Int'l Holdings, Inc., No. IPR2014-00023 (P.T.A.B. March 25, 2015).	0	4	1
Apple, Inc. v. PersonalWeb Techs. LLC, No. IPR2013-00596 (P.T.A.B. March 25, 2015).	0	0	1
Crocus Tech. S.A. v. N.Y. Univ., No. IPR2014-00047 (P.T.A.B. March 26, 2015).	2	1	1
Google Inc. v. Unwired Planet, LLC, No. IPR2014-00036 (P.T.A.B. March 30, 2015).	1	0	1
Facebook, Inc., v. B.E. Tech., LLC, No. IPR2014-00052 (P.T.A.B. March 31, 2015).	0	0	1
Google, Inc., v. B.E. Tech., LLC, No. IPR2014-00038 (P.T.A.B. March 31, 2015).	0	0	1
Microsoft Corp. v. B.E. Tech., LLC, No. IPR2014-00039 (P.T.A.B. March 31, 2015).	0	0	1
Toshiba Samsung Storage Tech. Korea Corp. v. LG Elecs., Inc., No. IPR2014-00204 (P.T.A.B. March 31, 2015).	1	1	1
Honeywell Int'l Inc. v. Int'l Controls & Measurements Corp., No. IPR2014-00219 (P.T.A.B. April 1, 2015).	2	5	2
Toshiba Samsung Storage Tech. Korea Corp. v. LG Elecs., Inc., No. IPR2014-00205 (P.T.A.B. April 1, 2015).	1	3	1
Int'l Bus. Machs. Corp. v. Intellectual Ventures II LLC, No. IPR2014-00180 (P.T.A.B. April 3, 2015).	0	1	2
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-00074 (P.T.A.B. April 3, 2015).	0	0	1
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-00073 (P.T.A.B. April 3, 2015).	0	0	1
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-00081 (P.T.A.B. April 3, 2015).	0	0	1
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-00034 (P.T.A.B. April 3, 2015).	0	1	1
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-00075 (P.T.A.B. April 5, 2015).	1	0	2
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-00087 (P.T.A.B. April 3, 2015).	0	0	1
Panel Claw, Inc. v. Sunpower Corp., No. IPR2014-00388 (P.T.A.B. April 3, 2015).	2	1	1
Samsung Elecs. Am., Inc. v. B.E. Tech., LLC, No. IPR2014-00044 (P.T.A.B. April 6, 2015).	1	0	1
Microsoft Corp. v. B.E. Tech., LLC, No. IPR2014-00040 (P.T.A.B. April 6, 2015).	1	0	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Google, Inc. v. B.E. Tech., LLC, No. IPR2014-0031 (P.T.A.B. April 6, 2015).	1	0	1
Sony Mobile Commc'ns (USA) Inc. v. B.E. Tech. LLC, No. IPR2014-00029 (P.T.A.B. April 6, 2015).	1	0	1
Google Inc. v. Unwired Patent, LLC, No. IPR2014-00027 (P.T.A.B. April 6, 2015).	0	2	0
Adobe Sys. Inc. v. Afluo. LLC, No. IPR2014-00154 (P.T.A.B. April 9, 2015).	1	0	1
Adobe Sys. Inc. v. Afluo. LLC, No. IPR2014-00153 (P.T.A.B. April 9, 2015).	1	0	1
Elec. Frontier Found. v. Pers. Audio, LLC, No. IPR2014-00070 (P.T.A.B. April 10, 2015).	0	1	1
Sony Comput. Entm't Am. LLC v. Game Controller Tech. LLC, No. IPR2013-00634 (P.T.A.B. April 14, 2015).	2	0	2
Apple, Inc. v. Evolutionary Intelligence, LLC, No. IPR2014-00086 (P.T.A.B. April 16, 2015).	1	1	1
Medtronic, Inc. v. Lifeport Scis. LLC, No. IPR2014-00288 (P.T.A.B. April 21, 2015).	0	2	1
Oracle Corp. v. Thought, Inc., No. IPR2014-00119 (P.T.A.B. April 23, 2015).	4	3	2
Oracle Corp. v. Thought, Inc., No. IPR2014-00118 (P.T.A.B. April 23, 2015).	4	3	2
Oracle Corp. v. Thought, Inc., No. IPR2014-00117 (P.T.A.B. April 23, 2015).	2	0	1
Medtronic, Inc. v. Norred, No. IPR2014-00111 (P.T.A.B. April 23, 2105).	1	10	1
Medtronic, Inc. v. Norred, No. IPR2014-00110 (P.T.A.B. April 23, 2105).	2	4	1
Veeam Software Corp. v. Symantec Corp., No. IPR2014-00091 (P.T.A.B. April 23, 2015).	0	1	0
Veeam Software Corp. v. Symantec Corp., No. IPR2014-00090 (P.T.A.B. April 23, 2015).	1	2	2
Veeam Software Corp. v. Symantec Corp., No. IPR2014-00089 (P.T.A.B. April 23, 2015).	1	0	1
Nintendo of Am., Inc. v. iLife Techs., Inc., No. IPR2015-00115 (P.T.A.B. April 28, 2015).	2	3	1
QSC Audio Prods., LLC v. Crest Audio, Inc., No. IPR2014-00129 (P.T.A.B. April 29, 2015).	3	3	1
Greene's Energy Grp., LLC v. Oil States Energy Servs., LLC, No. IPR2014-00364 (P.T.A.B. May 1, 2015).	0	8	1
Greene's Energy Grp., LLC v. Oil States Energy Servs., LLC, No. IPR2014-00216 (P.T.A.B. May 1, 2015).	0	5	1
QSC Audio Prods., LLC v. Crest Audio, Inc., No. IPR2014-00131 (P.T.A.B. May 1, 2015).	1	2	1
QSC Audio Prods., LLC v. Crest Audio, Inc., No. IPR2014-00364 (P.T.A.B. May 1, 2015).	1	7	1
Toshiba Corp. v. Intellectual Ventures I LLC, No. IPR2014-00113 (P.T.A.B. May 4, 2015).	0	0	1
Autel U.S. Inc. v. Bosch Auto. Serv. Sols. LLC, No. IPR2014-00183 (P.T.A.B. May 5, 2015).	1	1	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Wavemarket Inc. v. Locationet Sys. Ltd., No. IPR2014-00199 (P.T.A.B. May 7, 2015).	1	2	0
Apple, Inc. v. Virnetx, Inc., No. IPR2014-00237 (P.T.A.B. May 11, 2015).	1	1	0
Zimmer Holdings, Inc. v. Bonutti Skeletal Innovations LLC, No. IPR2014-00191 (P.T.A.B. May 12, 2015).	1	2	1
Reloaded Games, Inc. v. Parallel Networks LLC, No. IPR2014-00139 (P.T.A.B. May 14, 2015).	2	4	1
Nintendo of Am., Inc. v. Motion Games, LLC, No. IPR2014-00164 (P.T.A.B. May 15, 2015).	0	6	1
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2014-00144 (P.T.A.B. May 15, 2015).	0	2	1
Ericsson Inc. v. Intellectual Ventures I LLC, No. IPR2014-00527 (P.T.A.B. May 18, 2015).	0	5	1
Zimmer Holdings, Inc. v. Bonutti Skeletal Innovations LLC, No. IPR2014-00321 (P.T.A.B. May 18, 2015).	1	0	1
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2014-00143 (P.T.A.B. May 21, 2015).	0	0	1
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2014-00142 (P.T.A.B. May 21, 2015).	0	0	1
Headbox, LLC v. Infinite Imagineering, Inc., No. IPR2014-00365 (P.T.A.B. May 22, 2015).	1	2	1
Schott Gemtron Corp. v. SSW Holding Co., No. IPR2014-00367 (P.T.A.B. May 26, 2015).	0	0	1
Foursquare Labs, Inc. v. Silver State Intellectual Techs., Inc., No. IPR2014-00159 (P.T.A.B. May 26, 2015).	0	0	1
Organik Kimya AS v. Rohm & Haas Co., No. IPR2014-00185 (P.T.A.B. May 27, 2015).	1	2	1
Valeo N. Am., Inc. v. Magna Elecs., Inc., No. IPR2014-00222 (P.T.A.B. May 28, 2015).	0	0	1
Valeo N. Am., Inc. v. Magna Elecs., Inc., No. IPR2014-00220 (P.T.A.B. May 28, 2015).	0	0	1
Valeo N. Am., Inc. v. Magna Elecs., Inc., No. IPR2014-00221 (P.T.A.B. May 28, 2015).	0	0	1
First Quality Baby Prods., LLC v. Kimberly-Clark Worldwide, Inc., No. IPR2014-00169 (P.T.A.B. May 28, 2015).	0	1	1
Toshiba Corp. v. Intellectual Ventures II LLC, No. IPR2014-00317 (P.T.A.B. June 3, 2015).	0	1	2
Al-Ko Kober LLC v. Lippert Components Mfg., Inc., No. IPR2014-00313 (P.T.A.B. June 3, 2015).	0	1	1
Johnson Health Tech Co. v. Icon Health & Fitness, Inc., No. IPR2014-00184 (P.T.A.B. June 5, 2015).	0	1	1
Olympus Am. Inc. v. Perfect Surgical Techniques, Inc., No. IPR2014-00241 (P.T.A.B. June 8, 2015).	2	5	1
Olympus Am. Inc. v. Perfect Surgical Techniques, Inc., No. IPR2014-00233 (P.T.A.B. June 8, 2015).	3	1	1
Riverbed Tech., Inc. v. Silver Peak Sys., Inc., No. IPR2014-00245 (P.T.A.B. June 9, 2015).	0	4	0

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Apple Inc. v. THX Ltd., No. IPR2014-00235 (P.T.A.B. June 9, 2015).	2	0	1
Apple Inc. v. Arendi S.A.R.L., No. IPR2014-00207 (P.T.A.B. June 9, 2015).	1	0	1
Apple Inc. v. Arendi S.A.R.L., No. IPR2014-00206 (P.T.A.B. June 9, 2015).	1	0	1
Clariant Corp. v. CSP Techs., Inc., No. IPR2014-00375 (P.T.A.B. June 10, 2015).	3	4	1
SDI Techs., Inc. v. Bose Corp., No. IPR2014-00343 (P.T.A.B. June 11, 2015).	0	4	2
SDI Techs., Inc. v. Bose Corp., No. IPR2014-00346 (P.T.A.B. June 11, 2015).	0	4	2
Mentor Graphics Corp. v. Synopsys, Inc., No. IPR2014-00287 (P.T.A.B. June 11, 2015).	1	5	1
Google, Inc. v. Micrografx, LLC, No. IPR2014-00533 (P.T.A.B. June 17, 2015).	0	1	1
Ford Motor Co. v. TMC Fuel Injection Sys., LLC, No. IPR2014-00272 (P.T.A.B. June 22, 2015)	4	1	3
Norman Int'l, Inc. v. Andrew J. Testamentary Tr., No. IPR2014-00283 (P.T.A.B. June 18, 2015).	0	0	1
Facebook, Inc. v. Rembrandt Soc. Media, LP, No. IPR2014-00415 (P.T.A.B. June 22, 2015).	0	0	1
Johnson Controls, Inc. v. Wildcat Licensing WI, LLC, No. IPR2014-00305 (P.T.A.B. June 22, 2015).	2	3	0
TRW Auto. US LLC v. Magna Elecs. Inc., No. IPR2014-00262 (P.T.A.B. June 25, 2015).	1	0	1
TRW Auto. US LLC v. Magna Elecs. Inc., No. IPR2014-00266 (P.T.A.B. June 25, 2015).	2	1	1
Medtronic, Inc. v. Norred, No. IPR2014-00395 (P.T.A.B. June 25, 2015).	2	7	1
Organik Kimya AS v. Rohm & Haas Co., No. IPR2014-00350 (P.T.A.B. June 26, 2015).	1	2	1
Ford Motor Co, v. Cruise Control Techs. LLC, No. IPR2014-00291 (P.T.A.B. June 29, 2015).	0	0	1
Ford Motor Co. v. Cruise Control Techs. LLC, No. IPR2014-00281 (P.T.A.B. June 29, 2015).	0	0	1
Subaru of Am., Inc. v. Cruise Control Techs., No. IPR2014-00279 (P.T.A.B. June 29, 2015).	0	1	1
Toyota Motor N. Am., Inc. v. Cruise Control Techs. LLC, No. IPR2014-00280 (P.T.A.B. June 29, 2015).	0	0	1
Toyota Motor N. Am., Inc. v. Cruise Control Techs. LLC, No. IPR2014-00289 (P.T.A.B. June 29, 2015).	0	1	1
Biodelivery Scis. Int'l, Inc. v. RB Pharm. Ltd., No. IPR2014-00325 (P.T.A.B. June 30, 2015).	0	2	3
Square, Inc. v. REM Holdings 3, LLC, No. IPR2014-00312 (P.T.A.B. July 7, 2015).	2	1	1
Purdue Pharma L.P. v. Depomed, Inc., No. IPR2014-00379 (P.T.A.B. July 8, 2015).	1	1	1
Purdue Pharma L.P. v. Depomed, Inc., No. IPR2014-00378 (P.T.A.B. July 8, 2015).	2	1	2
Purdue Pharma L.P. v. Depomed, Inc., No. IPR2014-00377 (P.T.A.B. July 8, 2015).	2	0	2

