ESSAY

PATENT "TROLLS" AND CLAIM CONSTRUCTION

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This Essay explores the largely overlooked relationship between claim construction and patent assertion entities (patent "trolls") finding that claim construction problems and trends benefit patent assertion entities. First, the Federal Circuit is deeply divided as to the proper approach to claim construction. This split is a significant contributor to uncertain patent scope, which is widely-recognized as a core reason for the rise and success of patent assertion entities. Second, case law and commentary increasingly endorse an approach to claim construction that relies on the "general meaning" in the technical field with limited reliance on the patent itself. This approach increases the breadth and uncertainty of patent scope, the exact conditions under which patent assertion entities thrive. Unsurprisingly, patent assertion entities often rely on "general meaning" arguments. Third, the Supreme Court's recent adoption of a more deferential standard of review for claim construction is widely praised. However, because patent assertion entities file in favorable district courts, like the Eastern District of Texas, deferential review increases both the benefits patent assertion entities receive from favorable districts and their incentives to file in those districts.

These connections suggest that those concerned by patent assertion entities should be more concerned with claim construction. Conversely, the impact on patent assertion entities is relevant to designing claim construction rules. Finally, the current state of claim construction undermines other efforts to combat patent assertion entities, which often depend on identifying low merit claims. The uncertain and potentially broad claim scope under current claim construction doctrine limits the number of patent assertions that will be deemed meritless, frivolous, or implausible at the time of filing (and perhaps even after claim construction!).

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INTRODUCTION

Patent claim construction – the interpretation of the short paragraphs (or "claims") at the end of the patent that define the scope of the patentee's rights – is "overwhelmingly the most critical patent issue in litigation."¹ It is also one of the most problematic and controversial. "Debates over whether the fundamental inquiry of patent law is broken, and what to do if it is, engross not only observers of the patent system, but also the judges of the U.S. Court of Appeals for the Federal Circuit, the appellate court entrusted with the control of patent law."²

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¹ R. Polk Wagner & Lee Petherbridge, *Did Phillips Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY & THE COMMON LAW 123, (Shyamkrishna Balganesh ed., 2013).

² Jeffrey A. Lefstin, *Claim Construction, Appeal, and the Predictability of Interpretive Regimes*, 61 U. MIAMI L. REV. 1033, 1033 (2007).

Patent assertion entities – also known as non-practicing entities or, more pejoratively, patent "trolls"³ – are also one of the most important, controversial, and arguably problematic issues in modern patent litigation. The debate over patent assertion entities has divided academics,⁴ led Congress to debate major patent reform for the second time in less than five years,⁵ and even caught the attention of the popular media, including an eleven minute segment on John Oliver's *Last Week Tonight*.⁶

Yet, the intersection of what are probably the two most important, controversial, and problematic aspects of modern patent litigation has been largely overlooked. Unexplored are the related questions of how claim construction has contributed to the rise and/or viability of patent assertion entities and what concerns about patent assertion entities mean for the claim construction debates. Frankly, this is surprising. Problems with patent scope – both uncertainty and overbreadth of patent scope – are frequently identified as contributing to the rise and success of patent assertion entities.⁷ And "claim construction is fundamental to determining a patent's scope."⁸ The potential link between claim construction and patent assertion entities is, well, patent.

This Essay tackles the overlooked connection between patent assertion entities and claim construction. In broad strokes, the Essay develops three major themes. First, problems with claim construction are significant contributors to the uncertainty and breadth of claim scope,

³ The terms patent assertion entity ("PAE"), non-practicing entity ("NPE"), and patent troll ("troll") have slightly different connotations but are often used interchangeably. See David L. Schwartz & Jay P. Kesan, Analyzing the Role of Non-Practicing Entities in the Patent System, 99 CORNELL L. REV. 425, 426 (2014) (summarizing terminology).

⁴ Compare Letter to Congress by 51 Legal and Economics Scholars Who Study Innovation, Intellectual Property Law, and Policy (Mar. 2, 2015), available at <u>http://www.utdallas.edu/~ugg041000/IPScholarsLettertoCongress March 2 2015.pdf</u> ("PAE litigation has been costing firms tens of billions of dollars per year since 2007."), with Letter to Congress by 40 Economists and Law Professors Who Conduct Research in Patent Law and Policy (Mar. 10, 2015), available at <u>http://cpip.gmu.edu/wpcontent/uploads/2015/03/Economists-Law-Profs-Letter-re-Patent-Reform.pdf</u> ("[M]uch of the information surrounding the patent policy discussion, and in particular the discussion of so-called "patent trolls," is either inaccurate or does not support the conclusions for which it is cited.").

⁵ See Greg Reilly, *Linking Patent Reform with Civil Litigation Reform*, 47 LOY. U. CHI. L.J. (forthcoming 2015) (providing overview of current patent reform efforts); see *also* Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284 (2012).

⁶ Last Week Tonight with John Oliver: Patents (HBO) (Apr. 19, 2015), available at <u>https://www.youtube.com/watch?v=3bxcc3SM_KA</u>.

⁷ James Bessen, *The patent troll crisis is really a software patent crisis*, WASHINGTON POST (Sept. 3, 2013), <u>http://www.washingtonpost.com/blogs/the-</u> switch/wp/2013/09/03/the-patent-troll-crisis-is-really-a-software-patent-crisis/.

⁸ Jeffrey A. Lefstin, *Claim Construction, Appeal, and the Predictability of Interpretive Regimes*, 61 U. MIAMI L. REV. 1033, 1034 (2007).

which fuel patent assertion entities. Second, current trends in the claim construction debates, both in the courts and the academy, will benefit patent assertion entities. If patent assertion entities are as problematic as widely seen, the patent community would be wise to reconsider the direction in which claim construction is moving. Third, the problems and trends in claim construction undermine other efforts to combat patent assertion entities by making it easier for patent assertion entities to assert a non-frivolous litigation position supportable under current law.

More specifically, an outcome-determinative split within the Federal Circuit as to the proper approach to claim construction creates significant uncertainty about claim scope that cannot be resolved without litigation.⁹ Uncertain claim scope is widely seen as fueling patent assertion entities. Yet, courts and commentators are increasingly ignoring or downplaying the claim construction split when discussing patent notice problems. Some even suggest, contrary to empirical evidence, that the split has been resolved.¹⁰

Second, a claim construction approach that emphasizes the general meaning in the technical field and permits only limited resort to the disclosure in the patent itself continues to garner precedential and scholarly support. This approach undermines ex ante predictability of claim scope because it depends on testimony of expert witnesses and other evidence created or identified by the parties ex post in litigation, rather than on the publicly-available and static patent document. Moreover, even its proponents acknowledge that it produces broader claim scope. Uncertain and broad claim scope are conditions in which patent assertion entities thrive, and, unsurprisingly, they tend to rely on the general meaning line of cases.¹¹ Yet, even as general trends in patent law seek to constrain patent assertion entities, case law and scholars increasingly endorse the general meaning claim construction approach.¹²

Finally, the standard of appellate review for claim construction has long been the focal point of claim construction debates, with widespread calls in the academy and the bar for more deferential review. The Supreme Court's recent decision in *Teva v. Sandoz* heeded those calls, rejecting the Federal Circuit's de novo standard and providing greater deference to district court claim constructions. *Teva* largely has been lauded by the patent community, even though it is likely to help patent assertion entities. ¹³ After *Teva*, district judges have incentives to place great reliance on expert evidence and other external evidence, and little reliance on the

⁹ See Part II.A.1, infra.

¹⁰ See Part II.A.2, infra.

¹¹ See Part II.B.1, infra.

¹² See Part II.B.2, infra.

¹³ See Part II.C.2, infra.

patent document itself, which will tend to create broader claims and greater uncertainty. Moreover, patent assertion entities overwhelmingly file in the U.S. District Court for the Eastern District of Texas, which tends to favor patentees in a variety of ways, including claim construction. More deferential review means more power for district courts, which accentuates patent assertion entities' advantage from choosing the forum and incentivizes districts that cater to patent assertion entities to adopt propatentee claim constructions.¹⁴

Having described the connection between claim construction problems and trends and patent assertion entities, the obvious question is what does it all mean? For those untroubled by patent assertion entities, perhaps not much. But for the majority of the patent community that worries, to varying extents, about the consequences of patent assertion entities for innovation, competition, and patent litigation, this Essay suggests that they should pay more attention to claim construction. If patent assertion entities are as problematic as widely thought, the current direction of claim construction is far from optimal.¹⁵ Claim construction trends also undermine efforts to combat patent assertion entities not directly related to claim construction. A variety of current proposals pleading standards, Rule 11 sanctions, fee shifting – attempt to punish patent assertion entities for bringing frivolous, meritless, or weak claims. However, the uncertainty and breadth of potential claim scope created by the claim construction issues addressed in this Essay make it easier for a patent assertion entity to identify a reasonable litigation position, undermining efforts to weed out claims based on their merits.¹⁶

Of course, there may be ways to address patent assertion entities without altering the direction of claim construction, such as venue reform, restricting functional claiming, improving patent examination, etc. And the current claim construction trends benefitting patent assertion entities may be warranted for other reasons. At the very least, however, claim construction should be part of the patent assertion entity debate and the consequences for patent assertion entities should be part of the claim construction debates.¹⁷

Interestingly, and perhaps unsurprisingly, while courts, scholars, and most other commentators have overlooked the relationship between claim construction and patent assertion entities, the most popular targets for patent assertion entities – large technology companies like Google, Amazon.com, Yahoo!, Dell, and Twitter – have not. In amicus briefs in the Federal Circuit and Supreme Court, these companies reached conclusions

¹⁴ See Part II.C.1, infra.

¹⁵ See Part III.A, infra.

¹⁶ See Part III.B, infra.

¹⁷ See Part III.A, infra.

similar to this Essay: the claim construction split results in uncertain patent scope; a patent-focused approach better promotes public notice than the "general meaning" approach; and deferential appellate review undermines public notice and benefits patent holders.¹⁸ The technology companies were clearly motivated by their experience with patent assertion entities, though they left the link largely implicit.¹⁹ This Essay makes that link explicit.

Part I provides an overview of the parallel debates over patent assertion entities and claim construction. Part II draws the connections between claim construction and patent assertion entities. Part III evaluates the consequences of these connections. A short conclusion follows.

