

**A BROKEN PATENT SYSTEM:
HOW TO ADDRESS THE CLAIM
CONSTRUCTION PROBLEM IN
LITIGATION**

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INTRODUCTION

The process for patent litigation is flawed because the current regime for patent claim construction provides poor notice to a litigant. This flaw is punctuated by the egregious claim construction reversal rate of 32.5% at the U.S. Court of Appeals for the Federal Circuit (“Federal Circuit”).¹ To understand how the patent process came to this crossroads, it is helpful to trace the progression of the patent system along three lines: case law, scholarship in academia, and legislation.

Two different lines of Federal Circuit case law track two different

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1. David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223, 248 (2008).

facets of notice to litigants: the *Markman-Cybor* line tracks the amount of deference the Federal Circuit accords to the district courts (the 94 district courts along with the ITC and the USPTO funnel into the singular Federal Circuit for patent subject matter), and the *Telegenix-Phillips* line details the Federal Circuit's methodology for claim construction.

When the Federal Circuit accords no deference to a district court, then a litigant has poor notice because the method of claim construction in a district court is never an indicia of the method of claim construction in a given Federal Circuit tribunal. Under this regime, a litigant may make one claim construction argument in a district court and a wholly different claim construction argument at the Federal Circuit. The lack of deference to the district court results in a claim construction regime that is disjointed, and the district court-Federal Circuit dynamic adds uncertainty to patent litigation.

For methodology of claim construction, the clearer the procedure is for determining the scope of a patent, the better a litigant can predict how a court will construe the ordinary meaning of a claim term. In addition to clarity of methodology choice, the methodology itself affects the notice to a litigant. The procedural method of claim construction favors objective resources like dictionaries and provides better notice while the holistic method of claim construction favors subjective resources like the patent's description of the invention and provides better accuracy, *i.e.* fidelity to the inventor's intent.

The fluid case law of the Federal Circuit has engendered corresponding literature publication in academia. Professor Moore conducted empirical research to help frame how jury trials differ from bench trials in patentee win rates,² how litigants forum shop,³ and how juries determine willful infringement differently from judges.⁴ However, it was Professor Moore's empirical work in 2005 that shed light on the poor notice that litigants suffer when facing the patent system. In her 2005 work, Professor Moore found that the claim construction reversal rate at the Federal Circuit was 34.5%.⁵

These informative empirical studies spawned many proposals, both subtle and extreme, on how to fix the patent system. A common refrain among academics is for specialized trial court judges at the district court

2. Kimberly A. Moore, *Judges, Juries, and Patent Cases--An Empirical Peek Inside the Black Box*, 99 MICH. L. REV. 365, 408-09 (2000).

3. Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation?*, 79 N.C. L. REV. 889, 893-94 (2001).

4. Kimberly A. Moore, *Empirical Statistics on Willful Patent Infringement*, 14 FED. CIR. B.J. 227, 232 (2004).

5. Kimberly A. Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 LEWIS & CLARK. L. REV. 231, 239 (2005).

level.⁶ The theory is that specialized trial court judges will gain expertise and hopefully reduce the claim construction reversal rate at the Federal Circuit.⁷ Other scholars have suggested a single specialized trial court,⁸ additional courts of appeals,⁹ and disclosure of extrinsic sources on the cover of the patent to interpret its claims.¹⁰

Reform to the patent system arrived in the America Invents Act (“AIA”), which President Obama signed into law on September 16, 2011. The AIA amounted to front-end administrative changes at the USPTO, and it did little to affect downstream issues such as the poor notice to a litigant in the form of an egregious claim construction reversal rate at the Federal Circuit. The AIA’s most fundamental change to the patent system was the switch from the first-to-invent to a first-to-file system.¹¹ This change trickles down to other aspects of the patent prosecution process. For example, interference hearings to determine priority of inventorship are moot. Yet these front-end changes to the patent process do not directly reach the problem of a 32.5% claim construction reversal rate at the Federal Circuit.