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Euro-Pro Operating LLC v. Acorne Enters., LLC, No. IPR2014-00352 (P.T.A.B. July 9, 2015).	2	0	0
Euro-Pro Operating LLC v. Acorne Enters., LLC, No. IPR2014-00351 (P.T.A.B. July 9, 2015).	2	0	0
Toshiba Corp. v. Intellectual Ventures I LLC, No. IPR2014-00310 (P.T.A.B. July 9, 2015).	0	0	1
Finjan, Inc. v. Fireeye, Inc., No. IPR2014-00492 (P.T.A.B. July 10, 2015).	2	2	1
Skyhawke Techs. LLC v. L&H Concepts, LLC, No. IPR2014-00438 (P.T.A.B. July 10, 2015).	0	1	1
Skyhawke Techs. LLC v. L&H Concepts, LLC, No. IPR2014-00437 (P.T.A.B. July 10, 2015).	0	0	1
Finjan, Inc. v. Fireeye, Inc., No. IPR2014-00344 (P.T.A.B. July 10, 2015).	2	2	1
Eizo Corp. v. Barco N.V., No. IPR2014-00358 (P.T.A.B. July 14, 2015).	0	0	1
Samsung Elecs. Co. v. Affinity Labs of Tex., LLC, No. IPR2014-00407 (P.T.A.B. July 20, 2015).	1	0	1
Google Inc. v. Micrografx, LLC, No. IPR2014-00532 (P.T.A.B. July 21, 2015).	1	2	1
Customplay, LLC v. Clearplay, Inc., No. IPR2014-00383 (P.T.A.B. July 21, 2015).	0	0	1
Customplay, LLC v. Clearplay, Inc., No. IPR2014-00339 (P.T.A.B. July 21, 2015).	0	0	1
Amneal Pharm., LLC v. Endo Pharm. Inc., No. IPR2014-00360 (P.T.A.B. July 22, 2015).	0	1	0
Digital Ally, Inc. v. Utility Assocs., Inc., No. IPR2014-00725 (P.T.A.B. July 27, 2015).	2	2	1
Juniper Networks, Inc. v. Brixham Sols., Ltd., No. IPR2014-00431 (P.T.A.B. July 27, 2015).	2	0	1
Juniper Networks, Inc. v. Brixham Sols., Ltd., No. IPR2014-00425 (P.T.A.B. July 27, 2015).	0	2	0
Apple Inc. v. Virtnet Inc., No. IPR2014-00404 (P.T.A.B. July 29, 2015).	0	2	0
Apple Inc. v. Virnetx Inc., No. IPR2014-00403 (P.T.A.B. July 29, 2015).	4	10	2
A.C. Dispensing Equip. Inc. v. Prince Castle LLC, No. IPR2014-00511 (P.T.A.B. Aug. 4, 2015).	2	1	1
Monosol Rx, LLC v. Arius Two, Inc., No. IPR2014-00376 (P.T.A.B. Aug. 5, 2015).	4	5	0
Ricoh Ams. Corp. v. MPHJ Tech. Invs., LLC, No. IPR2014-00538 (P.T.A.B. Aug. 12, 2015).	3	0	1
Globalfoundries U.S., Inc. v. Zond, LLC, No. IPR2014-01087 (P.T.A.B. Aug. 14, 2015).	4	5	1
Globalfoundries US, Inc. v. Zond, LLC, No. IPR2014-01086 (P.T.A.B. Aug. 14, 2015).	4	10	1
Globalfoundries US, Inc. et. al. v. Zond, LLC, No. IPR2014-01083 (Aug. 14, 2015).	4	14	1
Customplay, LLC v. Clearplay, Inc., No. IPR2014-00430 (P.T.A.B. Aug. 14, 2015).	0	0	1
Ricoh Ams. Corp. v. MPHJ Tech. Invs., LLC, No. IPR2014-00539 (P.T.A.B. Aug. 14, 2015).	3	0	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00783 (P.T.A.B. Aug. 14, 2015).	4	15	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00782 (P.T.A.B. Aug. 14, 2015).	4	10	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00781 (P.T.A.B. Aug. 14, 2015).	4	10	1
SAP Am., Inc. v. Lakshmi Arunachalam, No. IPR2014-00414 (P.T.A.B. Aug. 17, 2015).	0	2	0
SAP Am., Inc. v. Lakshmi Arunachalam, No. IPR2014-00413 (P.T.A.B. Aug. 17, 2015).	0	2	0
Google Inc. v. Arendi S.A.R.L., No. IPR2014-00452 (P.T.A.B. Aug. 18, 2015).	3	6	1
Google Inc. v. Arendi S.A.R.L., No. IPR2014-00450 (P.T.A.B. Aug. 19, 2015).	2	3	1
Canon Inc. v. Intellectual Ventures II LLC, No. IPR2014-00631 (P.T.A.B. Aug. 19, 2015).	1	3	1
Apple Inc. v. Virnetx Inc., No. IPR2014-00482 (P.T.A.B. Aug. 24, 2015).	0	3	0
Apple Inc. v. Virnetx Inc., No. IPR2014-00481 (P.T.A.B. Aug. 24, 2015).	3	8	3
Unverferth Manfg Co. v. J&M Manfg Co., No. IPR2014-00758 (P.T.A.B. Aug. 31, 2015).	0	1	1
Mastercard Int'l Inc. v. D'Agostino, No. IPR2014-00544 (P.T.A.B. Aug. 31, 2015).	0	0	1
Mastercard Int'l Inc. v. D'Agostino, No. IPR2014- 00543 (P.T.A.B. Aug. 31, 2015).	0	0	1
Seagate Tech. (US) Holdings, Inc. v. Enova Tech. Corp., No. IPR2014-00683 (P.T.A.B. Sept. 2, 2015).	0	1	1
Flir Sys., Inc. v. Leak Surveys, Inc., No. IPR2014-00411/434 (P.T.A.B. Sept. 3, 2015).	0	0	1
Osram Sylvania Inc. v. Jam Strait, Inc., No. IPR2014-00703 (P.T.A.B. Sept. 8, 2015).	1	4	1
EMC Corp. v. Secure Axcess, LLC, No. IPR2014-00475 (P.T.A.B. Sept. 8, 2015).	6	0	2
Motorola Mobility LLC v. Intellectual Ventures I LLC, No. IPR2014-00501 (P.T.A.B. Sept. 9, 2015).	0	0	1
Edmund Optics, Inc. v. Semrock, Inc., No. IPR2014-00583 (P.T.A.B. Sept. 9, 2015).	1	4	2
Motorola Mobility LLC v. Intellectual Ventures I LLC, No. IPR2014-00504 (P.T.A.B. Sept. 9, 2015).	0	2	2
Glob. Tel*Link Corp. v. Securus Techs., Inc., No. IPR2014-00493 (P.T.A.B. Sept. 11, 2015).	4	2	1
U.S. Endoscopy Grp., Inc. v. CDX Diagnostics, Inc., No. IPR2014-00641 (P.T.A.B. Sept. 14, 2015).	0	1	0
U.S. Endoscopy Grp., Inc. v. CDX Diagnostics, Inc., No. IPR2014-00639 (P.T.A.B. Sept. 14, 2015).	0	1	0
Stats LLC v. Hockeyline, Inc., No. IPR2014-00510 (P.T.A.B. Sept. 15, 2015).	1	2	1
Globalfoundries U.S., Inc. v. Zond, LLC, No. IPR2014-01099 (P.T.A.B. Sept. 23, 2015).	4	16	1
Int'l Bus. Machs. Corp. v. Intellectual Ventures II, LLC, No. IPR2014-00587 (P.T.A.B. Sept. 23, 2015).	0	2	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Canon Inc. v. Intellectual Ventures I LLC, No. IPR2014-00535 (P.T.A.B. Sept. 23, 2015).	0	3	0
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00808 (P.T.A.B. Sept. 23, 2015).	4	10	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00807 (P.T.A.B. Sept. 23, 2015).	4	10	1
Compass Bank v. Intellectual Ventures II, No. IPR2014-00786 (P.T.A.B. Sept. 23, 2015).	0	3	1
Globalfoundries U.S., Inc. v. Zond, LLC, No. IPR2014-01100 (P.T.A.B. Sept. 23, 2015).	4	10	1
Samsung Elecs. Co. v. Rembrandt Wireless Techs., LP, No. IPR2014-00895 (P.T.A.B. Sept. 24, 2015).	3	2	1
Samsung Elecs. Co. v. Rembrandt Wireless Techs., LP, No. IPR2014-00893 (P.T.A.B. Sept. 24, 2015).	3	2	1
Samsung Elecs. Co. v. Rembrandt Wireless Techs., LP, No. IPR2014-00892 (P.T.A.B. Sept. 24, 2015).	3	2	1
Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014- 00652 (P.T.A.B. Sept. 16, 2015).	0	0	1
Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014-00656 (P.T.A.B. Sept. 21, 2015).	1	0	2
Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014-00654 (P.T.A.B. Sept. 21, 2015).	1	0	2
Torrent Pharm. Ltd. v. Novartis AG, No. IPR2014-00784 (P.T.A.B. Sept. 24, 2015).	0	2	0
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00821 (P.T.A.B. Sept. 25, 2015).	2	0	1
SK Innovation Co. v. Celgard, LLC, No. IPR2014- 00679 (P.T.A.B. Sept. 25, 2015).	0	0	3
Globalfoundries US, Inc. v. Zond, LLC, No. IPR2014-01098 (P.T.A.B. Sept. 25, 2015).	2	7	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00827 (P.T.A.B. Sept. 25, 2015).	2	1	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00819 (P.T.A.B. Sept. 25, 2015).	2	1	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00818 (P.T.A.B. Sept. 25, 2015).	2	1	1
Ford Motor Co. v. Paice LLC, No. IPR2014-00579 (P.T.A.B. Sept. 28, 2015).	2	3	1
Ford Motor Co. v. Paice LLC, No. IPR2014-00571 (P.T.A.B. Sept. 28, 2015).	2	3	1
Pac. Mkt. Int'l, LLC v. Ignite USA, LLC, No. IPR2014-00561 (P.T.A.B. Sept. 28, 2015).	2	2	1
Noven Pharm., Inc. v. Nortavis AG, No. IPR2014-00550 (P.T.A.B. Sept. 28, 2015).	1	1	1
Noven Pharm., Inc. v. Nortavis AG, No. IPR2014-00549 (P.T.A.B. Sept. 28, 2015).	1	0	1
Gordon*Howard Assocs., Inc. v. Lunareye, No. IPR2014-00712 (P.T.A.B. Sept. 28, 2015).	1	4	1
IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00664 (P.T.A.B. Sept. 28, 2015).	2	0	0
The Gillette Co. v. Zond, LLC, No. IPR2014-00726 (P.T.A.B. Sept. 29, 2015).	2	6	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
<i>IBG Auto. Ltd. v. Gentherm GMBH</i> , No. IPR2014-00661 (P.T.A.B. Sept. 29, 2015).	1	0	1
The Gillette Co. v. Zond, LLC, No. IPR2014-00799 (P.T.A.B. Sept. 30, 2015).	4	4	1
The Gillette Co. v. Zond, LLC, No. IPR2014-00580 (P.T.A.B. Oct. 1, 2015).	2	0	1
U.S. Dep't of Homeland Sec. v. Golden, No. IPR2014-00714 (P.T.A.B. Oct. 1, 2015).	0	2	0
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00805 (P.T.A.B. Oct. 2, 2015).	4	7	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00802 (P.T.A.B. Oct. 2, 2015).	4	7	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00800 (P.T.A.B. Oct. 2, 2015).	4	7	1
LG Chem, Ltd. v. Celgard, LLC, No. IPR2014-00692 (P.T.A.B. Oct. 5, 2015).	0	0	3
Henkel Corp. v. HB Fuller Co., No. IPR2014-00606 (P.T.A.B. Oct. 6, 2015).	1	3	1
Churchill Drilling Tools US, Inc. v. Schoeller-Bleckmann Oilfield Equip. AG, No. IPR2014-00814 (P.T.A.B. Oct. 9, 2015).	0	3	1
IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00667 (P.T.A.B. Oct. 13, 2015).	1	0	1
Seoul Semiconductor Co. v. Sharp Kabushiki Kaisha, No. IPR2014-00879 (P.T.A.B. Oct. 15, 2015).	0	0	1
Seoul Semiconductor Co. v. Enplas Corp., No. IPR2014-00878 (P.T.A.B. Oct. 15, 2015).	2	0	1
Int'l Bus. Machs. Corp. v. Intellectual Ventures II LLC, No. IPR2014-00660 (P.T.A.B. Oct. 19, 2015).	1	0	1
Samsung Elecs. Co. v. Black Hills Media, LLC, No. IPR2014-00717 (P.T.A.B. Oct. 20, 2015).	0	1	1
Samsung Elecs. Co. v. Black Hills Media, LLC, No. IPR2014-00735 (P.T.A.B. Oct. 21, 2015).	0	2	1
Silicon Labs., Inc. v. Cresta Tech. Corp., No. IPR2015-00728 (P.T.A.B. Oct. 21, 2015).	0	1	1
IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00668 (P.T.A.B. Oct. 21, 2015).	1	0	1
Eli Lilly Co. v. L.A. Biomedical Research Inst., No. IPR2014-00752 (P.T.A.B. Oct. 22, 2015).	0	3	1
EMC Corp. v. Clouding Corp., No. IPR2014-01218 (P.T.A.B. Oct. 22, 2015).	3	2	1
EMC Corp. v. Clouding Corp., No. IPR2014-01217 (P.T.A.B. Oct. 22, 2015).	3	2	2
EMC Corp. v. Clouding Corp., No. IPR2014-01216 (P.T.A.B. Oct. 22, 2015).	1	0	1
Eli Lilly Co. v. L.A. Biomedical Research Inst., No. IPR2014-00693 (P.T.A.B. Oct. 22, 2015).	0	3	1
C&D Zodiac, Inc. v. B/E Aerospace, Inc., No. IPR2014-00727 (P.T.A.B. Oct. 26, 2015).	1	3	1
Phigenix, Inc. v. Immunogen, Inc., No. IPR2014-00676 (P.T.A.B. Oct. 27, 2015).	1	0	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Square, Inc. v. Unwired Planet LLC, No. IPR2014-01165 (P.T.A.B. Oct. 30, 2015).	2	0	1
Glob. Tel*Link Corp. v. Securus Techs., Inc., No. IPR2014-00810 (P.T.A.B. Nov. 2, 2015).	3	2	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00917 (P.T.A.B. Nov. 3, 2015).	2	1	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00829 (P.T.A.B. Nov. 3, 2015).	2	7	1
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00828 (P.T.A.B. Nov. 3, 2015).	2	1	1
Kinik Co v. Sung, No. IPR2014-01523 (P.T.A.B. Nov. 4, 2015).	2	8	1
Pac. Mkt. Int'l, LLC v. Ignite USA, LLC, No. IPR2014-00750 (P.T.A.B. Nov. 13, 2015).	2	2	1
TRW Auto. US LLC v. Magna Elecs. Inc., No. IPR2014-1351 (P.T.A.B. Nov. 16, 2015).	0	2	1
Square, Inc. v. Unwired Planet LLC, No. IPR2014-01164 (P.T.A.B. Nov. 19, 2015).	0	1	1
Google, Inc. v. Intellectual Ventures II LLC, No. IPR2014-00787 (P.T.A.B. Nov. 20, 2015).	0	2	1
Fedex Corp. v. Ipventure, Inc., No. IPR2014-00833 (P.T.A.B. Nov. 20, 2015).	0	2	1
Kinetic Techs., Inc. v. Skyworks Sols. Inc., No. IPR2014-00690 (P.T.A.B. Oct. 19, 2015).	0	0	1
Infomotion Sports Techs., Inc. v. Pillar Vision, Inc., No. IPR2014-00764 (P.T.A.B. Nov. 12, 2015).	0	0	1
Ford Motor Co. v. Paice LLC, No. IPR2014-00875 (P.T.A.B. Nov. 23, 2015).	0	0	1
L-3 Commc'ns. Holdings, Inc. v. PowerSurvey, Inc., No. IPR2014-00836 (P.T.A.B. Nov. 23, 2015).	2	1	1
L-3 Comme'ns. Holdings, Inc. v. PowerSurvey, Inc., No. IPR2014-00834 (P.T.A.B. Nov. 23, 2015).	2	1	1
Ace Bed Co. v. Sealy Tech., LLC, No. IPR2014-01119 (P.T.A.B. Nov. 24, 2015).	2	0	1
Eastman Kodak Co. v. CTP Innovations, LLC, No. IPR2014-00790 (P.T.A.B. Nov. 25, 2015).	2	3	0
Eastman Kodak Co. v. CTP Innovations, LLC, No. IPR2014-00789 (P.T.A.B. Nov. 25, 2015).	2	3	0
Eastman Kodak Co. v. CTP Innovations, LLC, No. IPR2014-00788 (P.T.A.B. Nov. 25, 2015).	2	2	0
Eastman Kodak Co. v. CTP Innovations, LLC, No. IPR2014-00791 (P.T.A.B. Nov. 25, 2015).	2	2	0
Marvell Semiconductor, Inc. v. Intellectual Ventures I LLC, No. IPR2014-00548 (P.T.A.B. Nov. 30, 2015).	0	0	1
Captioncall, LLC v. Ultratec, Inc., No. IPR2014-00780 (P.T.A.B. Dec. 1, 2015).	0	3	1
Glob. Tel*Link Corp. v. Securus Techs., Inc., No. IPR2014-00824 (P.T.A.B. Dec. 2, 2015).	2	0	1
Glob. Tel*Link Corp. v. Securus Techs., Inc., No. IPR2014-00825 (P.T.A.B. Dec. 2, 2015).	2	0	1
VMWare, Inc. v. Clouding Corp., No. IPR2014-01292 (P.T.A.B. Dec. 3, 2015).	0	3	1