I. PATENT LITIGATION PROBLEMS: "TROLLS" AND CLAIM CONSTRUCTION

Patent assertion entities and claim construction have been two of the most discussed and debated topics in patent law since the turn of this century, probably only rivaled or surpassed by patentable subject matter under 35 U.S.C. § 101. This Part provides brief background on the debates over each, before turning to the relationship of patent assertion entities and claim construction in the remainder of the Essay.

A. The Patent "Troll" Debate

1. Overview of the Patent "Troll" Debate

In recent years, patent assertion entities have been central to most debates over the patent system. Patent assertion entities are estimated to have brought over 50% of all patent litigation in recent years.²⁰ They have received attention, and often criticism, from the White House, Congress, Supreme Court Justices, Federal Circuit judges, the Federal Trade Commission, corporations and industry groups, academics, the popular press, and the public at large.²¹

¹⁸ Brief of Google Inc. et al. as Amici Curiae in Support of Respondents 20-22, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831 (2015) (joined by Google, Dell, HP, Salesforce.com, Twitter, Yahoo!, Acushnet, eBay, Kaspersky Lab, Limelight Networks, Newegg, QVC, SAS Institute, and Xilink); Brief of Google Inc. et al. as Amicus Curiae in Support of Appellant 24-25 & n.3, *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272 (Fed. Cir. 2014) (en banc) (joined by Google, Amazon, HP, Red Hat, and Yahoo!).

¹⁹ Brief of Google Inc. et al. as Amici Curiae in Support of Respondents 26-27, *Teva Pharmaceuticals USA*, *Inc. v. Sandoz*, *Inc.*, 135 S.Ct. 831 (2015)

 $^{^{20}}$ Executive Office of the President, Patent Assertion and U.S. Innovation, at 5 (2013), available at <u>http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf</u>

²¹ See, e.g., Brian T. Yeh, An Overview of the Patent "Troll" Debates, CONGRESSIONAL RESEARCH SERVICE 1-2 (April 16, 2014); Executive Office of the President, Patent

Although the exact terminology and definitions vary, in rough terms, patent assertion entities are patent holders that do not commercialize inventions or transfer technology ex ante in a way that helps other companies develop products. Instead, patent assertion entities purchase patents for the purpose of extracting licensing fees by suing (or threatening to sue) companies that have already developed products allegedly covered by the patent.²²

A vigorous debate exists within the patent community regarding patent assertion entities. The majority view is that patent assertion entities tax innovation, stifle research and development, enrich investors at the expense of product-producing companies, increase litigation and litigation costs, and bring weak claims. The minority view contends that criticisms of patent assertion entities are overblown and unsupported and/or that patent assertion entities are actually beneficial to innovation by adding liquidity to the patent market and increasing the returns for small inventors.²³

The merits of this debate are complex, perhaps intractable, and beyond the Essay's scope. Instead, the Essay suggests that current claim construction rules and trends benefit, and perhaps even fuel, the patent assertion entity business model. Those interested in reforms to restrict patent assertion entities would be well-advised to focus at least some of their attention on claim construction.

2. The Relationship of Patent "Trolls" to Uncertain and Broad Claim Scope

Claim scope is central to discussions (especially criticisms) of patent assertion entities, with patent assertion entities associated with uncertain and broad claim scope.

First, the existence and success of the patent assertion entities is often attributed to patents with "fuzzy boundaries" and vague claims.²⁴ Leading commentators suggest that patent assertion entities purposefully seek out patents with vague or ambiguous claim language for purchase.²⁵

Assertion and U.S. Innovation, at 2 (2013), available at

http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf; Randall R. Rader et al., *Making Trolls Pay in Court*, N.Y. TIMES (June 4, 2013); eBay Inc. v.

MercExchange, L.L.C., 547 U.S. 388, 396 (2006) (Kennedy, J., concurring). ²² Executive Office of the President, Patent Assertion and U.S. Innovation, at 3-4

 ^{(2013),} available at <u>http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf</u>
 ²³ Brian T. Yeh, An Overview of the Patent "Troll" Debates, CONGRESSIONAL

RESEARCH SERVICE 4-8 (April 16, 2014) (summarizing debate).

²⁴ Brian T. Yeh, An Overview of the Patent "Troll" Debates, CONGRESSIONAL RESEARCH SERVICE 9-10 (April 16, 2014).

²⁵ James Bessen et al., The Private and Social Costs of Patent Trolls, REGULATION,

This allows patent assertion entities to target technology that is different than that disclosed in the patent and developed after the patent issued but has now become firmly established in a way that allows patent assertion entities to extract payments from those dependent on a particular technology.²⁶ Relatedly, vagueness in claim language allows patent assertion entities to assert their patents broadly to cover a wide range of technology that exists in the market, technology that may only have a tangential relationship to that described in the patent.²⁷ Importantly, technology users cannot avoid infringement ex ante before developing or adopting a technology because the vague claim language hinders efforts to identify or design around the subsequently asserted patent ex ante.²⁸

Second, patent assertion entities are often said to rely on overly broad claim scope, whether because the patent claims are inherently broad or because the ambiguity and vagueness of claim language permits the patent assertion entity to read the claim broadly.²⁹ Broad patent scope allows the patent assertion entity to assert the patent against nowestablished technologies developed after the patent issued, as well as to assert it broadly against a large number of products and companies. The result is increased returns from the patent assertion entity's investment in a patent.³⁰

That patent assertion entities most commonly assert patents on software-related inventions confirms the importance of ambiguous and broad claim scope to their business model.³¹ The most likely reason for the popularity of software patents among patent assertion entities is that software patents tend to have vague and broad claim language, often written in "functional" terms that define a goal, rather than a specific means of achieving that goal.³²

http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf

^{26, 26 (}Winter 2011-2012).

²⁶ James Bessen et al., *The Private and Social Costs of Patent Trolls*, REGULATION, 26, 26 (Winter 2011-2012); James Bessen, *The patent troll crisis is really a software patent crisis*, WASHINGTON POST (Sept. 3, 2013).

²⁷ James Bessen, *The patent troll crisis is really a software patent crisis*, WASHINGTON POST (Sept. 3, 2013).

²⁸ James Bessen, *The patent troll crisis is really a software patent crisis*, WASHINGTON POST (Sept. 3, 2013).

²⁹ Executive Office of the President, Patent Assertion and U.S. Innovation, at 6 (2013), available at http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf

³⁰ James Bessen, The patent troll crisis is really a software patent crisis,

WASHINGTON POST (Sept. 3, 2013); Executive Office of the President, Patent Assertion and U.S. Innovation, at 6 (2013), available at

³¹ James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387, 394 (2014) (noting that 62% of NPE lawsuits involve software patents).

 $^{^{32}}$ Executive Office of the President, Patent Assertion and U.S. Innovation, at 8 (2013), available at

B. Claim Construction Problems

1. The Relationship of Claim Construction and Patent Scope

The legal rights conferred by a patent are judged by the "claims" at the end of the patent: numbered paragraphs that describe the scope of the invention in a single, often tortuously written sentence. Like the words of any other legal document, patent claims must be interpreted to be applied. This process is called "claim construction" in patent lingo. Claim construction is widely recognized as the most important step in patent litigation. It is a threshold step for virtually every other issue in a patent case. And it is often case-dispositive or at least case-determinative (limiting the issues, the range of the dispute, facilitating settlement, etc.) because there is little dispute over the how the technology works.³³

The meaning of patent claim terms, like all words, is determined by the context in which they are used. The context for patent claim terms includes the rest of the claim at issue, other claims in the patent, the description of the invention in the part of the patent referred to as the "specification," and the record of the proceedings for obtaining the patent in the Patent and Trademark Office. These sources of context are known as "intrinsic evidence." The context for patent claim terms also includes information about the background meaning of the term to a skilled person in the field (known as a "person of ordinary skill in the art" in patent lingo), as evidenced by dictionaries, treatises and other scientific texts, other patents, and expert testimony. These sources of context are known as extrinsic evidence.³⁴ The relative weight of the intrinsic context versus extrinsic context is hotly disputed, as discussed in Part I.B.2, *infra*.

Claim construction is crucial to both the certainty and breadth of patent claims. "[C]laim construction is fundamental to determining a patent's scope"³⁵ because the terms in a patent claim only acquire meaning, and therefore scope, when they are interpreted in the relevant context (*i.e.*, construed). Therefore, the process for interpreting claims – what context is consulted, in what order, for what purpose, etc. – will determine whether a claim has broad or narrow scope.³⁶ Likewise, the extent to which the process for interpreting claims is well-known, predictable, and easily

http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf; see also Mark A. Lemley, *Functional Claiming*, 2013 WISCONSIN L. REV. 905.

³³ Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243, 246, 256-257 (2014).

³⁴ Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243, 257-264 (2014).

³⁵ Jeffrey A. Lefstin, *Claim Construction, Appeal, and the Predictability of Interpretive Regimes*, 61 U. MIAMI L. REV. 1033, 1034 (2007).

³⁶ Christopher A. Cotropia, *Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms*, 47 WM. & MARY L. REV. 49, 103-104 (2005).

replicable ex ante is a significant determinant of the certainty or uncertainty (more accurately, predictability or unpredictability) of patent scope.³⁷

Unsurprisingly, uncertainty and overbreadth in patent claim scope often are associated with claim construction problems. For example, one commentator noted that "uncertainty over the proper procedure for claim construction has led to uncertainty in patent scope, which in turn negates the notice and boundary-staking functions to be performed by the patent claim."³⁸ Another commentator pointed to flaws with the approach to claim construction as the cause of problematic breadth of patent claims.³⁹

2. Claim Construction Problems and Trends

Debates over claim construction have focused on two core problems. First, the primary focus of commentators has been the "uncertainty" created by the Federal Circuit's high rate of reversal of district court claim construction decisions.⁴⁰ In previous work, I referred to the uncertainty created by high reversal rates as "ex post uncertainty" because it only affected the ability to evaluate claim scope after litigation had been filed *and* after the district court had issued a claim construction decision. I argued that "ex post uncertainty" was far less significant than the difficulty of evaluating claim scope in advance of litigation, which I called "ex ante unpredictability." Because the Federal Circuit's high reversal rate had little to no effect on ex ante predictability, I questioned the importance of the standard of review.⁴¹

Regardless, conventional wisdom held that the Federal Circuit's de novo standard of claim construction review created uncertain claim scope, with "an avalanche of critical commentary" and repeated, sharply split Federal Circuit en banc decisions.⁴² Ultimately, the Supreme Court in *Teva v. Sandoz* held that the Federal Circuit must review the "evidentiary underpinnings" of claim construction for "clear error," rather than de

³⁷ Christopher A. Cotropia, *Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms*, 47 WM. & MARY L. REV. 49, 99-100 (2005).