Recent Federal Circuit case law, academic literature, and the AIA have not improved the poor notice that a litigant has at the Federal Circuit. The Federal Circuit case law leaves much to be desired because the Federal Circuit reviews the district court’s claim construction *de novo*. A litigant has to guess which methodology a district court will use in its claim construction, and then a litigant has to guess which methodology the Federal Circuit will use.

In this Note, I propose that the USPTO should annually publish a USPTO dictionary to reduce the egregious claim construction reversal rate at the Federal Circuit, and the procedural method of claim construction is the best method to realize notice benefits from an annually published USPTO dictionary. A clear choice in methodology along with the methodology itself will provide better notice to a litigant. In addition, a clear and repeatable claim construction process will improve the dynamic between the district courts and the Federal Circuit, engendering more deference to the district courts in matters of claim construction.

6. See, e.g., Donna M. Gitter, *Should the United States Designate Specialist Patent Trial Judges? An Empirical Analysis of H.R. 628 in Light of the English Experience and the Work of Professor Moore*, 10 COLUM. SCI. & TECH. L. REV. 169, 173 (2009).

7. *Id.*

8. Moore, *supra* note 3, at 932-33.

9. Craig Allen Nard & John F. Duffy, *Rethinking Patent Law’s Uniformity Principle*, 101 NW. U. L. REV. 1619, 1625 (2007).

10. Joseph Scott Miller & James A. Hilsenteger, *The Proven Key: Roles and Rules for Dictionaries at the Patent Office and the Courts*, 54 AM. U. L. REV. 829, 838 (2005).

11. America Invents Act, S. 23, 112th Cong. (2011), available at <http://www.govtrack.us/congress/billtext.xpd?bill=s112-23>.

I. HOW THE CURRENT PATENT SYSTEM CAME TO BE

A. Case Law

The Federal Circuit case law affects the notice that a litigant receives because the case law outlines the Federal Circuit's level of deference to the district courts and the Federal Circuit's methodology for claim construction. The *Markman-Cybor* line of case law tracks the evolution of the district court-Federal Circuit dynamic from deference to the district courts' determination to *de novo* review. The *Telegenix-Phillips* line of case law traces the methodology, either procedural or holistic, that the Federal Circuit applies to claim construction.

i. Markman-Cybor

In *Markman*, the Federal Circuit held that claim construction is a matter of law, and judges, not juries, should interpret claim terms.¹² The Federal Circuit argued that interpreting patents is more analogous to statutory interpretation, which is an objective process, rather than contract interpretation, where a fact-finder tries to discern the subjective intent of the parties.¹³ The Federal Circuit also argued that the subjective intent of the patentee is "of little or no probative weight in determining the scope of a claim (except as documented in the prosecution history)."¹⁴ Instead, the Federal Circuit argued that the construction of the claim term should be from the perspective of a person who has "ordinary skill in the art at the time of the invention . . ."¹⁵ Thus, the Federal Circuit side-stepped any concerns that judges would be making factual determinations.

The Supreme Court granted *certiorari* and agreed with the Federal Circuit's result, but it used policy arguments rather than a statutory analogy to determine that patent claim construction is a question of law for judges, not juries. The Court did a historical account of the patent system and determined that the history did not provide "clear answers."¹⁶ Therefore, the Court turned to "functional considerations."¹⁷ The Court stated that claim construction is a specialty that is better suited for judges rather than "jurors unburdened by training in exegesis."¹⁸ In addition, the court thought that having judges determine claim construction would pull the analysis out of the juror's black box, and this would provide more

12. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 983-84, 987 (Fed. Cir. 1995).

13. *Id.* at 987.

14. *Id.* at 985.

15. *Id.* at 986.

16. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388 (1996).

17. *Id.*

18. *Id.*

uniformity for the patent system and better notice to litigants.¹⁹

The Federal Circuit took the Court's holding in *Markman* to its logical ends in *Cybor*. In *Cybor*, the Federal Circuit held that its judges should review district court claim constructions *de novo* because claim construction is a matter of law.²⁰ After *Cybor*, the Federal Circuit accords no deference to a district court judge's claim construction.