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Arris Grp., Inc., v. Cirrex Sys. LLC, No. IPR2014-00815 (P.T.A.B. Dec. 2, 2015).	3	6	2
Petroleum Geo-Servs. Inc. v. Westerngeco LLC, No. IPR2014-00689 (P.T.A.B. Dec. 15, 2015).	0	5	1
Petroleum Geo-Servs. Inc. v. Westerngeco LLC, No. IPR2014-00688 (P.T.A.B. Dec. 15, 2015).	0	8	1
Petroleum Geo-Servs. Inc. v. Westerngeco LLC, No. IPR2014-00687 (P.T.A.B. Dec. 15, 2015).	2	6	1
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-00915 (P.T.A.B. Dec. 7, 2015).	2	5	2
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-00919 (P.T.A.B. Dec. 7, 2015).	2	7	1
VMWare, Inc. v. Elecs. & Telecomms. Research Inst., No. IPR 2014-00949 (P.T.A.B. Dec. 9, 2015).	2	2	1
Ericsson Inc. v. Intellectual Ventures I LLC, No. IPR2014-00921 (P.T.A.B. Dec. 9, 2015).	0	1	1
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-01149 (P.T.A.B. Dec. 9, 2015).	0	0	1
Universal Remote Control, Inc. v. Universal Elecs. Inc., No. IPR2014-01146 (P.T.A.B. Dec. 10, 2015).	2	5	1
Ford Motor Co. v. Paice LLC, No. IPR2014-00884 (P.T.A.B. Dec. 10, 2015).	1	2	1
Ford Motor Co. v. Paice LLC, No. IPR2014-00904 (P.T.A.B. Dec. 10, 2015).	1	2	1
First Quality Baby Prods., LLC v. Kimberly-Clark Worldwide, Inc., No. IPR2014-01021 (P.T.A.B. Dec. 10, 2015).	0	1	0
Universal Remote Control, Inc. v. Universal Elecs. Inc., No. IPR 2014-01109, 2015 WL 9275197 (P.T.A.B. Dec. 16, 2015).	2	1	1
Universal Remote Control, Inc. v. Universal Elecs. Inc., 2015 WL 9275200 (P.T.A.B. Dec. 18, 2015).	1	0	1
Geox S.P.A. v. Outdry Techs. Corp., No. IPR2014-01244 (P.T.A.B. Dec. 18, 2015).	0	1	1
Seagate Tech. (US) Holdings, Inc. v. Enova Tech. Corp., No. IPR2014-01178 (P.T.A.B. Dec. 18, 2015).	0	0	1
Nestlé USA, Inc. v. Steuben Foods, Inc., No. IPR2014-01235 (P.T.A.B. Dec. 21, 2015).	1	4	1
HTC Corp. v. Cellular Commc'ns Equip. LLC, No. IPR2014-01135 (P.T.A.B. Jan. 4, 2016).	0	1	0
NHK Seating of Am., Inc. v. Lear Corp., No. IPR2014-01101 (P.T.A.B. Jan. 5, 2016).	1	1	1
Amazon.com, Inc. v. Cellular Comme'ns Equip., LLC, No. IPR2014-01134 (P.T.A.B. Jan. 6, 2016).	2	0	1
VMWare, Inc. v. Clouding Corp., No. IPR2014-01304 (P.T.A.B. Jan. 7, 2016).	2	0	1
VMWare, Inc. v. Clouding Corp., No. IPR2014-01305 (P.T.A.B. Jan. 7, 2016).	2	0	1
ABS Glob., Inc. v. XY, LLC, No. IPR2014-01161 (P.T.A.B. Jan. 11, 2016).	1	1	1
Int'l Bus. Machs. Corp. v. Intellectual Ventures I LLC, No. IPR2014-01385 (P.T.A.B. Jan. 15, 2016).	2	1	2

	"Pure" PTO Citations	"Direct" District Court Citations	"Indirect" District Court Citations
Atoptech, Inc. v. Synopsys, Inc., No. IPR2014-01159 (P.T.A.B. Jan. 19, 2016).	3	2	1
Atoptech, Inc. v. Synopsys, Inc., No. IPR2014-01150 (P.T.A.B. Jan. 19, 2016).	3	2	1
Atoptech, Inc. v. Synopsys, Inc., No. IPR2014-01145 (P.T.A.B. Jan. 19, 2016).	2	1	1
BMC Med. Co. v. Resmed Ltd., No. IPR2014-01363 (P.T.A.B. Jan. 20, 2016).	1	1	1
Glob. Tel*Link Corp. v. Securus Techs., Inc., No. IPR2014-01282 (P.T.A.B. Jan. 21, 2016).	0	0	1
Glob. Tel*Link Corp. v. Securus Techs., Inc., No. IPR2014-01278 (P.T.A.B. Jan. 21, 2016).	0	0	1
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-01185 (P.T.A.B. Jan. 21, 2016).	4	2	1
HTC Corp. v. Advanced Audio Devices, LLC, No. IPR2014-01158 (P.T.A.B. Jan. 22, 2016).	1	0	0
HTC Corp. v. Advanced Audio Devices, LLC, No. IPR2014-01157 (P.T.A.B. Jan. 22, 2016).	1	0	0
Google, Inc. v. Visual Real Estate, Inc., No. IPR2014-01339 (P.T.A.B. Jan. 25, 2016).	2	10	1
Valeo N. Am., Inc. v. Magna Elecs., Inc., No. IPR2014-01203 (P.T.A.B. Jan. 25, 2016).	0	0	1
Samsung Elecs. Co. v. Affinity Labs of Tex., LLC, No. IPR2014-01181 (P.T.A.B. Jan. 28, 2016).	1	0	1
Cisco Sys., Inc. v. Capella Photonics, Inc., No. IPR2014-01166 (P.T.A.B. Jan. 28, 2016).	0	5	0
Mindgeek S.A.R.L. v. Skky Inc., No. IPR2014-01236 (P.T.A.B. Jan. 29, 2016).	3	12	1
Cisco Sys., Inc. v. Crossroads Sys., Inc., No. IPR2014-01226 (P.T.A.B. Jan. 29, 2016).	1	4	2
Cisco Sys., Inc. v. Crossroads Sys., Inc., No. IPR2014-01544 (P.T.A.B. Jan. 29, 2016).	1	2	1
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-01195 (P.T.A.B. Jan. 29, 2016).	0	1	1
Oracle Corp. v. Crossroads Sys., Inc., No. IPR2014-01207 (P.T.A.B. Jan. 29, 2016).	1	2	2
Gordon*Howard Assocs., Inc. v. Lunareye, Inc., No. IPR2014-01213 (P.T.A.B. Feb. 2, 2016).	0	6	2
NHK Seating of Am., Inc. v. Lear Corp., No. IPR2014-01200 (P.T.A.B. Feb. 2, 2016).	1	1	1
HTC Corp. v. NFC Tech., LLC, No. IPR2014-01199 (P.T.A.B. Feb. 3, 2016).	3	5	1
HTC Corp. v. NFC Tech., LLC, No. IPR2014-01198 (P.T.A.B. Feb. 3, 2016).	3	1	1
Seagate Tech. (US) Holdings, Inc. v. Enova Tech. Corp., No. IPR2014-01297 (P.T.A.B. Feb. 4, 2016).	0	0	1
Arctic Cat, Inc. v. Polaris Indus., Inc., No. IPR2014- 01428 (P.T.A.B. Feb. 4, 2016).	2	1	1
Arctic Cat, Inc. v. Polaris Indus., Inc., No. IPR2014-01427 (P.T.A.B. Feb. 4, 2016).	2	1	1

APPENDIX B: LEGAL AUTHORITY APPLIED IN INTER PARTES REVIEW PROCEEDINGS (FEBRUARY 5, 2015–FEBRUARY 4, 2016)

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard			
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Guangdong Xinbao Elec. Appliances Holdings Co. v. Rivera, No. IPR2014-00042 (P.T.A.B. Feb. 6, 2015).			X			
Sensio, Inc. v. Select Brands, Inc., No. IPR2013- 00500 (P.T.A.B. Feb. 9, 2015).						X
Sensio, Inc. v. Select Brands, Inc., No. IPR2013- 00580 (P.T.A.B. Feb. 9, 2015).						X
Sensio, Inc. v. Select Brands, Inc., No. IPR2013-						X
00501 (P.T.A.B. Feb. 9, 2015). Conopco, Inc. v. Procter & Gamble Co., No.			X			
IPR2013-00505 (P.T.A.B. Feb. 10, 2015). Conopco, Inc. v. Procter & Gamble Co., No.						
IPR2013-00509 (P.T.A.B. Feb. 10, 2015). Intelligent Bio-systems, Inc. v. Illumina			X			
Cambridge Ltd., No. IPR2013-00517 (P.T.A.B. Feb. 11, 2015).			X			
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2013- 00508 (P.T.A.B. Feb. 11, 2015).						X
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2013- 00507 (P.T.A.B. Feb. 11, 2015).						X
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2013- 00506 (P.T.A.B. Feb. 11, 2015).			х			
Target Corp. v. Destination Maternity Corp., No. IPR2013-00532 (P.T.A.B. Feb. 12, 2015).				X		
Target Corp. v. Destination Maternity Corp.,				X		
No. IPR2013-00530 (P.T.A.B. Feb. 12, 2015). Acco Brands Corp. v. Fellowes, Inc., No.			x			
IPR2013-00566 (P.T.A.B. Feb. 12, 2015). <i>Tandus Flooring, Inc. v. Interface, Inc.</i> , No.			Λ			
IPR2013-00527 (P.T.A.B. Feb. 12, 2015) Samsung Elecs. Co. v. Innovation Scis., Inc.,				X		
No. IPR2013-00570 (P.T.A.B. Feb. 17, 2015).			X			
Samsung Elecs. Co. v. Innovation Scis., Inc., No. IPR2013-00569 (P.T.A.B. Feb. 17, 2015).			X			
Smith & Nephew Inc. v. Bonutti Skeletal Innovations LLC, No. IPR2013-00629 (P.T.A.B.				X		
Feb. 18, 2015). Delaval Int'l AB v. Lely Patent N.V., No.				X		
IPR2013-00575 (P.T.A.B. Feb. 20, 2015). Biomarin Pharm. Inc. v. Genzyme Therapeutic				A		
Prods. Ltd. Pship, No. IPR2013-00537 (P.T.A.B. Feb. 23, 2015).				X		