³⁸ Kristen Osenga, *Linguistics and Patent Claim Construction*, 38 RUTGERS L.J. 61, 64 (2006).

³⁹ See Oskar Liivak, Rescuing the Invention from the Cult of the Claim, 42 SETON HALL L. REV. 1, 15-16 (2012).

⁴⁰ Jeffrey A. Lefstin, *Claim Construction, Appeal, and the Predictability of Interpretive Regimes*, 61 U. MIAMI L. REV. 1033, 1034 (2007).

⁴¹ Greg Reilly, Improvidently Granted: Why the Federal Circuit Chose the Wrong Claim Construction Issue for En Banc Review, 80 U. CHI. L. REV. DIALOGUE 43, 47-48 (2013).

⁴² Jeffrey A. Lefstin, *Claim Construction, Appeal, and the Predictability of Interpretive Regimes*, 61 U. MIAMI L. REV. 1033, 1034 (2007); *see also* Lighting Ballast Control v. Philips Electronics, 744 F. 3d 1272 (Fed. Cir. 2014) (en banc).

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The second major problem with claim construction - a deep and persistent split within the precedent as to the proper approach to claim construction – has received comparatively less attention than the standard of review. Yet, because it directly affects ex ante predictability of claim scope, it is far more important.⁴⁴ Although variably described, commentators generally agree there are two identifiable and conflicting methodological approaches. The primary difference between the two approaches is to what extent claim construction should rely on the written description of the invention found in the portion of the patent referred to as the specification and to what extent it should rely on the background or general meaning of the claim term in the field of invention. Put another way, the split is over what constitutes the primary context for understanding patent claim terms: the patent itself or the background or general knowledge in the field.⁴⁵

The first claim construction methodology, which I call the "general meaning" approach (and others refer to as the "heavy presumption" or "procedural" approach), emphasizes the background or general meaning in the field, with only a limited role for the specification to alter this meaning. Under this approach, claim construction begins with a "heavy presumption" in favor of the "general," "plain," and or "ordinary" meaning of the claim term to a skilled person in the field. Although not explicitly stated, this general meaning is presumably identified through extrinsic evidence of the understanding in the field, such as expert testimony, dictionaries, or scientific texts. Claim construction then turns to the specification to see if the patentee varied this general meaning. Importantly, this approach severely limits variance from the general meaning, permitting a "quite narrow" exception to general meaning only if the specification meets an "exacting standard." Specifically, the patentee must have "clearly set forth" an express definition different from the general meaning or used "expressions of manifest exclusion or restriction" that clearly and unmistakably disclaimed claim scope.⁴⁶

⁴³ Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., 135 S.Ct. 831 (2015).

⁴⁴ Greg Reilly, *Improvidently Granted: Why the Federal Circuit Chose the Wrong Claim Construction Issue for En Banc Review*, 80 U. CHI. L. REV. DIALOGUE 43 (2013).

⁴⁵ For a more detailed description and analysis of the methodological split, *see* Greg Reilly, *Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard*, 20 MICH. TELECOMM. & TECH. L. REV. 243, 246-248, 256-266 (2014), upon which the following paragraphs rely.

⁴⁶ Examples of this approach include: Thorner v. Sony Computer Ent'mt Am. LLC, 669 F.3d 1362, 1365-66 (Fed. Cir. 2012); Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1371 (Fed. Cir. 2011) (Moore, J. dissenting from the denial of the petition for rehearing en banc). For further description of this approach, *see* Greg Reilly, *Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard*, 20 MICH. TELECOMM. & TECH. L. REV. 243, 262-263 (2014).

The second approach to claim construction, which I call the "patentfocused approach (and others refer to as the "Phillips," "Vitronic," or "holistic" approach) emphasizes the meaning that the claim term bears in the patent itself, regardless of the meaning it would generally have in the field of the invention. A claim term's meaning is primarily derived by the contextual clues provided in the specification, which can define a claim term explicitly or implicitly. Extrinsic evidence can provide useful background information to understand the specification but cannot support a claim interpretation broader than that suggested by the specification.⁴⁷

The Federal Circuit's 2006 en banc decision in Phillips v. AWH Corp. seemed to resolve the methodological split in favor of a patentfocused approach.⁴⁸ Unfortunately, empirical evidence demonstrates that the Federal Circuit's precedent remains as divided on claim construction methodology as before *Phillips*.⁴⁹ Despite Phillips' fairly clear endorsement of a patent-focused approach, "courts have quietly been shifting back towards a 'heavy presumption of ordinary meaning'... with only limited exceptions when there has been lexicography or an express disclaimer," a "trend [that] has been largely without fanfare."50

The methodological split is not just a matter of semantics. Federal Circuit judges acknowledge a "fundamental split within the court as to . . . the proper approach to claim interpretation."⁵¹ Empirical evidence confirms that the outcome of claim construction appeals depends on the methodological preference of the panel of Federal Circuit judges and that most disputes over claim construction result from disagreements over methodology. Specifically, 95% of splits within Federal Circuit panels and 75-82% of Federal Circuit reversals of district court claim constructions result from differences in the methodological approach applied.⁵²

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⁴⁷ An example of this approach is Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582-83 (Fed. Cir. 1996). For further description of this approach, see Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243, 263-264 (2014).

⁴⁸ Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

⁴⁹ R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical* Analysis of the Federal Circuit's Claim Construction Jurisprudence, in INTELLECTUAL PROPERTY & THE COMMON LAW 123 (Shyamkrishna Balganesh

ed., 2013).

⁵⁰ Steven C. Carlson & Uttam G. Dubal, Federal Circuit Boosts Patent Owners on Claim Construction, MANAGING INTELLECTUAL PROPERTY (Oct. 9, 2013).

⁵¹ Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1373 (Fed. Cir. 2011) (Moore, J. dissenting from the denial of the petition for rehearing en banc).

⁵² R. Polk Wagner & Lee Petherbridge, Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance, 152 U. PA. L. REV. 1105, 1143-44, 1163-

^{70 (2004).}

C. The Disconnect Between Patent "Troll" Debates and Claim Construction Debates

The role of claim construction has been largely absent from debates over patent assertion entities. Claim construction reform is not on the agenda for current patent reform efforts focused on combatting patent assertion entities.⁵³ Rather than seeing claim construction as part of the patent assertion entity "problem," reform efforts treat it as part of the solution. Patent reform legislation would import the process for claim construction used in the district courts – long bemoaned by commentators – into U.S. Patent and Trademark Office ("PTO") proceedings where the validity of the patent is challenged after the patent has been issued by the PTO.⁵⁴ Other patent reform proposals would stay almost all discovery until after claim construction, on the assumption that claim construction will successfully weed out frivolous or weak claims brought by patent assertion entities.⁵⁵

Even though claim construction has previously been blamed for uncertain and broad claim scope, efforts to reduce the uncertainty and breadth of claim scope as a means of addressing the patent assertion entity "problem" have focused on a variety of other mechanisms. The most popular proposals focus on strengthening the requirements of 35 U.S.C. § 112 that the claims be "definite" and that the patent include a "written description" demonstrating that the patentee possessed the invention at the time of filing and an enabling disclosure that permits a skilled person in the field to make and use the invention.⁵⁶ Other proposals include reducing the ability of patentees to hide or delay patent applications in the Patent and Trademark Office⁵⁷ and including glossaries of key claim terms within the patent.⁵⁸ Claim construction, however, has been ignored. To the contrary, overestimating the impact of *Phillips v. AWH Corp.* in resolving the Federal Circuit's methodological split, the Federal Trade Commission concluded that current claim construction doctrine "marks a beneficial step from the perspective of public notice."59

⁵³ Patent Progress's Guide to Federal Patent Reform Legislation, available at <u>http://www.patentprogress.org/patent-progress-legislation-guides/patent-progress-guide-patent-reform-legislation/</u> (last visited May, 30, 2015).

⁵⁴ Innovation Act, H.R. 9, § 9(b) (114th Cong., 1st Session).

 $^{^{55}}$ Innovation Act, H.R. 9, § 3(d) (114th Cong., 1st Session); PATENT Act, S. 1137, § 5 (114th Cong., 1st Session).

⁵⁶ Brian T. Yeh, An Overview of the Patent "Troll" Debates, CONGRESSIONAL RESEARCH SERVICE 17 (April 16, 2014).

⁵⁷ Brian T. Yeh, An Overview of the Patent "Troll" Debates, CONGRESSIONAL RESEARCH SERVICE 17 (April 16, 2014).

⁵⁸ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 110 (2011) [hereinafter FTC REPORT].

⁵⁹ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 102 (2011) [hereinafter FTC REPORT].

One connection between patent assertion entities and claim construction has been recognized. Commentators have noted the inherent difficulty of interpreting software patents and the uncertainty that results.⁶⁰ Professor Mark Lemley has suggested a particular solution to the problem of functional claiming in software patents by interpreting functional claims as limited to the means for implementing the function described in the patent.⁶¹ In essence, the proposal would except functional claims in software patents from normal claim construction rules and create special claim construction rules specific to software functional claims, rules that are essentially a strong version of the patent-focused approach. Professor Lemley and others seem to assume that the problem with functional software claims results from the inherent indeterminacy of software claims, rather than the problems with the claim construction process addressed in this Essay.⁶²

Thus, the role of claim construction issues in facilitating the patent assertion entity business model is an important issue that has been largely absent from debates over patent assertion entities. The converse is also true. The beneficial effects for patent assertion entities have been largely overlooked in the claim construction debates.

II. CLAIM CONSTRUCTION PROBLEMS AND TRENDS HAVE, AND WILL, BENEFIT PATENT "TROLLS"

This Part turns to the intersection of the parallel debates over patent assertion entities and claim construction explored in Part I. Patent assertion entities benefit from three major problems in claim construction: the methodological split, the continued vitality of the general meaning approach, and the appellate standard of review. Surprisingly, while the general tide of patent law moves to limit and undermine patent assertion entities, claim construction trends are unwittingly moving in the opposite direction, *i.e.*, in ways favorable to patent assertion entities.