While the holdings in *Markman* and *Cybor* met some functional considerations of claim construction, these holdings introduced a new problem: a litigant has poorer notice and is less certain of an outcome in a patent case because the "main event" is now at the appellate level.²¹ District court judges are at the mercy of Federal Circuit review, which, as discussed below, is a moving target at best.

ii. Telegenix-Phillips

If litigants are to have proper notice, the various players in the patent system need a methodology with repeatability. The *Telegenix-Phillips* line of case law tracks the moving target that is the Federal Circuit's methodology of claim construction interpretation.

Before wading into the background of the *Telegenix-Phillips* line of case law, it is prudent to precisely define procedural and holistic claim construction. Professors Wagner and Petherbridge defined procedural claim construction as a method that gives primary weight to the ordinary meaning of the claim language itself.²² Therefore, the person who is constructing the claim would turn to evidence extrinsic to the patent itself, such as a dictionary, to discern the ordinary meaning of a claim term. If after utilizing extrinsic sources the claim term still has ambiguity, then the person would turn to the evidence that is intrinsic to the patent, such as the specification, to determine the context in which the claim term in question is used, and then decide what the claim term means.

In contrast, holistic claim construction places weight on the context in which the patent was written. Therefore the person who is construing the claim would turn to evidence intrinsic to the patent itself to discern the meaning of the claim term. If, after the intrinsic sources are depleted, the claim term's meaning is still not defined, then the person may turn to sources extrinsic to the patent to determine the meaning of the claim term in question.

19. *Id.* at 309.

20. *Cybor Corp. v. FAS Techs.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998).

21. *See Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

22. R. Polk Wagner & Lee Petherbridge, *Did Phillips Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence*, INST. FOR L. & ECON., Research Paper No. 11-27, 7 (2011).

Procedural claim construction provides better notice to a litigant because extrinsic resources objectively discern the ordinary meaning of a claim term. From the point of view of a litigant, it is easier to predict how a judge will utilize dictionaries to determine the ordinary meaning of a claim term than it is to predict how a judge will interpret the context – specification and wrapper – in light of which a claim term should be viewed.

Regarding case law, in 1996 the Federal Circuit decided *Vitronics*, in which the court took a holistic stance on claim construction methodology.²³ The court ruled that a court should first look to intrinsic evidence such as the claim's themselves, the specification, and the wrapper to determine the claim term's ordinary meaning.²⁴ Only if there is remaining ambiguity should a court resort to extrinsic evidence such as dictionaries.²⁵ In *Vitronics*, the Federal Circuit reversed the district court's use of extrinsic evidence because the intrinsic evidence left no ambiguity in a patent's claim term.²⁶

Since the Federal Circuit decided *Vitronics* in 1996, it slowly tracked toward a more procedural method of claim construction where extrinsic evidence such as dictionaries was not as taboo as it once was. This march towards a procedural method of claim construction reached a high water mark in 2002 when a Federal Circuit tribunal fully endorsed a procedural method of claim construction in *Telegenix*. Here, the Federal Circuit outlined a method of claim construction where, in order to determine the ordinary meaning of a claim term, the court *must* first look to extrinsic evidence such as dictionaries.²⁷ Only if there is ambiguity should the court look to intrinsic evidence.²⁸ The primary concern of the *Telegenix* court was that by going to the intrinsic evidence first, the claim constructor would read limitations into the claims themselves that the inventor never intended.²⁹ The court reasoned that by using a procedural method, no unintended limitations will be read into the claims.³⁰ In addition, the *Telegenix* court noted that its new endorsement of the procedural method of claim construction did not override the lexicographer rule where an inventor can specify his or her own definitions in the patent's specification.³¹

The march towards procedural claim construction came to an abrupt

23. *Vitronics*, 90 F.3d at 1582.

24. *Id.*

25. *Id.* at 1583.

26. *Id.*

27. *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202-03 (Fed. Cir. 2002).