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard			
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P'ship, No. IPR2013-00535			х			
(P.T.A.B. Feb. 23, 2015).			Λ			
Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P'ship, No. IPR2013-00534 (P.T.A.B. Feb. 23, 2015).				X		
Mexichem Amanco Holdings S.A. de C.V. v. Honeywell Int'l, Inc., No. IPR2013-00576 (P.T.A.B. Feb. 26, 2015).			X			
Dell, Inc. v. Elecs. & Telecomms. Research Inst., No. IPR2013-00635 (P.T.A.B. Feb. 27, 2015).			x			
Microsoft Corp. v. Enfish, LLC, No. IPR2013- 00563 (P.T.A.B. March 2, 2015).				x		
Microsoft Corp. v. Enfish, LLC, No. IPR2013- 00561 (P.T.A.B. March 2, 2015).				X		
Microsoft Corp. v. Enfish, LLC, No. IPR2013-				X		
00560 (P.T.A.B. March 2, 2015). Int'l Secs. Exch., LLC v. Chi. Bd. Options Exch., Inc., No. IPR2014-00098 (P.T.A.B. March 2, 2015).			x			
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2013-00539 (P.T.A.B. March 3, 2015).				X		
Captioncall, LLC v. Ultratec, Inc., No.				X		
IPR2013-00550 (P.T.A.B. March 3, 2015). Captioncall, LLC v. Ultratec, Inc., No.				X		
IPR2013-00549 (P.T.A.B. March 3, 2015). Captioncall, LLC v. Ultratec, Inc., No.				X		
IPR2013-00545 (P.T.A.B. March 3, 2015). Captioncall, LLC v. Ultratec, Inc., No.				X		
IPR2013-00544 (P.T.A.B. March 3, 2015). Captioncall, LLC v. Ultratec, Inc., No.						
IPR2013-00542 (P.T.A.B. March 3, 2015). <i>Microsoft Corp. v. Enfish, LLC</i> , No. IPR2013-				X		
00562 (P.T.A.B. March 3, 2015). <i>Microsoft Corp. v. Enfish, LLC</i> , No. IPR2013-				X		
00559 (P.T.A.B. March 3, 2015). Toyota Motor Co. v. Hagenbuch, No. IPR2014-				A .		
00124 (P.T.A.B. March 3, 2015). Toyota Motor Co. v. Hagenbuch, No. IPR2014-		X				
00123 (P.T.A.B. March 3, 2015). Captioncall, LLC v. Ultratec, Inc., No.		X				
IPR2013-00543 (P.T.A.B. March 3, 2015). Broadcom Corp. v. Wi-Fi One, LLC, No.				X		
IPR2013-00636 (P.T.A.B. March 6, 2015).				X		
Broadcom Corp. v. Wi-Fi One, LLC, No. IPR2013-00602 (P.T.A.B. March 6, 2015).				X		
Broadcom Corp. v. Wi-Fi One, LLC, No. IPR2013-00601 (P.T.A.B. March 6, 2015).				X		

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard			
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Nestle Oil OYJ v. Reg Synthetic Fuels, LLC, No. IPR2013-00578 (P.T.A.B. March 12, 2015).				X		
Butamax Advanced Biofuels LLC v. Gevo, Inc.,				X		
No. IPR2014-00250 (P.T.A.B. March 13, 2015). Baxter Healthcare Corp. v. Millenium Biologix, LLC, No. IPR2013-00590 (P.T.A.B. March 18, 2015).				X		
Yamaha Corp. v. Black Hills Media, LLC, No. IPR2013-00598 (P.T.A.B. March 18, 2015).			X			
Yamaha Corp. v. Black Hills Media, LLC, No.			X			
IPR2013-00597 (P.T.A.B. March 18, 2015). <i>Yamaha Corp. v. Black Hills Media, LLC</i> , No. IPR2013-00594 (P.T.A.B. March 18, 2015).			X			
Yamaha Corp. v. Black Hills Media, LLC, No. IPR2013-00593 (P.T.A.B. March 18, 2015).			x			
Baxter Healthcare Corp. v. Millenium Biologix, LLC, No. IPR2013-00582 (P.T.A.B. March 18, 2015).				X		
Unified Patents, Inc. v. Clouding IP, LLC, No. IPR2013-00586 (P.T.A.B. March 19, 2015).					X	
Veeam Software Corp. v. Symantec Corp., No. IPR2014-00088 (P.T.A.B. March 20, 2015).			x			
NHK Seating of Am., Inc. v. Lear Corp., No. IPR2014-00957 (P.T.A.B. March 23, 2015).	X					
Aker Biomarine As & Enzymotec Ltd. v. Neptune Techs. & Bioressources Inc., No. IPR2014-00003 (P.T.A.B. March 23, 2015).				x		
Intri-Plex Techs., Inc. v. Saint-Gobain Performance Plastics Rencol Ltd., No. IPR2014- 00309 (P.T.A.B. March 23, 2015).			х			
Medtronic, Inc. v. Marital Deduction Tr. & Endotach LLC, No. IPR2014-00100 (P.T.A.B. March 24, 2015).				X		
Laird Techs., Inc. v. Graftech Int'l Holdings, Inc., No. IPR2014-00024 (P.T.A.B. March 25, 2015).			X			
Laird Techs., Inc. v. Graftech Int'l Holdings, Inc., No. IPR2014-00025 (P.T.A.B. March 25, 2015).			X			
Laird Techs., Inc. v. Graftech Int'l Holdings, Inc., No. IPR2014-00023 (P.T.A.B. March 25, 2015).			x			
Apple, Inc. v. PersonalWeb Techs. LLC, No. IPR2013-00596 (P.T.A.B. March 25, 2015).			X			
Crocus Tech. S.A. v. N.Y. Univ., No. IPR2014- 00047 (P.T.A.B. March 26, 2015).				X		
Google, Inc. v. Unwired Planet, LLC, No. IPR2014-00036 (P.T.A.B. March 30, 2015).				x		

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			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Facebook, Inc., v. B.E. Tech., LLC, No.			X			
IPR2014-00052 (P.T.A.B. March 31, 2015). Google, Inc., v. B.E. Tech., LLC, No. IPR2014-			v			
00038 (P.T.A.B. March 31, 2015). <i>Microsoft Corp. v. B.E. Tech., LLC</i> , No.			X			
IPR2014-00039 (P.T.A.B. March 31, 2015).			X			
Toshiba Samsung Storage Tech. Korea Corp. v. LG Elecs., Inc., No. IPR2014-00204 (P.T.A.B.				X		
March 31, 2015). Honeywell Int'l Inc. v. Int'l Controls &						
Measurements Corp., No. IPR2014-00219				x		
(P.T.A.B. April 1, 2015). Toshiba Samsung Storage Tech. Korea Corp. v.						
LG Elecs., Inc., No. IPR2014-00205 (P.T.A.B.				x		
April 1, 2015). Int'l Bus. Machs. Corp. v. Intellectual Ventures II LLC, No. IPR2014-00180 (P.T.A.B. April 3,			X			
2015).			Λ			
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014- 00074 (P.T.A.B. April 3, 2015).			x			
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-			X			
00073 (P.T.A.B. April 3, 2015). Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-						
00081 (P.T.A.B. April 3, 2015).			X			
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014- 00034 (P.T.A.B. April 3, 2015).			X			
Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-				X		
00075 (P.T.A.B. April 5, 2015). Medtronic, Inc. v. Nuvasive, Inc., No. IPR2014-						
00087 (P.T.A.B. April 3, 2015).			X			
Panel Claw, Inc. v. Sunpower Corp., No. IPR2014-00388 (P.T.A.B. April 3, 2015).				X		
Samsung Elecs. Am., Inc. v. B.E. Tech., LLC, No. IPR2014-00044 (P.T.A.B. April 6, 2015).				X		
Microsoft Corp. v. B.E. Tech., LLC, No.				X		
IPR2014-00040 (P.T.A.B. April 6, 2015). Google, Inc. v. Unwired Patent, LLC, No.				Λ		
IPR2014-00037 (P.T.A.B. April 6, 2015).						X
Google, Inc. v. B.E. Tech., LLC, No. IPR2014- 0031 (P.T.A.B. April 6, 2015).				X		
Sony Mobile Commc'ns (USA) Inc. v. B.E. Tech.						
<i>LLC</i> , No. IPR2014-00029 (P.T.A.B. April 6, 2015).				X		
Google, Inc. v. Unwired Patent, LLC, No.			х			
IPR2014-00027 (P.T.A.B. April 6, 2015). GSI Tech. v. Cypress Semiconductor Corp., No.						
IPR2014-00202 (P.T.A.B. April 9, 2015).						X

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard			
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Adobe Sys. Inc. v. Afluo. LLC, No. IPR2014- 00154 (P.T.A.B. April 9, 2015).				X		
Adobe Sys. Inc. v. Afluo. LLC, No. IPR2014-				x		
00153 (P.T.A.B. April 9, 2015). GSI Tech., Inc. v. Cypress Semiconductor Corp.,						X
No. IPR2014-00121 (P.T.A.B. April 9, 2015). Elec. Frontier Found. v. Pers. Audio, LLC, No.						Λ
IPR2014-00070 (P.T.A.B. April 10, 2015). Sony Comput. Entm't Am. LLC v. Game			X			
Controller Tech. LLC, No. IPR2013-00634				X		
(P.T.A.B. April 14, 2015). Apple, Inc. v. Evolutionary Intelligence, LLC,				X		
No. IPR2014-00086 (P.T.A.B. April 16, 2015). Apotex Inc. v. Wyeth LLC, No. IPR2014-00115				A		
(P.T.A.B. April 20, 2015). Medtronic, Inc. v. Lifeport Scis. LLC, No.	X					
IPR2014-00288 (P.T.A.B. April 21, 2015).			X			
Medtronic, Inc. v. Norred, No. IPR2014-00110 (P.T.A.B. April 23, 2105).				X		
Veeam Software Corp. v. Symantec Corp., No. IPR2014-00091 (P.T.A.B. April 23, 2015).			X			
Veeam Software Corp. v. Symantec Corp., No.				х		
IPR2014-00090 (P.T.A.B. April 23, 2015). Veeam Software Corp. v. Symantec Corp., No.				X		
IPR2014-00089 (P.T.A.B. April 23, 2015). Standard Innovation Corp. v. Lelo, Inc., No.				Α		
IPR2014-00148 (P.T.A.B. April 23, 2015). Oracle Corp. v. Thought, Inc., No. IPR2014-	X					
00119 (P.T.A.B. April 23, 2015).				X		
Oracle Corp. v. Thought, Inc., No. IPR2014- 00118 (P.T.A.B. April 23, 2015).				X		
Oracle Corp. v. Thought, Inc., No. IPR2014- 00117 (P.T.A.B. April 23, 2015).				X		
Medtronic, Inc. v. Norred, No. IPR2014-00111				X		
(P.T.A.B. April 23, 2105). Nintendo of Am., Inc. v. iLife Techs., Inc., No.				X		
IPR2015-00115 (P.T.A.B. April 28, 2015). <i>Yahoo! Inc. v. Createads LLC</i> , No. IPR2014-				Λ		
00200 (P.T.A.B. April 29, 2015). QSC Audio Prods., LLC v. Crest Audio, Inc.,		X				
No. IPR2014-00129 (P.T.A.B. April 29, 2015).				X		
QSC Audio Prods., LLC v. Crest Audio, Inc., No. IPR2014-00127 (P.T.A.B. April 29, 2015).	X					
Greene's Energy Grp., LLC v. Oil States Energy Servs., LLC, No. IPR2014-00364 (P.T.A.B. May 1, 2015).			X			

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			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Greene's Energy Grp., LLC v. Oil States Energy Servs., LLC, No. IPR2014-00216 (P.T.A.B. May			х			
1, 2015).			Λ			
QSC Audio Prods., LLC v. Crest Audio, Inc., No. IPR2014-00131 (P.T.A.B. May 1, 2015).				X		
QSC Audio Prods., LLC v. Crest Audio, Inc., No. IPR2014-00364 (P.T.A.B. May 1, 2015).				X		
Toshiba Corp. v. Intellectual Ventures I LLC, No. IPR2014-00113 (P.T.A.B. May 4, 2015).			X			
Autel U.S. Inc. v. Bosch Auto. Serv. Solutions LLC, No. IPR2014-00183 (P.T.A.B. May 5,				v		
2015).				X		
Harmonix Music Sys., Inc. v. Princeton Dig. Image Corp., No. IPR2014-00155 (P.T.A.B. May 6, 2015).		X				
Wavemarket Inc. v. Locationet Sys. Ltd., No. IPR2014-00199 (P.T.A.B. May 7, 2015).				X		
Square, Inc. v. Cooper, No. IPR2014-00158 (P.T.A.B. May 8, 2015).		X				
Apple, Inc. v. Virnetx, Inc., No. IPR2014-00238 (P.T.A.B. May 11, 2015).	X					
Apple, Inc. v. Virnetx, Inc., No. IPR2014-00237 (P.T.A.B. May 11, 2015).				x		
Facebook, Inc. v. EveryMD LLC, No. IPR2014- 00242 (P.T.A.B. May 12, 2015).	X					
Zimmer Holdings, Inc. v. Bonutti Skeletal Innovations LLC, No. IPR2014-00191 (P.T.A.B. May 12, 2015).				X		
Samsung Elecs. Co. v. Affinity Labs of Tex., LLC, No. IPR2014-00209 (P.T.A.B. May 13, 2015).						Х
Square, Inc. v. Cooper, No. IPR2014-00157 (P.T.A.B. May 14, 2015).		X				
Square, Inc. v. Cooper, No. IPR2014-00156 (P.T.A.B. May 14, 2015).		X				
Reloaded Games, Inc. v. Parallel Networks LLC, No. IPR2014-00139 (P.T.A.B. May 14, 2015).				X		
Reloaded Games, Inc. v. Parallel Networks LLC, No. IPR2014-00136 (P.T.A.B. May 14, 2015).	х					
Nintendo of Am., Inc. v. Motion Games, LLC, No. IPR2014-00164 (P.T.A.B. May 15, 2015).			x			
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2014-00144 (P.T.A.B. May 15, 2015).			X			
Ericsson Inc. v. Intellectual Ventures I LLC, No. IPR2014-00527 (P.T.A.B. May 18, 2015).			x			