A. The Claim Construction Split, Uncertainty, and Patent Assertion Entities

1. How the Claim Construction Split Benefits Patent Assertion Entities

In theory, competitors and the public should be able to "understand what is the scope of the patent owner's rights by obtaining the patent and

⁶⁰ James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387, 394 (2014).

⁶¹ Mark A. Lemley, *Functional Claiming*, 2013 WISCONSIN L. REV. 905.

⁶² Mark A. Lemley, *Functional Claiming*, 2013 WISCONSIN L. REV. 905, 919-928 (suggesting problem with software claims comes primarily from nature of software and nature of claim drafting).

prosecution history . . . and applying established rules of construction" and "be able to rest assured . . . that a judge . . . will similarly analyze the text of the patent and its associated public record and apply the established rules of construction."⁶³ However, the Federal Circuit's split over the proper approach to claim construction makes it difficult to "understand what is the scope of the patent owner's rights" for two reasons.

First, there are no "established rules of construction." Rather, there are two competing sets of rules for construction. One set of rules starts with a presumption in favor of the extrinsic, general meaning of the term in the field and only looks to the use in the patent itself for a clear and unmistakable rebuttal of this presumption. The other set of rules starts with the usage of the term in the patent itself and only looks to extrinsic usage to help clarify the intrinsic usage. The scope of the patentee's rights depends on the choice between these two sets of rules.⁶⁴ However, a competitor has no reliable basis on which to choose between them, as both have significant precedential support.⁶⁵

Second, competitors cannot "rest assured . . . that a judge . . . will similarly analyze" the claim terms. If a competitor chooses to act based on a certain understanding of claim scope derived using one of the existing methodological approaches, it cannot predict that an unknown judge construing the claims in an unknown litigation will adopt the same approach.⁶⁶ Different judges take different approaches to claim construction and, often, even the same judge will take different approaches to claim construction from case to case.⁶⁷

⁶⁶ See Christopher A. Cotropia, *Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms*, 47 WM. & MARY L. REV. 49, 99 (2005) ("Without clear direction from the courts in the form of a single methodology, one cannot predict a claim's meaning because of the uncertainty about which methodology will be used.").

⁶³ Markman v. Westview Instruments, 52 F.3d 967, 978-979 (Fed. Cir. 1995) (en banc), *aff'd* 517 U.S. 370 (1996).

⁶⁴ R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1170 (2004) ('The Federal Circuit's claim construction jurisprudence evinces a distinct split in methodological approach, a dichotomy that both involves a significant number of decisions and appears to affect the results of the cases.").

⁶⁵ See Christopher A. Cotropia, *Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms*, 47 WM. & MARY L. REV. 49, 100 (2005) ("With only one methodology used, different individuals more likely will interpret the claims in the same manner, and thus, a higher likelihood of getting a similar result will exist.").

⁶⁷ R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1143-44, 1163-70 (2004) (studying Federal Circuit judges and concluding that "[t]he methodological approaches of individual judges on the Federal Circuit vary widely" and that "most Federal Circuit judges have relatively similar levels of inconsistency in claim construction methodology, but a small group is substantially more consistent").

In this way, the Federal Circuit's split over the proper approach to claim construction is a contributor to the uncertainty of patent scope, perhaps a significant contributor. As one commentator has explained, "[r]egardless of a methodology's specifics, an inherent certainty [would be] created once courts decide on a single methodology.⁶⁸ There is near universal agreement that uncertain patent scope is a significant contributor to the rise and success of patent assertion entities – a conclusion that has been endorsed by the Federal Trade Commission,⁶⁹ Congressional Research Service,⁷⁰ White House,⁷¹ academics,⁷² and technology companies.⁷³ If uncertain patent scope is a major factor fueling patent assertion entities and the Federal Circuit's split over the proper claim construction approach is a major cause of uncertain patent scope, the Federal Circuit's continued claim construction split inures to the benefit of patent assertion entities.

I do not suggest that the Federal Circuit's claim construction split is the *sole* cause of the uncertain patent scope on which patent assertion entities prey. Other factors are certainly at play, including "continuation" practice at the Patent Office that allows patentees to write claims to cover developments in the market, the inherent indeterminacy of language (or at least of describing software inventions in written words), and perhaps the indefiniteness doctrine.⁷⁴ Professor Lemley is undoubtedly correct that widespread use of functional claiming – which defines the invention by what it does, not how it does it – in software patents is a major contributor to the patent "thicket" that undermines public notice.⁷⁵ And, as explained in Part II.B, *infra*, the actual content of claim construction rules contribute to uncertain patent scope.⁷⁶ My claim is more modest: there is an important connection between the claim construction split and patent assertion entities that is being overlooked in both the debates over claim

⁶⁸ Christopher A. Cotropia, Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms, 47 WM. & MARY L. REV. 49, 99 (2005).

⁶⁹ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 9 (2011) [hereinafter FTC REPORT].

⁷⁰ Brian T. Yeh, *An Overview of the Patent "Troll" Debates*, CONGRESSIONAL RESEARCH SERVICE 9 (April 16, 2014).

⁷¹ Executive Office of the President, Patent Assertion and U.S. Innovation, at 4 (2013), available at <u>http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf</u>

⁷² James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387, 393-394 (2014).

⁷³ Comments of Google Inc., *In re: Strategies for Improving Claim Clarity: Glossary Use in Defining Claim Terms*, U.S. Patent and Trademark Office 5 (Oct. 23, 2013).

⁷⁴ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 9 (2011) [hereinafter FTC REPORT].

⁷⁵ Mark A. Lemley, Functional Claiming, 2013 WISCONSIN L. REV. 905.

⁷⁶ See also Christopher A. Cotropia, *Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms*, 47 WM. & MARY L. REV. 49, 99 (2005). ("The methodology chosen can still be unpredictable in application because of the canons it chooses to use.").

construction and the debates over patent assertion entities.

2. How Current Trends Benefit Patent Assertion Entities

To some extent, it is difficult to identify any "trend" in the case law and commentary related to the Federal Circuit's claim construction split for the simple reason that the Federal Circuit has been significantly divided for a decade and a half.⁷⁷ Empirical evidence suggests that Federal Circuit opinions in the years immediately after 2005's *Phillips v. AWH Corp.*, where the en banc court addressed the proper methodological approach, were as divided on methodology as they were before.⁷⁸ Anecdotal accounts offer a more complex story in which early decisions after *Phillips* largely followed a single, patent-focused methodology, with a more recent rise in the "general meaning" approach returning the Federal Circuit's claim construction doctrine to the same split that existed before *Phillips*.⁷⁹

Regardless of whether the Federal Circuit is becoming more divided or is simply as divided as ever, the existence and importance of the Federal Circuit's methodological split is increasingly ignored or downplayed. Attention to the split over claim construction probably peaked in 2011 with a vigorous dissent from the Federal Circuit's denial of rehearing en banc identifying "a fundamental split within the court as to... the proper approach to claim interpretation."80 However, the Federal Circuit's methodological split is increasingly absent from patent debates. For example, in briefing to the Supreme Court in Nautilus v. Biosig, the indefiniteness doctrine at issue in that case was lamed for uncertain patent scope, with the role of claim construction and the claim construction split ignored.⁸¹ Moreover, in reactions to the Supreme Court's adoption of a more deferential standard of review for claim construction in Teva v. Sandoz, commentators have described the Federal Circuit as having a singular "established methodology for construing claims,"82 glossing over the deep methodological split that Professors Wagner and Petherbridge

⁷⁷ See Craig Allen Nard, A Theory of Claim Interpretation, 14 HARV. J. L. & TECH. 1, 5 (2000) (describing split between what the author labeled "pragmatic textualism" and "hyper textualism").

⁷⁸ R. Polk Wagner & Lee Petherbridge, *Did Phillips Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY & THE COMMON LAW 123, 133-135 (S. Balganesh, ed., 2013) (finding "virtually no change" in methodological split after *Phillips* through 2007).

⁷⁹ Steven Carlson & Uttam Dubal, *Federal Circuit Boosts Patent Owners on Claim Construction*, MANAGING INTELLECTUAL PROPERTY (Oct. 9, 2013).

⁸⁰ Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1373 (Fed. Cir. 2011) (Moore, J. dissenting from the denial of the petition for rehearing en banc).

⁸¹ Greg Reilly, *Completing the Picture of Uncertain Patent Scope*, 91 WASH. U. L. REV. 1353 (2014).

⁸² Jason Rantanen, *Teva, Nautilus, and Change Without Change*, <u>STANFORD</u> TECH. L.J. (2015) (manuscript at 19-22).

empirically reconfirmed only a year before *Teva*.⁸³ Two leading commentators even hope that *Teva* solved long-standing claim construction problems, optimistically suggesting that implementation of *Teva* will result in "effective, transparent, and well-reasoned patent claim constructions" and that "patent litigation will become more predictable and understandable."⁸⁴ Again, the methodological split and its contribution to uncertain patent scope is ignored.

Downplaying or ignoring the Federal Circuit's split over the proper approach to claim construction is good for patent assertion entities. Patent assertion entities benefit from the uncertain claim scope resulting from the absence of a single approach to claim construction. The longer the Federal Circuit's split persists, the better for patent assertion entities' prospects. And the less attention the split receives, the longer it is likely to remain. Unsurprisingly, the patent stakeholders that are focused on the connection between the methodological split, uncertain patent scope, and patent assertion entities are the major technology companies most frequently targeted by patent assertion entities.⁸⁵

B. The General Meaning Approach, Uncertainty, Overbreadth, and Patent Assertion Entities

1. How the General Meaning Approach Benefits Patent Assertion Entities

Beyond the mere existence of a split over claim construction approach, the content of claim construction rules also affect the prospects for patent assertion entities. Different approaches to claim construction differ in the degree of certainty and breadth of claim scope they produce.⁸⁶ For reasons previously explained, patent assertion entities prefer a claim construction approach that tends to produce less certain and broader claim scope.⁸⁷ The "general meaning" approach to claim construction – where claim construction starts with extrinsic sources as to the abstract meaning in the field of invention and only looks to the specification for a clear deviation from this abstract meaning – does exactly that. As a result, its continued support within the claim construction precedent helps patent assertion entities.

⁸³ R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY & THE COMMON LAW 123, 144-145 (Shyamkrishna Balganesh ed., 2013).