28. *Id.* at 1203.

29. *Id.* at 1204.

30. *Id.* at 1205.

31. *Id.* at 1204.

halt in 2005 when the Federal Court decided *Phillips*. Here, the Federal Circuit considered the *Telegenix* decision, and it proffered arguments against procedural claim construction. The *Phillips* court started with a nod to the *Telegenix* court's concern of reading limitations into the patent's claims.³² However, the Federal Court argued the procedural method put too much emphasis on extrinsic evidence and not enough on intrinsic evidence.³³ The *Phillips* court was worried that extrinsic evidence determines the meaning of claim terms in the abstract, not in the context of the patent.³⁴ The court also noted that dictionaries are general in nature, not necessarily from the perspective of one skilled in the art, and dictionaries often contain multiple meanings for the same word.³⁵ In the end, the *Phillips* court concluded that dictionaries were still important but not as important as the court in *Telegenix* claimed they were.³⁶

In sum, the Federal Circuit has arrived at no deference to the district courts and a half-hearted endorsement of holistic claim construction in the *Markman-Cybor* and *Telegenix-Phillips* case lines, respectively. As a result, a litigant must guess which methodology the district court judges will use and which methodology the Federal Circuit will use upon appeal.

B. Scholarship in Academia

With such fluid and ever-changing case law at the Federal Circuit, the output from academia on the topic of patent law was rich in the post-*Markman* era. The scholarship prompted several researchers to take empirical looks at the Federal Circuit, and, accordingly, the scholars proposed reforms based on the empirical results.

i. Empirical Analyses

Kimberly Moore led the empirical charge against the Federal Circuit with her research that showed a 34.5% claim construction reversal rate at the Federal Circuit.³⁷ With more recent data, Professor Schwartz demonstrated that the claim construction reversal rate at the Federal Circuit has decreased to 32.5%, but remains high.³⁸ Professor Schwartz went further in his study, and he tried to understand why the claim construction reversal rate was so high. He determined that the

32. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005).

33. *Id.*

34. *Id.*

35. *Id.* at 1321.

36. *Id.* at 1324.

37. Moore, *supra* note 5, at 234.

38. Schwartz, *supra* note 1, at 248.

teacher-learner dynamic between the Federal Circuit and the district courts is broken.³⁹

Within the hierarchy of the U.S. federal court system, when an appellate level court rules on a particular issue, lesser courts will apply the new or clarified rule to future cases. Therefore, case law under the appellate court is standardized on the pertinent issue. In patent law, even after a particular district court judge has his or her case appealed and overruled, that particular district court judge's claim construction reversal rate at the Federal Circuit does not improve.⁴⁰ This leads to the conclusion that either the Federal Circuit is not promulgating clear case law or the district court judges are not getting the message,⁴¹ and thus, the claim construction reversal rate at the Federal Circuit remains high.

Professor Joseph Miller and student James Hilsenteger delve deeper into claim construction, and they do an empirical study of how the Federal Circuit uses dictionaries. Professor Miller's research demonstrated that the Federal Circuit has increasingly turned to dictionaries since the *Markman* decision. The years 1996 to 1999 yielded an average of 11.75 instances of dictionary use by the Federal Circuit, and the years 2000 to 2003 yielded an average of 31.24 instances of dictionary use by the Federal Circuit.⁴² Important caveats to go along with these figures include: the generally rising number of patent cases through time, and these figures were compiled just before the *Phillips* decision, which checked the procedural method of claim construction and the use of dictionaries.

Professor Miller also compiled data on which dictionaries the judges on the Federal Circuit use and on the variations of technically trained judges versus non-technically trained judges. Professor Miller determined that the Merriam Webster family of dictionaries account for 38.4% of citations to any source.⁴³ Also, Professor Miller determined that judges with technical backgrounds are more likely to turn to technical treatises for claim interpretation.⁴⁴

Professor Miller uses his finding to bolster arguments in favor of a procedural method of claim construction, which is discussed below, but the figures also ground conversations, proposals, and publications in hard data. The Federal Circuit did in fact trend towards a procedural method of claim construction after *Markman*. Professor Lemley's updated reversal rate of 32.5% is a decrease from Professor Moore's original determination of 34.5%. This decrease is likely statistically significant,

39. *Id.* at 225-26.