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			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Zimmer Holdings, Inc. v. Bonutti Skeletal Innovations LLC, No. IPR2014-00321 (P.T.A.B. May 18, 2015).				Х		
Cisco Sys., Inc. v. AIP Acquisition LLC, No. IPR2014-00247 (P.T.A.B. May 20, 2015).		X				
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2014-00143 (P.T.A.B. May 21, 2015).			X			
Butamax Advanced Biofuels LLC v. Gevo, Inc., No. IPR2014-00142 (P.T.A.B. May 21, 2015).			X			
Headbox, LLC v. Infinite Imagineering, Inc., No. IPR2014-00365 (P.T.A.B. May 22, 2015).				X		
Schott Gemtron Corp. v. SSW Holding Co., No. IPR2014-00367 (P.T.A.B. May 26, 2015).			X			
Foursquare Labs, Inc. v. Silver State Intellectual Techs., Inc., No. IPR2014-00159 (P.T.A.B. May 26, 2015).			X			
Organik Kimya AS v. Rohm & Haas Co., No. IPR2014-00185 (P.T.A.B. May 27, 2015).				X		
Valeo N. Am., Inc. v. Magna Elecs., Inc., No. IPR2014-00222 (P.T.A.B. May 28, 2015).			х			
Valeo N. Am., Inc. v. Magna Elecs., Inc., No. IPR2014-00227 (P.T.A.B. May 28, 2015).						x
Valeo N. Am., Inc. v. Magna Elecs., Inc., No. IPR2014-00221 (P.T.A.B. May 28, 2015).				X		
Valeo N. Am., Inc. v. Magna Elecs., Inc., No.			х			
IPR2014-00220 (P.T.A.B. May 28, 2015). First Quality Baby Prods., LLC v. Kimberly- Clark Worldwide, Inc., No. IPR2014-00169			x			
(P.T.A.B. May 28, 2015). Toshiba Corp. v. Intellectual Ventures II LLC,			v			
No. IPR2014-00317 (P.T.A.B. June 3, 2015). Al-Ko Kober LLC v. Lippert Components Mfg.,			X			
<i>Inc.</i> , No. IPR2014-00313 (P.T.A.B. June 3, 2015).			X			
Reg Synthetic Fuels LLC v. Neste Oil OYJ, No. IPR2014-00192 (P.T.A.B. June 5, 2015).	X					
Johnson Health Tech Co. v. Icon Health & Fitness, Inc., No. IPR2014-00184 (P.T.A.B. June 5, 2015).			x			
Samsung Elecs. Co. v. Black Hills Media, LLC, No. IPR2014-00721 (P.T.A.B. June 8, 2015).	x					
Samsung Elecs. Co. v. Black Hills Media, LLC, No. IPR2014-00718 (P.T.A.B. June 8, 2015).	x					
Olympus Am. Inc. v. Perfect Surgical Techniques, Inc., No. IPR2014-00241 (P.T.A.B. June 8, 2015).				X		

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			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
Olympus Am. Inc. v. Perfect Surgical Techniques, Inc., No. IPR2014-00233 (P.T.A.B. June 8, 2015).				X		
Riverbed Tech., Inc. v. Silver Peak Sys., Inc., No. IPR2014-00245 (P.T.A.B. June 9, 2015).			X			
Apple Inc. v. THX Ltd., No. IPR2014-00235 (P.T.A.B. June 9, 2015).				x		
Apple Inc. v. Arendi S.A.R.L., No. IPR2014-	X					
00208 (P.T.A.B. June 9, 2015). Apple Inc v. Arendi S.A.R.L., No. IPR2014-				x		
00207 (P.T.A.B. June 9, 2015). Apple Inc. v. Arendi S.A.R.L., No. IPR2014-				X		
00206 (P.T.A.B. June 9, 2015). Clariant Corp. v. CSP Techs., Inc., No.						
IPR2014-00375 (P.T.A.B. June 10, 2015). SDI Techs., Inc. v. Bose Corp., No. IPR2014-				X		
00343 (P.T.A.B. June 11, 2015).			X			
SDI Techs., Inc. v. Bose Corp., No. IPR2014- 00346 (P.T.A.B. June 11, 2015).			x			
Mentor Graphics Corp. v. Synopsys, Inc., No.				X		
IPR2014-00287 (P.T.A.B. June 11, 2015). Google, Inc. v. Micrografx, LLC, No. IPR2014-			x			
00533 (P.T.A.B. June 17, 2015). Continental Auto. Sys. Inc. v. Wasica Fin. GMBH, No. IPR2014-00295 (P.T.A.B. June 17,		X	Α			
2015). Norman Int'l, Inc. v. Andrew J. Testamentary Tr., No. IPR2014-00283 (P.T.A.B. June 18,			X			
2015). Ford Motor Co. v. TMC Fuel Injection Sys., LLC, No. IPR2014-00272 (P.T.A.B. June 22,				X		
2015). Facebook, Inc. v. Rembrandt Soc. Media, LP,						
No. IPR2014-00415 (P.T.A.B. June 22, 2015).			X			
Johnson Controls, Inc. v. Wildcat Licensing WI, LLC, No. IPR2014-00305 (P.T.A.B. June 22, 2015).				X		
TRW Auto. US LLC v. Magna Elecs. Inc., No. IPR2014-00255 (P.T.A.B. June 23, 2015).		X				
TRW Auto. US LLC v. Magna Elecs. Inc., No. IPR2014-00262 (P.T.A.B. June 25, 2015).				X		
TRW Auto. US LLC v. Magna Elecs. Inc., No.				x		
IPR2014-00266 (P.T.A.B. June 25, 2015). TRW Auto. US LLC v. Magna Elecs. Inc., No.		-				
IPR2014-00256 (P.T.A.B. June 25, 2015). TRW Auto. US LLC v. Magna Elecs. Inc., No.		X				
IPR2014-00261 (P.T.A.B. June 25, 2015).		X				

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			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only
TRW Auto. US LLC v. Magna Elecs. Inc., No.		X				
IPR2014-00251 (P.T.A.B. June 25, 2015). Medtronic, Inc. v. Norred, No. IPR2014-00395						
(P.T.A.B. June 25, 2015).				X		
Organik Kimya AS v. Rohm & Haas Co., No.				x		
IPR2014-00350 (P.T.A.B. June 26, 2015). Ford Motor Co. v. Cruise Control Techs. LLC,						
No. IPR2014-00291 (P.T.A.B. June 29, 2015).			X			
Ford Motor Co. v. Cruise Control Techs. LLC, No. IPR2014-00281 (P.T.A.B. June 29, 2015).			X			
Subaru of Am., Inc. v. Cruise Control Techs.,						
No. IPR2014-00279 (P.T.A.B. June 29, 2015).			X			
Toyota Motor N. Am., Inc. v. Cruise Control Techs. LLC, No. IPR2014-00280 (P.T.A.B. June 29, 2015).			X			
Toyota Motor N. Am., Inc., v. Cruise Control Techs. LLC, No. IPR2014-00289 (P.T.A.B. June 29, 2015).			х			
Biodelivery Scis. Int'l, Inc. v. RB Pharm. Ltd.,						
No. IPR2014-00325 (P.T.A.B. June 30, 2015).			X			
Square, Inc. v. REM Holdings 3, LLC, No. IPR2014-00312 (P.T.A.B. July 7, 2015).				X		
Purdue Pharma L.P. v. Depomed, Inc., No.						
IPR2014-00379 (P.T.A.B. July 8, 2015).				X		
Purdue Pharma L.P. v. Depomed, Inc., No. IPR2014-00378 (P.T.A.B. July 8, 2015).				X		
Purdue Pharma L.P. v. Depomed, Inc., No.						
IPR2014-00377 (P.T.A.B. July 8, 2015).				X		
Euro-Pro Operating LLC v. Acorne Enters., LLC, No. IPR2014-00352 (P.T.A.B. July 9, 2015).					X	
Euro-Pro Operating LLC v. Acorne Enters., LLC, No. IPR2014-00351 (P.T.A.B. July 9, 2015).					X	
Toshiba Corp. v. Intellectual Ventures I LLC,						
No. IPR2014-00310 (P.T.A.B. July 9, 2015).			X			
Finjan, Inc. v. Fireeye, Inc., No. IPR2014-00492 (P.T.A.B. July 10, 2015).				x		
Skyhawke Techs. LLC v. L&H Concepts, LLC,						
No. IPR2014-00438 (P.T.A.B. July 10, 2015).			X			
Skyhawke Techs. LLC v. L&H Concepts, LLC,			X			
No. IPR2014-00437 (P.T.A.B. July 10, 2015). Finjan, Inc. v. Fireeye, Inc., No. IPR2014-00344			-			
(P.T.A.B. July 10, 2015).				X		
Eizo Corp. v. Barco N.V., No. IPR2014-00358			x			
(P.T.A.B. July 14, 2015).						

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Samsung Elecs. Co. v. Affinity Labs of Tex., LLC, No. IPR2014-00407 (P.T.A.B. July 20,				X			
2015).				A			
Brose N. Am., Inc. v. UUSI, LLC, No. IPR2014- 00417 (P.T.A.B. July 20, 2015).		X					
Google Inc. v. Micrografx, LLC, No. IPR2014- 00532 (P.T.A.B. July 21, 2015).				x			
Customplay, LLC v. Clearplay, Inc., No.			X				
IPR2014-00383 (P.T.A.B. July 21, 2015). Customplay, LLC v. Clearplay, Inc., No.							
IPR2014-00339 (P.T.A.B. July 21, 2015).			X				
Schrader-Bridgeport Int'l v. Wasica Fin. GMBH, No. IPR2014-00476 (P.T.A.B. July 22, 2015).		x					
Amneal Pharm., LLC v. Endo Pharm. Inc., No. IPR2014-00360 (P.T.A.B. July 22, 2015).			X				
Qualtrics, LLC v. OpinionLab, Inc., No.	X						
IPR2014-00421 (P.T.A.B. July 24, 2015). <i>Qualtrics, LLC v. OpinionLab, Inc.</i> , No.	X						
IPR2014-00420 (P.T.A.B. July 24, 2015). Qualtrics, LLC v. OpinionLab, Inc., No.	Λ						
IPR2014-00406 (P.T.A.B. July 24, 2015).	X						
Digital Ally, Inc. v. Util. Assocs., Inc., No. IPR2014-00725 (P.T.A.B. July 27, 2015).				X			
Juniper Networks, Inc. v. Brixham Sols., Ltd.,				x			
No. IPR2014-00431 (P.T.A.B. July 27, 2015). Juniper Networks, Inc. v. Brixham Sols., Ltd.,				Α			
No. IPR2014-00425 (P.T.A.B. July 27, 2015).			X				
Brose N. Am., Inc. v. Uusi, LLC, No. IPR2014- 00416 (P.T.A.B. July 27, 2015).		X					
Apple Inc. v. Virtnetx Inc., No. IPR2014-00404			X				
(P.T.A.B. July 29, 2015). Apple Inc. v. Virnetx Inc., No. IPR2014-00403							
(P.T.A.B. July 29, 2015).				X			
Qualtrics, LLC v. Opinionlab, Inc., No. IPR2014-00366 (P.T.A.B. July 30, 2015).	X						
Qualtrics, LLC v. Opinionlab, Inc., No. IPR2014-00356 (P.T.A.B. July 30, 2015).	X						
A.C. Dispensing Equip. Inc. v. Prince Castle LLC, No. IPR2014-00511 (P.T.A.B. Aug. 4,				X			
2015). Butamax Advanced Biofuels LLC v. Gevo, Inc.,							
No. IPR2014-00402 (P.T.A.B. Aug. 5, 2015). Monosol Rx, LLC v. Arius Two, Inc., No.	X						
IPR2014-00376 (P.T.A.B. Aug. 5, 2015).				X			
Toshiba Corp. v. Intellectual Ventures II LLC, No. IPR2014-00418 (P.T.A.B. Aug. 7, 2015).		X					