⁸⁴ J. Jonas Anderson & Peter S. Menell, *Restoring the Fact/Law Distinction in Patent Claim Construction*, 109 Nw. U. L. REV. ONLINE 187, 198 (2015).

⁸⁵ Brief of Google Inc. et al. as Amici Curiae in Support of Respondents 20-22, 26-27, *Teva Pharmaceuticals USA*, *Inc. v. Sandoz*, *Inc.*, 135 S.Ct. 831 (2015)

⁸⁶ Christopher A. Cotropia, Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms, 47 WM. & MARY L. REV. 49, 100 (2005).

⁸⁷ See Part II.A.2, supra.

Some scholars believe that the general meaning approach results in more predictable claim scope.⁸⁸ They assume that skilled people can simply apply their own understanding of the claim term – an understanding that reflects the general understanding in the field – with confidence that the claim construction adopted in subsequent litigation will reflect this understanding.⁸⁹ This is an idealized view of litigation. The incentives in litigation are likely to result in a battle of experts (or expert texts) each asserting a "general meaning" that is most favorable to its side's litigation position, regardless of any connection to any actual "general meaning" in the field (to the extent one even exists).⁹⁰ Nor are generalist judges well-situated to sort through the ex post, litigation-driven "general meanings" and accurately identify the true "general meaning" in the field.⁹¹

Anecdotal evidence from those on the ground confirms that scholars who assume the "general meaning" approach promotes certainty of claim scope are mistaken. The Federal Trade Commission ("FTC") surveyed a wide range of stakeholders within the patent system, finding, among other things, that there was widespread concern about uncertain patent scope, especially in the information technology sector. Importantly, though, the FTC noted that "[t]hose who found claim construction manageable emphasized the importance of looking beyond the claims themselves and relying heavily on review of the patent's description of the invention to sort out claim meaning."⁹² A group of the nation's leading information technology companies – the industry in which patent notice problems are widely agreed to be most severe⁹³ – concur: "[d]ecisions that divorce claim terms from the context of the written description entrench claim ambiguity and litigation uncertainty."⁹⁴

⁸⁸ R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY & THE COMMON LAW 123, 144-145 (Shyamkrishna Balganesh ed., 2013).

⁸⁹ R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY & THE COMMON LAW 123, 144-145 (Shyamkrishna Balganesh ed., 2013).

⁹⁰ Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243, 271-277 (2014).

⁹¹ Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243, 271-277 (2014).

⁹² FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 82 (2011) [hereinafter FTC REPORT].

⁹³ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 80 (2011) [hereinafter FTC REPORT]; Brian T. Yeh, An Overview of the Patent "Troll" Debates, CONGRESSIONAL RESEARCH SERVICE 9 (April 16, 2014).

⁹⁴ Brief of Google Inc. et al. as Amicus Curiae in Support of Appellant, *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272 (Fed. Cir. 2014) (en

The patent-focused approach encourages heavy reliance on the specification to understand claim meaning, whereas the "general meaning" approach limits reliance on the specification to explicit definitions or clear disclaimers of claim scope. "From a notice perspective," the patent-focused approach "works best."⁹⁵ As the FTC explained, when claim construction is primarily driven by the patent itself, "[a] third party seeking to understand a claim's meaning can view the intrinsic evidence by reading the patent and consulting the file wrapper (containing the prosecution history). The material is easily identifiable by, and accessible to, third parties" ex ante.⁹⁶ By contrast, when claim construction emphasizes the supposed "general meaning" in the technical field, claim meaning depends on external texts and expert testimony identified or developed ex post for purposes of litigation. "A third party therefore cannot know in advance what external evidence will be utilized" because there are a variety of potential external texts or expert witnesses which will support a variety of supposed "general meanings."⁹⁷ Thus, the patent-focused approach better promotes certainty of claim scope, whereas the general meaning approach increases the uncertainty of claim scope upon which patent assertion entities prey.⁹⁸

The different claim construction methodologies also produce different claim scope. Specifically, the general meaning approach will tend to produce broader claim scope than the patent-focused approach.⁹⁹ Even those generally supportive of the general meaning approach acknowledge that it is likely to "yield broader interpretations."¹⁰⁰ This is because the

⁹⁸ Brief of Google Inc. et al. as Amici Curiae in Support of Respondents 21, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831 (2015) (endorsing patentfocused approach and rejecting general meaning approach based on certainty concerns).

⁹⁹ Steven C. Carlson & Uttam G. Dubal, *Federal Circuit Boosts Patent Owners on Claim Construction*, MANAGING INTELLECTUAL PROPERTY (Oct. 9, 2013) (noting that claims are "overwhelmingly construed broadly" under the general meaning approach, which authors refer to as "heavy presumption of ordinary meaning" standard); Christopher A. Cotropia, *Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms*, 47 WM. & MARY L. REV. 49, 121-122 (2005) (noting that the "heavy presumption," *i.e.*, general meaning, methodology may give the patentee "the greatest possible breadth of patent protection").

¹⁰⁰ R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1142 (2004) (referring to "general meaning" approach as "procedural methodology"); *see also* Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1371 (Fed. Cir. 2011) (Moore, J. dissenting from the denial of the petition for rehearing en banc)

banc) (joined by Google, Amazon, HP, Red Hat, and Yahoo!).

⁹⁵ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 102 (2011) [hereinafter FTC REPORT].

⁹⁶ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 102 (2011) [hereinafter FTC REPORT].

⁹⁷ FED. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 102 & n.181 (2011) [hereinafter FTC REPORT] (quoting stakeholder as saying that "if you start to look at external records, even in biotech, there you can probably find five different people to say five different things").

patent-focused approach limits the context available for claim construction to that found in the patent itself. "The patent's disclosure sets a ceiling for the claim's meaning, and thus, the literal scope of exclusivity afforded to the patent."¹⁰¹ By contrast, the general meaning approach "moves the claim term's meaning from the context of the patent to the abstract," which will naturally expand the potential claim scope.¹⁰² The specification does not generally limit claim scope under this approach.¹⁰³ Rather, the only limit on claim scope is the ability to find some expert text, however tangentially relevant, or some paid expert witness to support a supposed "general meaning."¹⁰⁴

Thus, the general meaning approach to claim construction tends to produce unpredictable and broad claim scope, the very conditions in which patent assertion entities thrive.¹⁰⁵ Unsurprisingly, in litigation, patent assertion entities tend to rely on the general meaning approach in formulating claim construction positions. As one practitioner explained, "[w]hen the claim construction phase occurs, the claim construction proposed by plaintiff in such [patent "troll"] cases is typically superficial, often consisting of 'no construction required,' 'plain and ordinary meaning' or 'dictionary definition,' with the goal a construction that results in infringement with some wiggle room to avoid prior art."106 Other practitioners explained that "[p]atent trolls excel[] under this [general meaning] standard, with infringement easier to prove, and patent invalidity always an elusive and risky path."107 Probably for these exact reasons, the most common targets of patent assertion entities - the nation's leading technology companies - vehemently rejected the general meaning approach and endorsed the patent-focused approach, arguing that "[i]t is improper to ignore the specification in favor of a 'plain meaning' analysis divorced from the context of the patent."108

¹⁰⁵ See Part I.A.2, supra.

¹⁰⁶ Christopher Hu, 26 INTELLECTUAL PROPERTY & TECHNOLOGY LAW JOURNAL No. 8, at 1, 3 (2014).

¹⁰⁷ Steven C. Carlson & Uttam G. Dubal, *Federal Circuit Boosts Patent Owners on Claim Construction*, MANAGING INTELLECTUAL PROPERTY (Oct. 9, 2013) (referring to "general meaning" approach as "heavy presumption" methodology).

⁽acknowledging that the "general meaning" approach can produce claim scope broader than a patent-focused approach but arguing that this is a problem of invalidity).

¹⁰¹ Christopher A. Cotropia, Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms, 47 WM. & MARY L. REV. 49, 108 (2005).

¹⁰² Christopher A. Cotropia, Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms, 47 WM. & MARY L. REV. 49, 114 (2005).

¹⁰³ Christopher A. Cotropia, Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms, 47 WM. & MARY L. REV. 49, 110 (2005).

¹⁰⁴ Greg Reilly, *Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard*, 20 MICH. TELECOMM. & TECH. L. REV. 243, 276-277 (2014).

¹⁰⁸ Brief of Google Inc. et al. as Amici Curiae in Support of Respondents 21-22, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831 (2015) (joined by Google, Dell, HP, Salesforce.com, Twitter, Yahoo!, Acushnet, eBay, Kaspersky Lab, Limelight

2. How Current Trends Benefit Patent Assertion Entities

Even as the patent community is increasingly obsessed by how to combat patent assertion entities, the claim construction case law and scholarship are moving in favor of patent assertion entity's preferred claim construction methodology: the general meaning approach.

The case law has long been split between the "general meaning" and patent-focused approaches, a split that Professors Wagner and Petherbridge found to have remained fairly consistent after the Federal Circuit's 2005 Phillips decision, at least through 2007 (the end of their study).¹⁰⁹ However, anecdotal reports suggest that in the past few years "claim construction law for now is swinging in the direction" of the "general meaning" approach, with more cases taking this approach than before and the newer Federal Circuit judges favoring it.¹¹⁰ Moreover, although the Supreme Court's decision in Teva v. Sandoz addressed the standard of appellate review, not methodology, for claim construction, the Court did endorse district court's "consult[ing] extrinsic evidence in order to understand... the meaning of a term in the relevant art during the relevant time period."111 Some scholars have read this as consistent with an approach to claim construction that starts with extrinsic evidence about the meaning of the term in the field and only then checks to see if the intrinsic evidence is inconsistent with this meaning, *i.e.*, an approach similar to the general meaning approach.¹¹²

Teva could result in greater use of the "general meaning" approach for an additional reason. Under *Teva*, district courts receive deference for findings on subsidiary factual issues underpinning claim construction, such as the general meaning of the term in the technical field or resolution of conflicting expert testimony, but no deference when claim construction is based solely on the intrinsic evidence within the patent document and

Networks, Newegg, QVC, SAS Institute, and Xilink)

¹⁰⁹ R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in*

INTELLECTUAL PROPERTY & THE COMMON LAW 123, 134-135 (Shyamkrishna Balganesh ed., 2013)

¹¹⁰ Steven C. Carlson & Uttam G. Dubal, *Federal Circuit Boosts Patent Owners on Claim Construction*, MANAGING INTELLECTUAL PROPERTY (Oct. 9, 2013).

