

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.¹¹⁰ 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. *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”).¹¹⁵ The PTO has noted that the broadest *reasonable* interpretation “does not mean the broadest possible interpretation.”¹¹⁶ 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.¹¹⁷ Moreover, the broadest reasonable interpretation must focus on what is reasonable from the perspective of a person of ordinary skill in the art.¹¹⁸ 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.

111. *Id.* at 1318:

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.

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.¹²² 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.”¹²³ 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.¹²⁴ 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 the lack of guidance on what constitutes a “reasonable” 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. Proxycorr, 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, § 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 claims¹⁴² 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 Commc’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 *Proxycorr* 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. The PTAB 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*.”¹⁵⁶ 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.¹⁵⁷

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 Cmty. 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.

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 main ways: increasing efficiency, promoting uniformity, and 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.*

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.

202. *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
<i>Guangdong Xinbao Elec. Appliances Holdings Co. v. Rivera</i> , No. IPR2014-00042 (P.T.A.B. Feb. 6, 2015).	0	1	1
<i>Conopco, Inc. v. Procter & Gamble Co.</i> , No. IPR2013-00505 (P.T.A.B. Feb. 10, 2015).	0	1	1
<i>Conopco, Inc. v. Procter & Gamble Co.</i> , No. IPR2013-00509 (P.T.A.B. Feb. 10, 2015).	0	1	1
<i>Intelligent Bio-systems, Inc. v. Illumina Cambridge Ltd.</i> , No. IPR2013-00517 (P.T.A.B. Feb. 11, 2015).	0	0	1
<i>Medtronic, Inc. v. Nuvasive, Inc.</i> , No. IPR2013-00506 (P.T.A.B. Feb. 11, 2015).	0	1	1
<i>Target Corp. v. Destination Maternity Corp.</i> , No. IPR2013-00532 (P.T.A.B. Feb. 12, 2015).	1	2	1
<i>Target Corp. v. Destination Maternity Corp.</i> , No. IPR2013-00530 (P.T.A.B. Feb. 12, 2015).	1	1	1
<i>Acco Brands Corp. v. Fellowes, Inc.</i> , No. IPR2013-00566 (P.T.A.B. Feb. 12, 2015).	0	1	1
<i>Tandus Flooring, Inc. v. Interface, Inc.</i> , No. IPR2013-00527 (P.T.A.B. Feb. 12, 2015).	1	1	1
<i>Samsung Elecs. Co. v. Innovation Scis., Inc.</i> , No. IPR2013-00570 (P.T.A.B. Feb. 17, 2015).	0	0	1
<i>Samsung Elecs. Co. v. Innovation Scis., Inc.</i> , No. IPR2013-00569 (P.T.A.B. Feb. 17, 2015).	0	0	1
<i>Smith & Nephew Inc. v. Bonutti Skeletal Innovations LLC</i> , No. IPR2013-00629 (P.T.A.B. Feb. 18, 2015).	1	2	1
<i>Delaval Int’l AB v. Lely Patent N.V.</i> , No. IPR2013-00575 (P.T.A.B. Feb. 20, 2015).	1	3	3
<i>Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P’ship</i> , No. IPR2013-00537 (P.T.A.B. Feb. 23, 2015).	1	0	1
<i>Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P’ship</i> , No. IPR2013-00535 (P.T.A.B. Feb. 23, 2015).	0	2	0
<i>Biomarin Pharm. Inc. v. Genzyme Therapeutic Prods. Ltd. P’ship</i> , No. IPR2013-00534 (P.T.A.B. Feb. 23, 2015).	1	0	1
<i>Mexichem Amanco Holdings S.A. DE C.V. v. Honeywell Int’l, Inc.</i> , No. IPR2013-00576 (P.T.A.B. Feb. 26, 2015).	0	1	0
<i>Dell, Inc. v. Elecs. & Telecomms. Research Inst.</i> , No. IPR2013-00635 (P.T.A.B. Feb. 27, 2015).	0	1	0
<i>Microsoft Corp. v. Enfish, LLC</i> , No. IPR2013-00563 (P.T.A.B. March 2, 2015).	2	3	0
<i>Microsoft Corp. v. Enfish, LLC</i> , No. IPR2013-00561 (P.T.A.B. March 2, 2015).	2	3	0
<i>Microsoft Corp. v. Enfish, LLC</i> , No. IPR2013-00560 (P.T.A.B. March 2, 2015).	2	3	0

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

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

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

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

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

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

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