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Ricoh Ams. Corp. v. MPHJ Tech. Invs., LLC,				X			
No. IPR2014-00538 (P.T.A.B. Aug. 12, 2015). Globalfoundries U.S., Inc. v. Zond, LLC, No.				v			
IPR2014-01087 (P.T.A.B. Aug. 14, 2015). Globalfoundries U.S., Inc. v. Zond, LLC, No.				X			
IPR2014-01807 (P.T.A.B. Aug. 14, 2015).				X			
Globalfoundries US, Inc. v. Zond, LLC, No. IPR2014-01083 (P.T.A.B. Aug. 14, 2015).				X			
Customplay, LLC v. Clearplay, Inc., No.			37				
IPR2014-00430 (P.T.A.B. Aug. 14, 2015). Ricoh Ams. Corp. v. MPHJ Tech. Invs., LLC,			X				
No. IPR2014-00539 (P.T.A.B. Aug. 14, 2015).				X			
Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				X			
IPR2014-00783 (P.T.A.B. Aug. 14, 2015). Fujitsu Semiconductor Ltd. v. Zond, LLC, No.							
IPR2014-00782 (P.T.A.B. Aug. 14, 2015).				X			
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00781 (P.T.A.B. Aug. 14, 2015).				X			
SAP Am., Inc. v. Lakshmi Arunachalam, No.			X				
IPR2014-00414 (P.T.A.B. Aug. 17, 2015). SAP Am., Inc. v. Lakshmi Arunachalam, No.							
IPR2014-00413 (P.T.A.B. Aug. 17, 2015).			X				
Google Inc. v. Arendi S.A.R.L., No. IPR2014- 00452 (P.T.A.B. Aug. 18, 2015).				X			
Google, Inc. v. Arendi S.A.R.L., No. IPR2014-				X			
00450 (P.T.A.B. Aug. 19, 2015). Canon Inc. v. Intellectual Ventures II LLC, No.				Α			
IPR2014-00631 (P.T.A.B. Aug. 19, 2015).				X			
Apple Inc. v. Virnetx Inc., No. IPR2014-00482 (P.T.A.B. Aug. 24, 2015).			X				
Apple Inc. v. Virnetx Inc., No. IPR2014-00481				**			
(P.T.A.B. Aug. 24, 2015).				X			
Nissan N. Am., Inc. v. Norman IP Holdings, LLC, No. IPR2014-00564 (P.T.A.B. Aug. 26, 2015).		x					
Nissan N. Am., Inc. v. Norman IP Holdings, LLC, No. IPR2014-00563 (P.T.A.B. Aug. 26,		х					
2015).		А					
Unverferth Mfg. Co. v. J&M Mfg. Co., No. IPR2014-00758 (P.T.A.B. Aug. 31, 2015).			X				
Mastercard Int'l Inc. v. D'Agostino, No. IPR2014-00544 (P.T.A.B. Aug. 31, 2015).			X				
Mastercard Int'l Inc. v. D'Agostino, No.			v				
IPR2014-00543 (P.T.A.B. Aug. 31, 2015).			X				
Seagate Tech. (US) Holdings, Inc. v. Enova Tech. Corp., No. IPR2014-00683 (P.T.A.B. Sept. 2, 2015).			X				

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Flir Sys., Inc. v. Leak Surveys, Inc., No. IPR2014-00411/434 (P.T.A.B. Sept. 3, 2015).			X				
Osram Sylvania Inc. v. Jam Strait, Inc., No. IPR2014-00703 (P.T.A.B. Sept. 8, 2015).				X			
EMC Corp. v. Secure Axcess, LLC, No.				X			
IPR2014-00475 (P.T.A.B. Sept. 8, 2015). Edmund Optics, Inc. v. Semrock, Inc., No.							
IPR2014-00583 (P.T.A.B. Sept. 9, 2015). Motorola Mobility LLC v. Intellectual Ventures				X			
ILLC, No. IPR2014-00504 (P.T.A.B. Sept. 9, 2015).			X				
Motorola Mobility LLC v. Intellectual Ventures I LLC, No. IPR2014-00501 (P.T.A.B. Sept. 9, 2015).			X				
Motorola Mobility LLC v. Intellectual Ventures I LLC, No. IPR2014-00500 (P.T.A.B. Sept. 9, 2015).		X					
Glob. Tel*Link Corp. v. Securus Techs., Inc., No. IPR2014-00493 (P.T.A.B. Sept. 11, 2015).				X			
U.S. Endoscopy Grp., Inc. v. CDX Diagnostics, Inc., No. IPR2014-00641 (P.T.A.B. Sept. 14, 2015).			х				
U.S. Endoscopy Grp., Inc. v. CDX Diagnostics, Inc., No. IPR2014-00639 (P.T.A.B. Sept. 14, 2015).			X				
Stats LLC v. Hockeyline, Inc., No. IPR2014-				X			
00510 (P.T.A.B. Sept. 15, 2015). Globalfoundries U.S., Inc. v. Zond, LLC, No.				X			
IPR2014-01099 (P.T.A.B. Sept. 23, 2015). Int'l Bus. Machs. Corp. v. Intellectual Ventures II, LLC, No. IPR2014-00587 (P.T.A.B. Sept. 23, 2015).			X	Α			
Canon Inc. v. Intellectual Ventures I LLC, No. IPR2014-00535 (P.T.A.B. Sept. 23, 2015).			X				
Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				x			
IPR2014-00808 (P.T.A.B. Sept. 23, 2015). Fujitsu Semiconductor Ltd. v. Zond, LLC, No.							
IPR2014-00807 (P.T.A.B. Sept. 23, 2015). Compass Bank v. Intellectual Ventures II, No.				X			
IPR2014-00786 (P.T.A.B. Sept. 23, 2015). Globalfoundries U.S., Inc.v. Zond, LLC, No.			X				
IPR2014-01100 (P.T.A.B. Sept. 23, 2015).				X			
Samsung Elecs. Co. v. Rembrandt Wireless Techs., LP, No. IPR2014-00895 (P.T.A.B. Sept. 24, 2015).				X			
Samsung Elecs. Co. v. Rembrandt Wireless Techs., LP, No. IPR2014-00893 (P.T.A.B. Sept. 24, 2015).				X			

Samsung Elecs. Co. v. Rembrandt Wireless Techs., LP, No. 1PR2014-00892 (P.T.A.B. Sept. 24, 2015). X X X X X X X X X		No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
Techs, LP, No. IPR2014-00892 (P.T.A.B. Sept. 24, 2015). X Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014-00652 (P.T.A.B. Sept. 16, 2015). X Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014-00656 (P.T.A.B. Sept. 21, 2015). X Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014-00656 (P.T.A.B. Sept. 21, 2015). X IPR2014-00656 (P.T.A.B. Sept. 21, 2015). X IPR2014-00656 (P.T.A.B. Sept. 24, 2015). X IPR2014-00656 (P.T.A.B. Sept. 24, 2015). X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X IPR2014-00690 (P.T.A.B. Sept. 25, 2015). X IPR2014-0089 (P.T.A.B. Sept. 25, 2015). X IPR2014-0089 (P.T.A.B. Sept. 25, 2015). X IPR2014-0089 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 25, 2015). X IPR2014-00810 (P.T.A.B. Sept. 25, 2015). X IPR2014-00810 (P.T.A.B. Sept. 25, 2015). X IPR2014-00810 (P.T.A.B. Sept. 28, 2015). X IPR2014-00560 (P.T.A.B. Sept. 28, 2015). X IPR2014-00560 (P.T.A.B. Sept. 28, 2015). X IPR2014-00560 (P.T.A.B. Sept. 28, 2015). X IPR2014-00660 (P.T.A.B. Sept. 28, 2015				Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Endo Pharm, Inc. v. Depomed, Inc., No. IPR2014-00652 (P.T.A.B. Sept. 16, 2015). X Endo Pharm, Inc. v. Depomed, Inc., No. IPR2014-00656 (P.T.A.B. Sept. 21, 2015). X Endo Pharm, Inc. v. Depomed, Inc., No. IPR2014-00654 (P.T.A.B. Sept. 21, 2015). X X IPR2014-00654 (P.T.A.B. Sept. 21, 2015). X X IPR2014-00654 (P.T.A.B. Sept. 24, 2015). X IPR2014-00654 (P.T.A.B. Sept. 24, 2015). X IPR2014-00654 (P.T.A.B. Sept. 25, 2015). X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X X IPR2014-00679 (P.T.A.B. Sept. 25, 2015). X X IPR2014-00689 (P.T.A.B. Sept. 25, 2015). X IPR2014-00898 (P.T.A.B. Sept. 25, 2015). X IPR2014-00899 (P.T.A.B. Sept. 25, 2015). X IPR2014-00899 (P.T.A.B. Sept. 25, 2015). X IPR2014-00899 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 25, 2015). IPR2014-00818 (P.T.A.B. Sept. 25, 2015). IPR2014-00818 (P.T.A.B. Sept. 25, 2015). IPR2014-00818 (P.T.A.B. Sept. 28, 2015). IPR2014-00570 (P.T.A.B. Sept. 28, 2015). IPR2014-00570 (P.T.A.B. Sept. 28, 2015). IPR2014-00561 (P.T.A.B. Sept. 28, 2015). IPR2014-00560 (P.T.A.B. Sept. 28, 2015). IPR2014-00660 (P.T.A.B. Sept. 28, 2015). IPR2014	Techs., LP, No. IPR2014-00892 (P.T.A.B. Sept.				х			
Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014-00656 (P.T.A.B. Sept. 21, 2015). X IPR2014-00654 (P.T.A.B. Sept. 21, 2015). X IPR2014-00654 (P.T.A.B. Sept. 21, 2015). X IPR2014-00654 (P.T.A.B. Sept. 24, 2015). X IPR2014-00784 (P.T.A.B. Sept. 24, 2015). X IPR2014-00784 (P.T.A.B. Sept. 24, 2015). X IPR2014-00784 (P.T.A.B. Sept. 25, 2015). X IPR2014-00821 (P.T.A.B. Sept. 25, 2015). X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X IPR2014-00679 (P.T.A.B. Sept. 25, 2015). X IPR2014-00879 (P.T.A.B. Sept. 25, 2015). X IPR2014-00879 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 28, 2015). X IPR2014-00540 (P.T.A.B. Sept. 28, 2015). X IPR2014-00664 (P.T.A.B. Sept. 28, 2015). IPR2014-00664 (P.T.A.B. Sept. 28, 2015). X IPR2014-00664 (P.T.A.B. Sept. 28, 2015). IPR2014-00664 (P.T.A.B. Sept. 28, 2015). IPR2014-00664 (P.T.A.B. Sept. 28, 2015).	Endo Pharm., Inc. v. Depomed, Inc., No.			X				
Endo Pharm., Inc. v. Depomed, Inc., No. IPR2014-00654 (P.T.A.B. Sept. 21, 2015). X Torrent Pharm. Ltd. v. Novartis AG, No. IPR2014-00784 (P.T.A.B. Sept. 24, 2015). X IPR2014-00784 (P.T.A.B. Sept. 24, 2015). X IPR2014-00821 (P.T.A.B. Sept. 25, 2015). X IPR2014-00821 (P.T.A.B. Sept. 25, 2015). X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X IPR2014-00660 (P.T.A.B. Sept. 25, 2015). X IPR2014-00679 (P.T.A.B. Sept. 25, 2015). X IPR2014-00879 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 28, 2015). X IPR2014-00570 (P.T.A.B. Sept. 28, 2015). X IPR2014-00561 (P.T.A.B. Sept. 28, 2015). X IPR2014-00660 (P.T.A.B. Sept. 28,	Endo Pharm., Inc. v. Depomed, Inc., No.				X			
Torrent Pharm. Ltd. v. Novartis AG, No. IPR2014-00784 (P.T.A.B. Sept. 24, 2015). X	Endo Pharm., Inc. v. Depomed, Inc., No.				X			
Fig. 15	Torrent Pharm. Ltd. v. Novartis AG, No.			x				
SK Innovation Co. v. Celgard, LLC, No. IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X X IPR2014-00680 (P.T.A.B. Sept. 25, 2015). X IPR2014-00679 (P.T.A.B. Sept. 25, 2015). X IPR2014-00679 (P.T.A.B. Sept. 25, 2015). X IPR2014-01098 (P.T.A.B. Sept. 25, 2015). X IPR2014-01098 (P.T.A.B. Sept. 25, 2015). X IPR2014-00827 (P.T.A.B. Sept. 25, 2015). X IPR2014-00827 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 25, 2015). X IPR2014-00819 (P.T.A.B. Sept. 25, 2015). X IPR2014-00818 (P.T.A.B. Sept. 25, 2015). X IPR2014-00818 (P.T.A.B. Sept. 25, 2015). X IPR2014-00818 (P.T.A.B. Sept. 28, 2015). X IPR2014-00570 (P.T.A.B. Sept. 28, 2015). X IPR2014-00570 (P.T.A.B. Sept. 28, 2015). X IPR2014-00560 (P.T.A.B. Sept. 28, 2015). X IPR2014-00560 (P.T.A.B. Sept. 28, 2015). X IPR2014-00550 (P.T.A.B. Sept. 28, 2015). X IPR2014-00550 (P.T.A.B. Sept. 28, 2015). X IPR2014-00549 (P.T.A.B. Sept. 28, 2015). X IPR2014-00549 (P.T.A.B. Sept. 28, 2015). X IPR2014-00549 (P.T.A.B. Sept. 28, 2015). IPR2014-00712 (P.T.A.B. Sept. 28, 2015). X IPR2014-00640 (P.T.A.B. Sept. 28, 2015). IPR2014-00640 (P.T.A.B. Sept. 28, 2015). IPR2014-00640 (P.T.A.B. Sept. 28, 2015). X IPR2014-00660 (P.T.A.B. Sept. 28, 2015). IPR2014-00660 (P.T.A.B. Sept. 28, 2015). X IPR2014-00660 (P.T.A.B. Sept. 28, 2015). IPR2014-00660 (P.T.A.B. Sept. 28, 2015). X IPR2014-00660 (P.T.A.B. Sept. 28, 2015). I	Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				x			
SK Innovation Co. v. Celgard, LLC, No. IPR2014-00679 (P.T.A.B. Sept. 25, 2015). X IPR2014-01098 (P.T.A.B. Sept. 25, 2015). X IPR2014-01098 (P.T.A.B. Sept. 25, 2015). X IPR2014-01098 (P.T.A.B. Sept. 25, 2015). X IPR2014-00827 (P.T.A.B. Sept. 25, 2015). X IPR2014-0827 (P.T.A.B. Sept. 25, 2015). X IPR2014-0819 (P.T.A.B. Sept. 25, 2015). X IPR2014-0819 (P.T.A.B. Sept. 25, 2015). X IPR2014-0818 (P.T.A.B. Sept. 25, 2015). X IPR2014-0818 (P.T.A.B. Sept. 25, 2015). X IPR2014-00818 (P.T.A.B. Sept. 25, 2015). X IPR2014-00818 (P.T.A.B. Sept. 25, 2015). IPR2014-00579 (P.T.A.B. Sept. 28, 2015). IPR2014-00570 (P.T.A.B. Sept. 28, 2015). IPR2014-00570 (P.T.A.B. Sept. 28, 2015). IPR2014-00570 (P.T.A.B. Sept. 28, 2015). IPR2014-00560 (P.T.A.B. Sept. 28, 2015). IPR2014-00550 (P.T.A.B. Sept. 28, 2015). IPR2014-00549 (P.T.A.B. Sept. 28, 2015). IPR2014-00549 (P.T.A.B. Sept. 28, 2015). IPR2014-00740 (P.T.A.B. Sept. 28, 2015). IPR2014-00740 (P.T.A.B. Sept. 28, 2015). IPR2014-00666 (P.T.A.B. Sept. 28, 2015). IPR2014-00664 (P.T.A.B. Sept. 29, 2015). IPR2014-00664 (P.T.A.B. Sept. 29, 2015). IPR2014-00664 (P.T.A.B. Sept. 29, 2015). IPR2014-00664 (P.T.A.B. Sept.					A .			
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IPR2014-00827 (P.T.A.B. Sept. 25, 2015).	IPR2014-01098 (P.T.A.B. Sept. 25, 2015).				X			
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00819 (P.T.A.B. Sept. 25, 2015). X					X			
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00818 (P.T.A.B. Sept. 25, 2015). X	Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				X			
Frizo Friz	Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				X			
Sept. 28, 2015). X Sept. 28, 2015). X Sept. 28, 2015. Sept. 28, 2015.	Ford Motor Co. v. Paice LLC, No. IPR2014-							
00571 (P.T.A.B. Sept. 28, 2015). X Ford Motor Co. v. Paice LLC, No. IPR2014-	00579 (P.T.A.B. Sept. 28, 2015).				X			
00570 (P.T.A.B. Sept. 28, 2015). X Pac. Mkt. Int'l, LLC v. Ignite USA, LLC, No. IPR2014-00561 (P.T.A.B. Sept. 28, 2015). X Noven Pharm., Inc. v. Nortavis AG, No. IPR2014-00550 (P.T.A.B. Sept. 28, 2015). X Noven Pharm., Inc. v. Nortavis AG, No. IPR2014-00549 (P.T.A.B. Sept. 28, 2015). X Gordon*Howard Assocs., Inc. v. Lunareye, No. IPR2014-00712 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00666 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00666 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00666 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00666 (P.T.A.B. Sept. 28, 2015). X The Gillette Co. v. Zond, LLC, No. IPR2014- 00726 (P.T.A.B. Sept. 29, 2015). X	00571 (P.T.A.B. Sept. 28, 2015).				X			
IPR2014-00561 (P.T.A.B. Sept. 28, 2015). X Noven Pharm, Inc. v. Nortavis AG, No. IPR2014-00550 (P.T.A.B. Sept. 28, 2015). X Noven Pharm, Inc. v. Nortavis AG, No. IPR2014-00549 (P.T.A.B. Sept. 28, 2015). X Gordon*Howard Assocs., Inc. v. Lunareye, No. IPR2014-00712 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00666 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00664 (P.T.A.B. Sept. 28, 2015). X IBG Gallette Co. v. Zond, LLC, No. IPR2014- 00726 (P.T.A.B. Sept. 29, 2015). X V	00570 (P.T.A.B. Sept. 28, 2015).						X	
Noven Pharm., Inc. v. Nortavis AG, No. IPR2014-00550 (P.T.A.B. Sept. 28, 2015). X					X			
Noven Pharm., Inc. v. Nortavis AG, No. IPR2014-00549 (P.T.A.B. Sept. 28, 2015). X	Noven Pharm., Inc. v. Nortavis AG, No.				X			
Gordon*Howard Assocs., Inc. v. Lunareye, No. X IPR2014-00712 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00666 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00664 (P.T.A.B. Sept. 28, 2015). X IFR2014-00664 (P.T.A.B. Sept. 28, 2015). X X IFR2014-00664 (P.T.A.B. Sept. 28, 2015). X X IFR2014-00664 (P.T.A.B. Sept. 29, 2015). X X IFR2014-00726 (P.T.A.B. Sept. 29, 2015). X X X X X X X X X	Noven Pharm., Inc. v. Nortavis AG, No.							
IRA2014-00112 (F. 1.A.B. Sept. 28, 2013). IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00666 (P.T.A.B. Sept. 28, 2015). X IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00664 (P.T.A.B. Sept. 28, 2015). X The Gillette Co. v. Zond, LLC, No. IPR2014-00726 (P.T.A.B. Sept. 29, 2015). X								
IPR2014-00666 (P.T.A.B. Sept. 28, 2015). IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00664 (P.T.A.B. Sept. 28, 2015). The Gillette Co. v. Zond, LLC, No. IPR2014- 00726 (P.T.A.B. Sept. 29, 2015). X					X			
IPR2014-00664 (P.T.A.B. Sept. 28, 2015). The Gillette Co. v. Zond, LLC, No. IPR2014- 00726 (P.T.A.B. Sept. 29, 2015). X	IPR2014-00666 (P.T.A.B. Sept. 28, 2015).	X						
00726 (P.T.A.B. Sept. 29, 2015).	IPR2014-00664 (P.T.A.B. Sept. 28, 2015).					X		
					X			
IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00661 (P.T.A.B. Sept. 29, 2015).	IBG Auto. Ltd. v. Gentherm GMBH, No.				X			