 ¹¹¹ Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., 135 S.Ct. 831, 840-842 (2015).
 ¹¹² Dennis Crouch, Giving Deference to the Supreme Court in Teva v. Sandoz,

PATENTLYO (Jan. 21, 2015), available at http://patentlyo.com/patent/2015/01/deference-supreme-sandoz.html (quoting Professor Rantanen but noting that other commentators disagreed); Jason Rantanen, Teva, Nautilus, and Change Without Change, _____ STANFORD TECH. L.J. ____(2015) (manuscript at 25); see also J. Jonas Anderson & Peter S. Menell, Restoring the Fact/Law Distinction in Patent Claim Construction, 109 NW. U. L. REV. ONLINE 187, 198 (2015) (arguing that Teva "affords [district courts] greater flexibility to use familiar tools for resolving factual disputes—presentation of [extrinsic] evidence and expert testimony").

prosecution history.¹¹³ This gives district judges incentives to rely heavily on extrinsic evidence and expert testimony – such as by using the general meaning approach, not the patent-focused approach – in order to insure deferential review from the Federal Circuit.¹¹⁴ On the other hand, the incentive *Teva* provides district courts to use the general meaning approach may be counterbalanced by the incentive it provides the Federal Circuit to emphasize greater or exclusive use of the intrinsic record – consistent with the patent-focused approach – so as to avoid having to defer to district court claim constructions.¹¹⁵

Beyond the case law, claim construction scholarship increasingly favors the "general meaning" approach. In the past, the scholarship, like the case law, was divided between the patent-focused and general meaning approaches.¹¹⁶ However, recent work from leading scholars endorses, to varying extents, approaches to claim construction more consistent with the general meaning approach than the patent-focused approach. Professors Wagner and Petherbridge explicitly endorse "[a]n approach to patent claim construction that firmly embraces the commonly understood meaning of words and places the burden on the patent applicant to clearly explain any deviations from the ordinary meaning" and reject "an open-ended search for 'contextual' meaning in the patent document and prosecution history."117 Similarly, Professor Rantanen advocates "a claim construction process where the judge begins by making a factual determination about the meaning of a claim term to a person of skill in the art [using extrinsic evidence] and then considers the intrinsic evidence of the patent to arrive at a legal conclusion as to its meaning in the patent."118 Professor Crouch believes that "the rule that extrinsic evidence is of secondary importance and perhaps should not be considered absent ambiguity in the intrinsic

¹¹³ Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., 135 S.Ct. 831, 841 (2015).

¹¹⁴ Brief of Google Inc. et al. as Amici Curiae in Support of Respondents 23, *Teva Pharmaceuticals USA*, *Inc. v. Sandoz*, *Inc.*, 135 S.Ct. 831 (2015).

¹¹⁵ Jason Rantanen, *Teva, Nautilus, and Change Without Change*, __ STANFORD TECH. L.J. __ (2015) (manuscript at 19-22) (suggesting that this has been Federal Circuit's reaction to *Teva*).

¹¹⁶ Compare, e.g., Christopher A. Cotropia, Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms, 47 WM. & MARY L. REV. 49 (2005) (endorsing patent-focused approach); Kelly Casey Mullally, Patent Hermeneutics: Form & Substance in Claim Construction, 59 FLA. L. REV. 333 (2007) (same); with, e.g., Kristen Osenga, Linguistics & Patent Claim Construction, 38 RUTGERS L.J. 61 (2006) (endorsing approach more similar to "general meaning" approach); R. Polk Wagner & Lee Petherbridge, Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance, 152 U. PA. L. REV. 1105 (2004) (same).

¹¹⁷ R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY & THE COMMON LAW 123, 143-145 (Shyamkrishna Balganesh ed., 2013).

¹¹⁸ Jason Rantanen, *Teva, Nautilus, and Change Without Change*, __ STANFORD TECH. L.J. __ (2015) (manuscript at 22-25).

evidence... is contrary to the rule that the interpretation should be based upon the contemporary understanding of a person having ordinary skill in the art."¹¹⁹ And Professors Anderson and Menell criticize relying just on the intrinsic evidence and instead endorse an approach that "place[s] greater emphasis on skilled artisans, inventors, patent attorneys, and patent agents in tracing the drafting of patent claim terms and their understanding to skilled artisans in the context of the particular patent."¹²⁰

The recent cases and scholarship favoring the general meaning approach to claim construction seem not to appreciate the beneficial effects this approach has for patent assertion entities. This trend is again inconsistent with the general tide of patent law, which aims to reduce the prevalence and power of patent assertion entities.

C. The Standard of Review, Forum Choice, and Patent Assertion Entities

1. How Deferential Review Benefits Patent Assertion Entities

The appropriate appellate standard of review for claim construction – the Federal Circuit's long-standing de novo standard or some more deferential standard – has received extensive attention over the past fifteen years.¹²¹ Despite the volumes of ink spilled, there has been little development of the connection between the standard of review and patent assertion entities. If anything, the ubiquitous assertion that more deferential review will increase certainty of patent scope¹²² could result in an assumption that deferential review is a remedy for patent assertion entities.

As I have explained elsewhere, more deferential appellate review of claim construction is unlikely to have a significant impact on certainty of claim scope.¹²³ Deferential review may improve to some extent the ex post certainty of claim construction after the district court has issued its claim construction. Even this is unlikely to be significant as long as the methodological split exists because the district judge's choice of methodology is a question of law subject to de novo review, even if the underlying claim construction is reviewed deferentially. More importantly,

¹¹⁹ Dennis Crouch, *Teva v. Sandoz: Partial Deference in Claim Construction*, PATENTLYO (Jan. 20, 2015), available at <u>http://patentlyo.com/patent/2015/01/partial-deference-construction.html</u>.

¹²⁰ J. Jonas Anderson & Peter S. Menell, Informal Deference: An Historical, Empirical, and Normative Analysis of Patent Claim Construction, 108 Nw. U. L. REV. 1, 68, 75 (2013).

¹²¹ See Part I.B.2, supra.

¹²² See Part I.B.2, supra.

¹²³ Greg Reilly, *Improvidently Granted: Why the Federal Circuit Chose the Wrong Claim Construction Issue for En Banc Review*, 80 U. CHI. L. REV. DIALOGUE 43 (2013).

deferential appellate review has no impact on the far more important question of ex ante unpredictability, *i.e.*, whether claim scope can accurately be predicted in advance of litigation. Thus, the likelihood that deferential review of claim construction will improve certainty of claim scope in a way that will affect patent assertion entities is low.

On the other hand, in two ways, deferential review of claim construction is likely to benefit patent assertion entities. First, as discussed in Part II.B.2, *supra*, deferential review incentivizes district judges to place greater reliance on the general meaning approach to claim construction and extrinsic evidence more generally.¹²⁴ The result is likely to be greater uncertainty and breadth of claim scope, the exact conditions in which patent assertion entities thrive.¹²⁵

Second, the more deferential standard of review provides greater power and discretion to the district judge.¹²⁶ Some may see this as a benefit of deferential review, as the Federal Circuit is often seen as too powerful and self-aggrandizing.¹²⁷ Similarly, some may believe that deferential review, and therefore less power for the Federal Circuit, will undermine patent assertion entities, since the Federal Circuit is often seen as pro-patentee.¹²⁸ However, empirical evidence demonstrates that, at least in recent years, the Federal Circuit used its de novo review power to the detriment of patentees. Professor Cotropia's study of Federal Circuit claim construction decisions between 2010 and 2013 found that "[l]ower court decisions where the patentee wins are more likely to be subject to a claim construction reversal that prompts a change in the case's outcome,"

¹²⁴ See also J. Jonas Anderson & Peter S. Menell, *Informal Deference: An Historical, Empirical, and Normative Analysis of Patent Claim Construction,* 108 Nw. U. L. REV. 1, 68, 75 (2013) (endorsing deferential review exactly because it will lead to greater emphasis on extrinsic texts and expert witnesses); Jason Rantanen, *Teva, Nautilus, and Change Without Change,* _____ STANFORD TECH. L.J. __ (2015) (manuscript at 22-25) (hoping that deferential review will lead to this result).

 $^{^{125}}$ See Part II.B.1, supra. This is true unless the incentives the Federal Circuit has to emphasize the intrinsic record, so as to increase its ability to review claim construction de novo under *Teva*, leads it to resolve the claim construction spilt in favor of the patent-only approach. See *id*.

¹²⁶ Peter Lee, The Supreme Assimilation of Patent Law (June 2015 manuscript at 37), <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2616412</u> (describing how *Teva* and other Supreme Court decisions "elevat[e] districts courts and the PTO in influence relative to the Federal Circuit").

¹²⁷ Peter Lee, The Supreme Assimilation of Patent Law (June 2015 manuscript at 37), <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2616412</u> (describing how Federal Circuit "tends to enhance its own power" and how de novo review of claim construction "allowed the Federal Circuit to assume greater power over a crucial aspect of patent litigation").

¹²⁸ Peter Lee, The Supreme Assimilation of Patent Law (June 2015 manuscript at 37), <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2616412</u> (describing Federal Circuit as "a pro-patent institution").

whereas "in cases where the patentee loses below...the claim construction affirmance rate is the highest."¹²⁹ These effects were strongest "in cases involving electronic, information technology, or business method patents,"¹³⁰ the very areas in which patent assertion entities are most prevalent. Thus, assuming more deferential review of claim construction results in fewer reversals, patentees, especially patent assertion entities, will benefit, since reversals under de novo review were concentrated in cases where the patentee won below in the technical areas where patent assertion entities are the most active.

This potential result of deferential review is exacerbated by the increasing recognition that judges in certain districts, especially the U.S. District Court for the Eastern District of Texas, seek to attract patent litigation by distorting their decisions in favor of the patentee (who chooses the forum), or "forum selling."¹³¹ As a result, 29% of 2014 patent cases were filed in the Eastern District of Texas,¹³² as were an astounding 44% of patent cases filed in the first half of 2015.¹³³ Patent assertion entities in particular prefer to litigate in the Eastern District of Texas,¹³⁴ To date, the Eastern District's primary means for attracting patent cases has been propatentee procedures.¹³⁵ However, increased deference to district court claim construction decisions makes substantive differences between districts on claim construction more important, as they would be more likely to withstand appellate scrutiny. This will provide even greater incentives for patentees, including patent assertion entities, to file in the districts most favorable to them.¹³⁶ It also could incentivize the Eastern

¹²⁹ Christopher A. Cotropia, *Is Patent Claim Interpretation Deference or Correction Driven*?, 2014 BYU L. REV. (forthcoming 2015) (Feb. 7, 2014 manuscript at 4), <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2265962</u>.