40. *Id.* at 252-53.

41. *Id.* at 225-26.

42. Miller & Hilsenteger, *supra* note 10, at 859.

43. *Id.* at 862.

44. *Id.* at 864-65.

but there are many plausible explanations besides procedural claim construction providing better notice to litigants.

ii. Proposed Reforms

Professors across academia have proposed many different reforms to the patent system in order to improve either the district court-appellate court dynamic or claim construction methodology, i.e., the two aforementioned facts of notice for litigants. Proposed reforms include: a single trial court for patent cases, specialized trial court judges in existing district courts, additional courts of appeals, and USPTO rules that require a patentee to specify the dictionary or treatise of choice for claim term interpretation.

In her 2001 paper, Professor Moore argued that a single trial court for patent cases could alleviate some ills in the patent system like forum shopping, inconsistency among the 94 district courts, and the single patent trial court would develop expertise.⁴⁵ In 2002, Professor Rai published a paper in favor of specialized trial courts for patent cases, and she attacks the status quo from a legal fiction angle. The legal fiction is that determining claim construction is inherently partially factual, not a pure matter of law per *Markman*.⁴⁶ Rai argues that it is too much of a stretch to believe the legal fiction that a generalist judge can assume the perspective of a person who is skilled in the art.⁴⁷ Rai notes that a highly specialized trial court might entrain more deference from the Federal Circuit than the currently low amount of deference the trial courts receive in the aftermath of *Markman*.⁴⁸

However, the prospect never gained traction because of some fatal defects in a specialized trial court for patent cases. Ostensibly, proffered benefits of a single trial court system like accumulated expertise would improve notice. A single trial court that is better aligned with the Federal Circuit would reduce the disconnect that currently exists between the district court and the Federal Circuit. However, a 2008 paper by Professor Schwartz shattered the notion that a trial court judge can accumulate expertise in patent cases.⁴⁹ Professor Schwartz empirically demonstrated that trial court judges who have had their patent cases reversed at the Federal Circuit do not improve their subsequent claim construction reversal rate.⁵⁰ In addition, proposals for a single trial court for patent cases do not address practical limitations like a hypothetical,

45. Moore, *supra* note 3, at 932-33.

46. Arti K. Rai, *Specialized Trial Courts: Concentrating Expertise on Fact*, 17 BERKELEY TECH. L.J. 877, 882 (2002).

47. *Id.* at 881-82.

48. *Id.* at 880.

49. Schwartz, *supra* note 1, at 258-59.

50. *Id.* at 252.

independent inventor in Alaska who has to travel to Washington D.C. just to litigate. The concept of a single trial court for patent cases never gained much traction in academia.

Next, authors in academia have proposed specially designated judges within the existing district court structure. Professor Gitter drew an analogy to the English patent system where patent cases exist in specialized trial courts.⁵¹ Professor Gitter noted that the US and the English patent systems were largely the same, but the English system's claim construction reversal rate at the appellate level is half of the reversal rate in the US system.⁵² Professor Gitter traces this result to one difference between the two systems: the fact that the English system has a specialized trial court judges.⁵³ However, the proposal for specialized trial court judges has the same accumulated knowledge defect as the proposals for specialized trial courts; Professor Schwartz demonstrated that trial court judges do not accumulate knowledge.⁵⁴ Moreover, within the Gitter paper there are additional differences between the US and English patent systems that might account for the difference in results.⁵⁵

Regardless of the Schwartz empirical study, proposals for specialized trial court judges has gained traction to a certain degree within academia as well as some traction outside of academia. There is currently a pilot program in place in fourteen district courts that will "enhance expertise in patent cases among U.S. district judges."⁵⁶