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
The Gillette Co. v. Zond, LLC, No. IPR2014- 00799 (P.T.A.B. Sept. 30, 2015).				X			
U.S. Dep't of Homeland Sec. v. Golden, No.			X				
IPR2014-00714 (P.T.A.B. Oct. 1, 2015). The Gillette Co. v. Zond., LLC, No. IPR2014-				v			
00580 (P.T.A.B. Oct. 1, 2015). Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				X			
IPR2014-00805 (P.T.A.B. Oct. 2, 2015).				X			
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00802 (P.T.A.B. Oct. 2, 2015).				X			
Fujitsu Semiconductor Ltd. v. Zond, LLC, No. IPR2014-00800 (P.T.A.B. Oct. 2, 2015).				X			
LG Chem, Ltd. v. Celgard, LLC, No. IPR2014-			X				
00692 (P.T.A.B. Oct. 5, 2015). <i>Henkel Corp. v. HB Fuller Co.</i> , No. IPR2014-							
00606 (P.T.A.B. Oct. 6, 2015). Glob. Tel*Link Corp. v. Securus Techs., Inc.,				X			
No. IPR2014-00785 (P.T.A.B. Oct. 7, 2015).	X						
Churchill Drilling Tools US, Inc. v. Schoeller- Bleckmann Oilfield Equip. AG, No. IPR2014- 00814 (P.T.A.B. Oct. 9, 2015).			X				
IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00667 (P.T.A.B. Oct. 13, 2015).				X			
Webasto Roof Sys., Inc. v. Uusi, LLC, No. IPR2014-00650 (P.T.A.B. Oct. 13, 2015).		х					
Webasto Roof Sys., Inc. v. Uusi, LLC, No. IPR2014-00649 (P.T.A.B. Oct. 13, 2015).		x					
Webasto Roof Sys., Inc. v. Uusi, LLC, No.		Х					
IPR2014-00648 (P.T.A.B. Oct. 13, 2015). Seoul Semiconductor Co. v. Sharp Kabushiki							
Kaisha, No. IPR2014-00879 (P.T.A.B. Oct. 15, 2015).			X				
Seoul Semiconductor Co. v. Enplas Corp., No.				X			
IPR2014-00878 (P.T.A.B. Oct. 15, 2015). Kinetic Techs., Inc. v. Skyworks Sols. Inc., No.				Α.			
IPR2014-00690 (P.T.A.B. Oct. 19, 2015).			X				
Int'l Bus. Machs. Corp. v. Intellectual Ventures II LLC, No. IPR2014-00660 (P.T.A.B. Oct. 19, 2015).				X			
Parrot S.A. v. Drone Techs., Inc., No. IPR2014- 00732 (P.T.A.B. Oct. 20, 2015).	X						
Samsung Elecs. Co. v. Black Hills Media, LLC,			X				
No. IPR2014-00717 (P.T.A.B. Oct. 20, 2015). Samsung Elecs. Co. v. Black Hills Media, LLC,							
No. IPR2014-00735 (P.T.A.B. Oct. 21, 2015).			X				
Silicon Labs., Inc. v. Cresta Tech. Corp., No. IPR2015-00728 (P.T.A.B. Oct. 21, 2015).			X				

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
AVX Corp. v. Greatbatch Ltd., No. IPR2014- 00697 (P.T.A.B. Oct. 21, 2015).	X						
Int'l Bus. Machs. Corp. v. Intellectual Ventures II LLC, No. IPR2014-00682 (P.T.A.B. Oct. 21, 2015).						х	
IBG Auto. Ltd. v. Gentherm GMBH, No. IPR2014-00668 (P.T.A.B. Oct. 21, 2015).				X			
Eli Lilly Co. v. L.A. Biomedical Research Inst., No. IPR2014-00752 (P.T.A.B. Oct. 22, 2015).			X				
Volkswagen Grp. of Am., Inc. v. Emerachem Holdings, LLC, No. IPR2014-01554 (P.T.A.B. Oct. 22, 2015).	х						
EMC Corp. v. Clouding Corp., No. IPR2014- 01218 (P.T.A.B. Oct. 22, 2015).				X			
EMC Corp. v. Clouding Corp., No. IPR2014- 01217 (P.T.A.B. Oct. 22, 2015).				X			
EMC Corp. v. Clouding Corp., No. IPR2014-				x			
01216 (P.T.A.B. Oct. 22, 2015). Eli Lilly & Co. v. L.A. Biomedical Research Inst., No. IPR2014-00693 (P.T.A.B. Oct. 22, 2015).			х				
C&D Zodiac, Inc. v. B/E Aerospace, Inc., No. IPR2014-00727 (P.T.A.B. Oct. 26, 2015).				X			
Phigenix, Inc. v. Immunogen, Inc., No. IPR2014-00676 (P.T.A.B. Oct. 27, 2015).				x			
Square, Inc. v. Unwired Planet LLC, No.				X			
IPR2014-01165 (P.T.A.B. Oct. 30, 2015). Glob. Tel*Link Corp. v. Securus Techs., Inc.,				x			
No. IPR2014-00810 (P.T.A.B. Nov. 2, 2015). Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				X			
IPR2014-00917 (P.T.A.B. Nov. 3, 2015). Fujitsu Semiconductor Ltd. v. Zond, LLC, No.				X			
IPR2014-00829 (P.T.A.B. Nov. 3, 2015). Fujitsu Semiconductor Ltd. v. Zond, LLC, No.							
IPR2014-00828 (P.T.A.B. Nov. 3, 2015). Kinik Co v. Sung, No. IPR2014-01523 (P.T.A.B.				X			
Nov. 4, 2015). Infomotion Sports Techs., Inc. v. Pillar Vision,				X			
Inc., No. IPR2014-00764 (P.T.A.B. Nov. 12, 2015).			X				
Hart Comme'n Found. v. Sipco, LLC, No. IPR2014-00751 (P.T.A.B. Nov. 13, 2015).	X						
Pac. Mkt. Int'l, LLC v. Ignite USA, LLC, No. IPR2014-00750 (P.T.A.B. Nov. 13, 2015).				X			
TRW Auto. US LLC v. Magna Elecs. Inc., No. IPR2014-1351 (P.T.A.B. Nov. 16, 2015).			X				
BLD Servs., LLC v. LMK Techs., LLC, No. IPR2014-00772 (P.T.A.B. Nov. 18, 2015).	X						