¹³⁰ Christopher A. Cotropia, *Is Patent Claim Interpretation Deference or Correction Driven*?, 2014 BYU L. REV. (forthcoming 2015) (Feb. 7, 2014 manuscript at 4), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2265962.

¹³¹ J. Jonas Anderson, *Court Competition for Patent Cases*, 163 U. PENN. L. REV. 631(2015); Daniel M. Klerman & Greg Reilly, *Forum Selling*, 89 S. CAL. L. REV. (forthcoming 2016), <u>http://ssrn.com/abstract=2538857</u>.

¹³² Daniel M. Klerman & Greg Reilly, *Forum Selling*, 89 S. CAL. L. REV. (forthcoming 2016), <u>http://ssrn.com/abstract=2538857</u>.

¹³³ Brian Howard, 2015 First Half Patent Case Filing Trends, LEXMACHINA (July 14, 2015), <u>https://lexmachina.com/2015-first-half-patent-case-filing-trends/</u> (finding 1387 of 3122 patent cases filed in first half of 2015 were filed in Eastern District of Texas).

¹³⁴ Government Accounting Office, Assessing Factors That Affect Patent Infringement Litigation Could Help Improve Patent Quality, Report No. GAO-13-465, at 24 (Aug. 2013) (finding that patent assertion entities "filed more lawsuits in the Eastern District of Texas than other types of plaintiffs" and that 39% of their cases were filed there compared to 8% of cases filed by other types of plaintiffs).

¹³⁵ Daniel M. Klerman & Greg Reilly, *Forum Selling*, 89 S. CAL. L. REV. (forthcoming 2016), <u>http://ssrn.com/abstract=2538857</u>.

¹³⁶ Brief for Intel Corp. et al. as Amici Curiae in Support of Affirmance, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831 (2015) (suggesting that patent

District of Texas, and other forum selling districts, to compete for patentees by offering them even more favorable (likely broader) claim construction decisions.

Rough empirical evidence suggests that the Eastern District of Texas already does so. The leading, or perhaps most extreme, example of the general meaning approach favored by patent assertion entities was Texas Digital Systems, Inc. v. Telegenix, Inc.,¹³⁷ a decision subsequently "renounced"¹³⁸ (even if not formally overruled) by the en banc Federal Circuit's 2005 *Phillips* decision.¹³⁹ The leading example of the patentfocused approach is probably Vitronics Corp. v. Conceptronic, Inc., a decision that was expressly reaffirmed by *Phillips*.¹⁴⁰ Unsurprisingly given their relative precedential status, Phillips was cited nine times more frequently than *Texas Digital* nationwide from 2006-2013 and *Vitronics* six times more frequently than Texas Digital. But in the Eastern District of Texas, Phillips was cited only four times more frequently than Texas Digital and Vitronics only three times more frequently than Texas *Digital.*¹⁴¹ Thus, while the Eastern District cites *Phillips* and *Vitronics* at rates comparable to elsewhere, it cites the patent-assertion-entity-friendly *Texas Digital* general meaning decision far more frequently than normal.¹⁴² This is consistent with, though hardly dispositive of, a conclusion that the Eastern District of Texas' claim construction decisions benefit patent assertion entities, decisions that are more likely to withstand appellate scrutiny under deferential review.

Thus, deferential review of claim construction is unlikely to reduce

¹³⁸ Kelly Casey Mullally, *Patent Hermeneutics: Form & Substance in Claim Construction*, 59 FLA. L. REV. 333, 358 (2007).

¹³⁹ Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

¹⁴⁰ 90 F.3d 1576 (Fed. Cir. 1996); Kelly Casey Mullally, *Patent Hermeneutics: Form & Substance in Claim Construction*, 59 FLA. L. REV. 333, 362 (2007).

¹⁴¹ *Phillips* was issued, and *Texas Digital* renounced and *Vitronics* reaffirmed, on July 12, 2005. My study started with January 1, 2006 to allow district courts to adjust to *Phillips*. Citations were calculated via Westlaw by entering the citation for each decision; clicking on the "Citing References" function; limiting to cases; limiting to Jan. 1, 2006-Dec. 31, 2013; limiting to district courts; limiting by "hide negative." For each decision, citations were then limited just to E.D. Tex and again limited to hide negative. Nationwide, there were 2832 cites to *Phillips*, 1995 cites to *Vitronics*, and 328 cites to *Texas Digital*. In the Eastern District of Texas, there were 437 cites to *Phillips*, 312 cites to *Vitronics*, and 107 cites to *Texas Digital*.

¹⁴² According to Lex Machina, 16.7% of claim construction orders from 2006-2013 are from the Eastern District of Texas. 15.4% of non-negative citations to *Phillips* and 15.6% of non-negative citations to *Vitronics* were from the Eastern District, but 32.6% of non-negative citations to *Texas Digital* were from the Eastern District. *See id.*

assertion entities are "especially likely to exploit forum-shopping opportunities" created by deferential review of claim construction).

¹³⁷ 308 F.3d 1193 (Fed. Cir. 2002); see also Kelly Casey Mullally, Patent Hermeneutics: Form & Substance in Claim Construction, 59 FLA. L. REV. 333, 354 (2007).

uncertainty in a way that will affect patent assertion entities. By contrast, it is likely to increase use of patent-assertion-entity friendly general meaning approach, as well as increase the power and importance of the district courts most favorable to patent assertion entities. Overall, deferential review of claim construction is good news for patent assertion entities. Unsurprisingly, the nation's leading technology companies (again, the most popular target of patent assertion entities) in recent years have bucked conventional wisdom in the patent community and argued for retention of the Federal Circuit's de novo review standard.¹⁴³

2. How Current Trends Benefit Patent Assertion Entities

Current claim construction trends favoring of patent assertion entities are clearest for the appellate standard of review. In *Teva v. Sandoz*, the Supreme Court rejected the Federal Circuit's de novo standard of review, holding instead that some measure of deference was appropriate in reviewing district court claim construction decisions. Specifically, the Court held that a district court's "subsidiary factual findings about th[e] extrinsic evidence... must be reviewed for clear error on appeal," though the Federal Circuit should "still review the district court's ultimate construction of the claim de novo."¹⁴⁴ "On its face, *Teva v. Sandoz* unquestionably altered the standard of review for claim construction, shifting it towards greater deference to the district courts."¹⁴⁵ Patent assertion entities are likely to benefit under this more deferential regime, as explained in the prior section.

Commentators have generally praised the Supreme Court's adoption of more deferential claim construction review.¹⁴⁶ Some commentators even have criticized the Federal Circuit for not vigorously implementing deferential review post-*Teva* and urged an expansive reading of the deferential review required by *Teva*.¹⁴⁷

¹⁴³ Brief of Google Inc. et al. as Amici Curiae in Support of Respondents, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831 (2015) (joined by Google, Dell, HP, Salesforce.com, Twitter, Yahoo!, Acushnet, eBay, Kaspersky Lab, Limelight Networks, Newegg, QVC, SAS Institute, and Xilink); Brief for Intel Corp. et al. as Amici Curiae in Support of Affirmance, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831 (2015) (joined by Intel, EMC, Facebook, Red Hat, and Verizon); Brief of Google Inc. et al. as Amicus Curiae in Support of Appellant, *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272 (Fed. Cir. 2014) (en banc) (joined by Google, Amazon, HP, Red Hat, and Yahoo!).

¹⁴⁴ Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., 135 S.Ct. 831, 841 (2015)

¹⁴⁵ Jason Rantanen, *Teva, Nautilus, and Change Without Change*, __ STANFORD TECH. L.J. __ (2015) (manuscript at 10).

¹⁴⁶ J. Jonas Anderson & Peter S. Menell, *Restoring the Fact/Law Distinction in Patent Claim Construction*, 109 NW. U. L. REV. ONLINE 187 (2015); Jason Rantanen, *Teva, Nautilus, and Change Without Change*, <u>STANFORD TECH. L.J.</u> (2015).

¹⁴⁷ Jason Rantanen, *Teva, Nautilus, and Change Without Change*, __ STANFORD TECH. L.J. __ (2015) (manuscript at 18-22).

Once again, the trends in claim construction – where increased deference to district court claim constructions will benefit patent assertion entities – are out of step with the trends in the rest of patent law, where concerns about patent assertion entities are rampant.

III. LESSONS FROM THE INTERSECTION OF CLAIM CONSTRUCTION AND PATENT ASSERTION ENTITIES

This Part turns from the descriptive to the normative. Part II described the overlooked connection between claim construction and patent assertion entities, as well as how patent assertion entities benefit from problems and trends in claim construction doctrine. This Part addresses what this descriptive account means for the patent system.

A. If You Care About Patent Assertion Entities, You Should Care About Claim Construction

A sometimes fierce debate exists within the patent community as to whether patent assertion entities are good or bad for the patent system.¹⁴⁸ This Essay does not take sides in that debate. Regardless of one's views of patent assertion entities, it is useful to recognize their connection to claim construction issues and trends.

For those who believe that concerns about patent assertion entities are overblown or that patent assertion entities play a beneficial role in the patent system, this Essay will probably be of little import. Perhaps (hopefully?) they will find the descriptive account interesting and recognition of the relationship between claim construction doctrine and patent assertion entities useful. However, they will be undisturbed by the fact that the issues and trends in claim construction help patent assertion entities, though perhaps (as I do¹⁴⁹) they will find the issues and trends in claim construction problematic in their own right unrelated to patent assertion entities.

On the other hand, for the majority of the patent community concerned (to some extent) about patent assertion entities, this Essay should serve as a wake-up call. Problems with claim construction are ignored in debates and reforms related to patent assertion entities. If anything, claim construction is treated as a solution, not a cause, of the

¹⁴⁸ See Part I.A, supra.