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
BLD Servs., LLC v. LMK Techs., LLC, No. IPR2014-00770 (P.T.A.B. Nov. 18, 2015).	x						
BLD Servs., LLC v. LMK Techs., LLC, No. IPR2014-00768 (P.T.A.B. Nov. 18, 2015).	X						
TRW Auto. U.S. LLC v. Magna Elecs. Inc., No.	х						
IPR2014-01355 (P.T.A.B. Nov. 19, 2015). Square, Inc. v. Unwired Planet LLC, No.	21						
IPR2014-01164 (P.T.A.B. Nov. 19, 2015).			X				
Google Inc. v. Intellectual Ventures II LLC, No. IPR2014-00787 (P.T.A.B. Nov. 20, 2015).			X				
Fedex Corp. v. Ipventure, Inc., No. IPR2014- 00833 (P.T.A.B. Nov. 20, 2015).			X				
Ford Motor Co. v. Paice LLC, No. IPR2014-							
00875 (P.T.A.B. Nov. 23, 2015).			X				
L-3 Comme'ns. Holdings, Inc. v. PowerSurvey, Inc., No. IPR2014-00836 (P.T.A.B. Nov. 23,				X			
2015). L-3 Commc'ns. Holdings, Inc. v. PowerSurvey,							
Inc., No. IPR2014-00834 (P.T.A.B. Nov. 23, 2015).				X			
Ace Bed Co. v. Sealy Tech. LLC, No. IPR2014- 01119 (P.T.A.B. Nov. 24, 2015).				X			
Eastman Kodak Co. v. CTP Innovations, LLC,				x			
No. IPR2014-00790 (P.T.A.B. Nov. 25, 2015). Eastman Kodak Co. v. CTP Innovations, LLC,				Α			
No. IPR2014-00789 (P.T.A.B. Nov. 25, 2015).				X			
Eastman Kodak Co. v. CTP Innovations, LLC, No. IPR2014-00788 (P.T.A.B. Nov. 25, 2015).				X			
Eastman Kodak Co. v. CTP Innovations, LLC,				v			
No. IPR2014-00791 (P.T.A.B. Nov. 25, 2015). Marvell Semiconductor, Inc. v. Intellectual				X			
Ventures I LLC, No. IPR2014-00553 (P.T.A.B. Nov. 30, 2015).						X	
Marvell Semiconductor, Inc. v. Intellectual Ventures I LLC, No. IPR2014-00552 (P.T.A.B.	X						
Nov. 30, 2015).	Α						
Marvell Semiconductor, Inc. v. Intellectual Ventures I LLC, No. IPR2014-00548 (P.T.A.B.			x				
Nov. 30, 2015). Taiwan Semiconductor Mfg. Co. v. DSS Tech.							
Mgmt., Inc., No. IPR2014-01030 (P.T.A.B. Nov. 30, 2015).		X					
Captioncall, LLC v. Ultratec, Inc., No.			x				
IPR2014-00780 (P.T.A.B. Dec. 1, 2015). Glob. Tel*Link Corp. v. Securus Techs., Inc.,			-				
No. IPR2014-00824 (P.T.A.B. Dec. 2, 2015). Glob. Tel*Link Corp. v. Securus Techs., Inc.,				X			
No. IPR2014-00825 (P.T.A.B. Dec. 2, 2015).				X			

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Arris Grp., Inc., v. Cirrex Sys. LLC, No.				X			
IPR2014-00815 (P.T.A.B. Dec. 2, 2015). VMWare, Inc. v. Clouding Corp., No. IPR2014-							
01292 (P.T.A.B. Dec. 3, 2015). St. Jude Med. SC, Inc., v. Atlas IP LLC, No.			X				
St. Jude Med. Sc, Inc., v. Atlas IP LLC, No. IPR2014-00916 (P.T.A.B. Dec. 3, 2015).		X					
Ericsson Inc. v. Intellectual Ventures II LLC,				x			
No. IPR2014-00915 (P.T.A.B. Dec. 7, 2015). Ericsson Inc. v. Intellectual Ventures II LLC,							
No. IPR2014-00919 (P.T.A.B. Dec. 7, 2015).				X			
VMWare, Inc. v. Elecs. & Telecomms. Research Inst., No. IPR 2014-00949 (P.T.A.B. Dec. 9,				X			
2015). Ericsson Inc. v. Intellectual Ventures I LLC, No.							
IPR2014-00921 (P.T.A.B. Dec. 9, 2015).			X				
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-01149 (P.T.A.B. Dec. 9, 2015).			x				
Microsoft Corp. v. Proxyconn, Inc., No.						v	
IPR2012-00026 (P.T.A.B. Dec. 9, 2015). Universal Remote Control, Inc. v. Universal						X	
Elecs. Inc., No. IPR2014-01146 (P.T.A.B. Dec. 10, 2015).				X			
Ford Motor Co. v. Paice LLC, No. IPR2014-				v			
00884 (P.T.A.B. Dec. 10, 2015). Ford Motor Co. v. Paice LLC, No. IPR2014-				X			
00904 (P.T.A.B. Dec. 10, 2015).				X			
First Quality Baby Prods., LLC v. Kimberly- Clark Worldwide, Inc., No. IPR2014-01021			37				
(P.T.A.B. Dec. 10, 2015).			X				
Petroleum Geo-Servs. Inc. v. Westerngeco LLC,			X				
No. IPR2014-00689 (P.T.A.B. Dec. 15, 2015). Petroleum Geo-Servs. Inc. v. Westerngeco LLC,							
No. IPR2014-00688 (P.T.A.B. Dec. 15, 2015).			X				
Petroleum Geo-Servs. Inc. v. Westerngeco LLC, No. IPR2014-00687 (P.T.A.B. Dec. 15, 2015).				X			
Universal Remote Control, Inc. v. Universal							
Elecs. Inc., No. IPR2014-01104 (P.T.A.B. Dec. 15, 2015).		X					
Universal Remote Control, Inc. v. Universal							
Elecs. Inc., No. IPR2014-01106 (P.T.A.B. Dec. 15, 2015).		X					
Universal Remote Control, Inc. v. Universal							
Elecs. Inc., No. IPR2014-01103, 2015 WL		X					
9099146 (P.T.A.B. Dec. 15, 2015). Universal Remote Control, Inc. v. Universal							
Elecs. Inc., No. IPR2014-01102 (P.T.A.B. Dec.		X					
15, 2015).							

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Universal Remote Control, Inc. v. Universal Elecs. Inc., No. IPR2014-01109, 2015 WL 9275197 (P.T.A.B. Dec. 16, 2015).				Х			
Arris v. Cirrex Sys., LLC, No. IPR2014-01191 (P.T.A.B. Dec. 17, 2015).	X						
Universal Remote Control, Inc. v. Universal Elecs. Inc., 2015 WL 9275200 (P.T.A.B. Dec. 18, 2015).				X			
Geox S.P.A. v. Outdry Techs. Corp., No. IPR2014-01244 (P.T.A.B. Dec. 18, 2015).			X				
Seagate Tech. (US) Holdings, Inc. v. Enova Tech. Corp., No. IPR2014-01449 (P.T.A.B. Dec. 18, 2015).	X						
LG Display Co. v. Innovative Display Techs. LLC, No. IPR2014-01096 ((P.T.A.B. Dec. 18, 2015).						X	
Seagate Tech. (US) Holdings, Inc. v. Enova Tech. Corp., No. IPR2014-01178 (P.T.A.B. Dec. 18, 2015).			X				
Nestlé USA, Inc. v. Steuben Foods, Inc., No. IPR2014-01235 (P.T.A.B. Dec. 21, 2015).				X			
Valeo North Am., Inc. v. Magna Elecs., Inc., No. IPR2014-01208 (P.T.A.B. Dec. 21, 2015).						X	
HTC Corp. v. Advanced Audio Devices, LLC, No. IPR2014-01156 (P.T.A.B. Dec. 29, 2015).						X	
HTC Corp. v. Advanced Audio Devices, LLC, No. IPR2014-01155 (P.T.A.B. Dec. 29, 2015).						X	
HTC Corp. v. Advanced Audio Devices, LLC, No. IPR2014-01154 (P.T.A.B. Dec. 29, 2015).						X	
AVX Corp. v. Greatbatch Ltd., No. IPR2014-01361 (P.T.A.B. Dec. 30, 2015).	X						
HTC Corp. v. Cellular Commc'ns Equip. LLC, No. IPR2014-01133 (P.T.A.B. Jan. 4, 2016).	X						
HTC Corp. v. Cellular Commc'ns Equip. LLC, No. IPR2014-01135 (P.T.A.B. Jan. 4, 2016).			X				
NHK Seating of Am., Inc. v. Lear Corp., No. IPR2014-01101 (P.T.A.B. Jan. 5, 2016).				x			
Amazon.com, Inc. v. Cellular Commc'ns Equip., LLC, No. IPR2014-01134 (P.T.A.B. Jan. 6, 2016).				X			
VMWare, Inc. v. Clouding Corp., No. IPR2014-01304 (P.T.A.B. Jan. 7, 2016).				X			
VMWare, Inc. v. Clouding Corp., No. IPR2014-01305 (P.T.A.B. Jan. 7, 2016).				X			
Ariosa Diagnostics, Inc. v. Illumina, Inc., No. IPR2014-01093 (P.T.A.B. Jan. 7, 2016).	X						
ABS Glob., Inc. v. XY, LLC, No. IPR2014-01161 (P.T.A.B. Jan. 11, 2016).				X			

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			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Int'l Bus. Machs. Corp. v. Intellectual Ventures I LLC, No. IPR2014-01385 (P.T.A.B. Jan. 15, 2016).				X			
TRW Auto. US, LLC v. Magna Elecs. Inc., No. IPR2014-01348 (P.T.A.B. Jan. 15, 2016).	X						
BMC Med. Co. v. Resmed Ltd., No. IPR2014- 01196 (P.T.A.B. Jan. 19, 2016).	X						
Atoptech, Inc. v. Synopsys, Inc., No. IPR2014-01159 (P.T.A.B. Jan. 19, 2016).				X			
Atoptech, Inc. v. Synopsys, Inc., No. IPR2014-01150 (P.T.A.B. Jan. 19, 2016).				X			
Atoptech, Inc. v. Synopsys, Inc., No. IPR2014- 01145 (P.T.A.B. Jan. 19, 2016).				X			
BMC Med. Co. v. Resmed Ltd., No. IPR2014-				x			
01363 (P.T.A.B. Jan. 20, 2016). Google, Inc. v. Meiresonne, No. IPR2014-01188						X	
(P.T.A.B. Jan. 20, 2016). Glob. Tel*Link Corp. v. Securus Techs., Inc.,						Λ	
No. IPR2014-01282 (P.T.A.B. Jan. 21, 2016). Glob. Tel*Link Corp. v. Securus Techs., Inc.,			X				
No. IPR2014-01278 (P.T.A.B. Jan. 21, 2016).			X				
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-01185 (P.T.A.B. Jan. 21, 2016).				X			
HTC Corp. v. Advanced Audio Devices, LLC, No. IPR2014-01158 (P.T.A.B. Jan. 22, 2016).					X		
HTC Corp. v. Advanced Audio Devices, LLC, No. IPR2014-01157 (P.T.A.B. Jan. 22, 2016).					x		
Valeo N. Am., Inc. v. Magna Elecs., Inc., No.	X						
IPR2014-01204 (P.T.A.B. Jan. 25, 2016). Google, Inc. v. Visual Real Estate, Inc., No.				**			
IPR2014-01339 (P.T.A.B. Jan. 25, 2016). Valeo N. Am., Inc. v. Magna Elecs., Inc., No.				X			
IPR2014-01203 (P.T.A.B. Jan. 25, 2016).			X				
Tech 21 UK Ltd. v. Zagg Intellectual Prop. Holding Co., No. IPR2014-01262 (P.T.A.B. Jan. 27, 2016).	x						
Oracle Corp. v. Crossroads Sys., Inc., No. IPR2014-01197 (P.T.A.B. Jan. 28, 2016).	x						
Samsung Elecs. Co. v. Affinity Labs of Tex., LLC, No. IPR2014-01181 (P.T.A.B. Jan. 28, 2016).				X			
Cisco Sys., Inc. v. Capella Photonics, Inc., No. IPR2014-01166 (P.T.A.B. Jan. 28, 2016).			X				
Mindgeek S.A.R.L. v. Skky Inc., No. IPR2014- 01236 (P.T.A.B. Jan. 29, 2016).				X			
Oracle Corp. v. Crossroads Sys., Inc., No. IPR2014-01209 (P.T.A.B. Jan. 29, 2016).	х						

	No Claim Construction Required	Phillips Standard (patent expired)	Broadest Reasonable Interpretation Standard				
			Completely District Court Authority (Direct or Indirect)	Mixed District Court and PTO Authority	Complete "Pure" PTO Authority	Conclusory Citation Only	
Cisco Sys., Inc. v. Crossroads Sys., Inc., No.				X			
IPR2014-01226 (P.T.A.B. Jan. 29, 2016). <i>EMC Corp. v. Clouding Corp.</i> , No. IPR2014-							
01309 (P.T.A.B. Jan. 29, 2016).	X						
Cisco Sys., Inc. v. Crossroads Sys., Inc., No. IPR2014-01544 (P.T.A.B. Jan. 29, 2016).				X			
Ericsson Inc. v. Intellectual Ventures II LLC, No. IPR2014-01195 (P.T.A.B. Jan. 29, 2016).			Х				
Oracle Corp. v. Crossroads Sys., Inc., No. IPR2014-01207 (P.T.A.B. Jan. 29, 2016).				х			
Gordon*Howard Assocs., Inc. v. Lunareye, Inc.,							
No. IPR2014-01213 (P.T.A.B. Feb. 2, 2016).			X				
NHK Seating of Am., Inc. v. Lear Corp., No. IPR2014-01202 (P.T.A.B. Feb. 2, 2016).		X					
NHK Seating of Am., Inc. v. Lear Corp., No.				X			
IPR2014-01200 (P.T.A.B. Feb. 2, 2016). HTC Corp. v. NFC Tech., LLC, No. IPR2014-							
01199 (P.T.A.B. Feb. 3, 2016).				X			
HTC Corp. v. NFC Tech., LLC, No. IPR2014- 01198 (P.T.A.B. Feb. 3, 2016).				X			
Seagate Tech. (US) Holdings, Inc. v. Enova Tech. Corp., No. IPR2014-01297 (P.T.A.B. Feb. 4, 2016).			х				
Arctic Cat, Inc. v. Polaris Indus., Inc., No. IPR2014-01428 (P.T.A.B. Feb. 4, 2016).				X			
Arctic Cat, Inc. v. Polaris Indus., Inc., No.				X			
IPR2014-01427 (P.T.A.B. Feb. 4, 2016). Fike Corp. v. Donadon Safety Discs & Devices				Α			
SRL, No. IPR2015-00341 (P.T.A.B. Feb. 4, 2016).	X						