¹⁴⁹ See Greg Reilly, Completing the Picture of Uncertain Patent Scope, 91 WASH. U. L. REV. 1353 (2014); Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243 (2014); Greg Reilly, Improvidently Granted: Why the Federal Circuit Chose the Wrong Claim Construction Issue for En Banc Review, 80 U. CHI. L. REV. DIALOGUE 43 (2013).

"patent troll problem."¹⁵⁰ This Essay suggests that claim construction problems contribute to the effectiveness of patent assertion entities. More troubling, claim construction doctrine and commentary is moving in a direction that favors patent assertion entities. If patent assertion entities are as problematic as many in the patent community believe, then it is important to address the underlying problems of claim construction and reconsider the direction in which claim construction is moving. Those in the crosshairs of patent assertion entities – the nation's leading technology companies – seem to have reached this very conclusion.¹⁵¹

This Essay also contributes to debates over claim construction. At times, claim construction feels as if it is in a time warp, with the battle lines and arguments drawn in the early 2000s and little changed in the intervening years despite significant changes in the patent litigation landscape. Concerns about patent assertion entities appear in virtually all discussions of patent issues these days. But not claim construction. Claim construction is the one area immune from analysis about how the rise of patent assertion entities over the past decade has changed the patent landscape. Likewise, the dramatic concentration of patent cases in the Eastern District of Texas over the past decade plays little part in claim construction discussions. Commentators praise recent developments in claim construction, like the *Teva* decision, even as they acknowledge that the success of these developments depend on faithful implementation by district judges, which they assume will occur.¹⁵² This is a questionable assumption in the current patent litigation landscape, where approaching half of all patent cases are filed in a single district exactly because that district has consistently applied the law in a way to favor patentees, including patent assertion entities.¹⁵³

Those debating claim construction issues would be well-advised to consider the consequences for patent assertion entities of various approaches to claim construction. Some may argue that trends in claim construction rules like deferential review and the general meaning

¹⁵⁰ See Part I.C, supra.

¹⁵¹ Brief of Google Inc. et al. as Amicus Curiae in Support of Appellant 4, *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272 (Fed. Cir. 2014) (en banc) ("[T]he root causes of uncertainty in claim construction are vaguely drafted claims and contradictory claim-construction methodologies, not appellate review. Deference would not ameliorate those causes of uncertainty; it would make them worse. Deference would . . . incentivize [district judges] to rely more on the extrinsic evidence presented in any given case, and less on what a patent actually says, in hopes of securing greater deference.").

¹⁵² J. Jonas Anderson & Peter S. Menell, *Restoring the Fact/Law Distinction in Patent Claim Construction*, 109 Nw. U. L. REV. ONLINE 187, 197-199 (2015).

¹⁵³ See Part II.C.1, supra; see also J. Jonas Anderson, Court Competition for Patent Cases, 163 U. PENN. L. REV. 631(2015); Daniel M. Klerman & Greg Reilly, Forum Selling, 89 S. CAL. L. REV. (forthcoming 2016), http://ssrn.com/abstract=2538857.

approach are warranted for reasons unrelated to patent assertion entities. That certainly could be true, though I have previously doubted it.¹⁵⁴ Regardless, the consequences for patent assertion entities are a cost of these trends that should be weighed in any cost-benefit analysis of claim construction rules.

This is not to say that claim construction doctrine should be applied differently in cases brought by patent assertion entities or designed in a particular way solely to combat patent assertion entities. Rather, I agree with Professor Lemley and Douglas Melamed that "[p]atent trolls alone are not the problem; they are a symptom of larger problems with the patent system."¹⁵⁵ This Essay builds on the Lemley and Melamed's *Missing the* Forest for the Trolls by suggesting that the current state and trends of claim construction are one of those "larger problems" of which patent assertion entities are a "symptom." As Lemley and Melamed conclude, "[e]xposing the larger problems allows us to contemplate changes in patent law that will actually tackle the underlying pathologies of the patent system and the abusive conduct they enable."156 Current claim construction issues and problems are problematic in their own right. The positive consequences for patent assertion entities cast even further doubt on the current state of claim construction.

Finally, this Essay only argues that reversing current trends in claim construction could help address success and influence of patent assertion entities, not that it is the only way of doing so. It is possible that other patent reforms will successfully combat patent assertion entities, without the need for any changes to the general doctrine or trends in claim construction. For example, perhaps venue reform that limits the ability to file in the Eastern District of Texas will undermine patent assertion entities.

Similarly, Professor Lemley's suggestion for limiting software functional claiming could be sufficient to combat patent assertion entities. Over half of patent assertion entity cases involve software patents,¹⁵⁷ and estimates are that 100% of the software claims asserted by patent

¹⁵⁴ See Greg Reilly, Completing the Picture of Uncertain Patent Scope, 91 WASH. U. L. REV. 1353 (2014); Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243 (2014); Greg Reilly, Improvidently Granted: Why the Federal Circuit Chose the Wrong Claim Construction Issue for En Banc Review, 80 U. CHI. L. REV. DIALOGUE 43 (2013).

¹⁵⁵ Mark A. Lemley & Douglas Melamed, *Missing the Forests for the Trolls*, 113 COLUM. L. REV. 2117, 2121 (2013)

¹⁵⁶ Mark A. Lemley & Douglas Melamed, *Missing the Forests for the Trolls*, 113 COLUM. L. REV. 2117, 2121 (2013)

¹⁵⁷ James Bessen et al., *The Private and Social Costs of Patent Trolls*, REGULATION, 26, 29 (Winter 2011-2012) (finding 62% of patents asserted in patent assertion entity cases were software patents).

assertion entities use functional claim language.¹⁵⁸ To some extent, Professor Lemley's proposal is consistent with the analysis in this Essay. This Essay suggests that persistent split in the Federal Circuit's claim construction precedent and the continued vitality of the general meaning approach to claim construction are significant factors in the uncertainty and overbreadth of claim scope on which patent assertion entities rely.¹⁵⁹ Professor Lemley would create special rules for interpreting software functional claims that are more consistent with the patent-focused approach than the general meaning approach. Doing so would mitigate the problems created by the persistence of both the claim construction split generally and the general meaning approach specifically, perhaps sufficiently to severely undermine patent assertion entities' prospects of success.

For several reasons, however, it is still important to recognize the connection between general claim construction problems and patent assertion entities. First, a significant portion of patent assertion entity cases do not involve functional software claims, approximately 40%, and would be unaffected by Professor Lemley's proposal.¹⁶⁰ Although the en banc Federal Circuit recently expanded the circumstances in which claims will be deemed so-called "means-plus-function" claims that are limited to the corresponding structure disclosed in the specification,¹⁶¹ Professor Lemley's broader proposal to limit all functional claims to the means disclosed for performing the function disclosed in the specification has not been adopted. Third, even if Professor Lemley's proposal were adopted, the line between functional and non-functional claims is murky. Skilled claim drafters are likely to find creative ways to write claims that are the equivalent of functional claims while avoiding the "functional" label and the special claim construction rules that would come with it.

B. Claim Construction Problems Undermine Other Efforts to Combat Patent Assertion Entities

To this point, I have focused on how the problems and trends in claim construction directly benefit patent assertion entities. But claim construction doctrine is relevant to the debate over patent assertion entities for another reason. The problems and trends in claim construction indirectly benefit patent assertion entities by limiting the likely effectiveness of many of the leading proposals to combat patent assertion entities.

 ¹⁵⁸ Mark A. Lemley, *Functional Claiming*, 2013 WISCONSIN L. REV. 905, 920 n.65.
 ¹⁵⁹ See Part II.A, B., *supra*.

¹⁶⁰ James Bessen et al., *The Private and Social Costs of Patent Trolls*, REGULATION, 26, 29 (Winter 2011-2012).

 $^{^{161}}$ Williamson v. Citrix Online, LLC, No. 2013-1130 (Fed. Cir. June 16, 2015) (en banc in relevant part).

Most proposals to combat patent assertion entities are motivated by the belief that patent assertion entities bring weak claims and that mechanisms are needed to deter or weed out these weak claims. Proposals abound to weed out these weak, meritless, or frivolous claims, such as heightened pleading requirements, fee shifting, and Rule 11 sanctions. These proposals generally require a determination that the claim lack merit when brought. This is obviously true of heightened pleading It also true of Rule 11 sanctions, which require the requirements. contentions in the complaint to have factual and legal support at the time the attorney signs and files the complaint. Likewise, proposals that would require the nonprevailing party to pay the attorneys' fees of the prevailing party would excuse fee shifting if "the position and conduct of the nonprevailing party or parties were reasonably justified in law and fact," or something significantly equivalent.¹⁶²

However, under the current state of claim construction, requirements like "reasonably justified" and "plausible" are very low thresholds for the patentee to pass. An issued patent benefits from the statutory presumption of validity, which likely is sufficient for a plaintiff to be "reasonably justified" or "plausible" in believing the patent is not invalid. It is widely recognized that claim construction is normally decisive as to the infringement question. In light of the issues with claim construction discussed above, how difficult is it really for a patentee to identify a "reasonably justified" or "plausible" claim construction (and therefore infringement) position? The patentee has two equally valid claim construction methodologies from which to choose, methodologies that result in differing claim scope. As a result of the continued vitality of the general meaning approach, the patentee need only be able to find a dictionary, scientific text, or paid expert willing to support its claim construction position in order for it to be "reasonably justified" and "plausible."

The uncertainty and breadth of potential claim constructions under current jurisprudence gives the patentee a lot of leeway in filing patent infringement cases. The patentee will almost always be able to state a plausible, good faith claim at the time of filing because the range of potential claim constructions is so great. As a result, there is a good chance that efforts to address the patent assertion entity "problem" that rely on identifying claims that lack merit at the time of filing are likely to be futile.

CONCLUSION

For too long, the vigorous debates over patent assertion entities and claim construction have operated independent of each other. Current problems and trends in claim construction have important consequences

¹⁶² H.R. 9, 114th Cong., 1st Session, at 6 (as introduced in the House, Feb. 5, 2015).

for debates over patent assertion entities, as they tend to help the litigation position of patent assertion entities. Those concerned about patent assertion entities would be well-advised to reconsider the direction that claim construction is moving. Those concerned about claim construction would be well-advised to consider the consequences various claim construction rules have for patent assertion entities. This Essay contributes to both the debates over patent assertion entities and the debates over claim construction by recognizing the important, but overlooked, links between claim construction and patent assertion entities.