A more radical solution is to add more courts of appeals to join the Federal Circuit at the appellate level. Professors Nard and Duffy suggest that one of the weaknesses in the current patent system is the fact that there is only one appellate court; they suggest that a single appellate court swings too far in the direction of uniformity.⁵⁷ The professors put forward the notion that multiple courts of appeals result in more robust case law. A single court of appeals suffers from a dearth of ideas. Multiple courts of appeals would cede short-term volatility, i.e. poor short-term notice, but in the long-term the case law would be less volatile because the appellate case law would be a product of consensus, not a decree from the singular Federal Circuit.⁵⁸ When the Federal Circuit hands down a decision, it is bound by that decision unless it overturns its own case law or the Supreme Court grants *certiorari*. This makes the

51. Gitter, *supra* note 6.

52. *Id.* at 183, 191.

53. *Id.* at 191-92.

54. Schwartz, *supra* note 1, at 225-26.

55. Gitter, *supra* note 6, at 193-94.

56. Karen Redmond, *District Courts Selected for Patent Pilot Program*, UNITED STATES COURTS (June 7, 2011), http://www.uscourts.gov/news/newsview/11-06-07/District_Courts_Selected_for_Patent_Pilot_Program.aspx.

57. Nard & Duffy, *supra* note 9, at 1622.

58. *Id.* at 1623-24.

case law more brittle according to Professors Nard and Duffy. Adding more courts of appeals is certainly radical, and it has not garnered a foothold in academia.

Finally, Professor Miller attacks the source, the USPTO, and suggests that patentees should make additional disclosures that appear on the face of the patent. Professor Miller proposes that patents should contain: (1) the field of art, (2) all problems the claimed invention helps solve, (3) a lexicon of all claim terms that the applicant defines differently from the person skilled in the art, and (4) a list of preferred objective reference sources.⁵⁹

Many of these proposals would improve notice to litigants because they serve to limit the domain of possible interpretations of the scope of a patent. Certainly, a patentee could list a vague field of art, and the practical effect of this requirement would be negligible. However, requirements like listing preferred objective reference sources would have teeth.

Professor Miller demonstrates that the major families of dictionaries have different methods of defining words and that appeals to the Federal Circuit have turned on the court's choice of dictionary.⁶⁰ If a patentee had to specify which dictionary he or she was using, then courts would not have to make subjective choices on which dictionary to use. Generally, Professor Miller's proposals favor a procedural method of claim construction, and his proposals aim to provide better notice for litigants.

The empirical studies of researchers, particularly Professor Moore, ground the patent debate in cold truths. The claim construction reversal rate at the Federal Circuit is egregious, and it continues to be so. Also, the Federal Circuit has trended towards procedural claim construction with its increasing use of dictionaries in the 2000s. However, that data was collected prior to the *Phillips* decision.

With the debate centering on cold truths, the professoriate has suggested numerous proposals for patent reform. The proposals exist on a sliding scale: the more radical the proposal, the less certain one can be of its outcome. At the extreme, the Nard and Duffy proposal for more courts of appeals is radical, and the outcome is uncertain because there is no reference for such a drastic move. In contrast, Professor Miller's proposal for having patentees specify which field of art the patent exists in is incremental at best, and as such, any resulting change might be negligible. The proposals from academia were numerous, but when Congress decided on patent reform, they did not take to heart many of

59. Joseph Scott Miller, *Enhancing Patent Disclosure for Faithful Claim Construction*, 9 LEWIS & CLARK L. REV. 177, 183-84 (2005).

60. Miller & Hilsenteger, *supra* note 10, at 877.

academia's suggestions.

C. America Invents Act

President Obama signed the AIA into law on September 16, 2011. The AIA's primary change to the patent system was the switch from a first-to-invent system to a first-to-file system.⁶¹ This switch has implications for prior art, interferences proceedings, grace periods, and prior use rights.⁶² However, the AIA did not reduce the poor notice to litigants at the litigation stage of the patent system.

Filing occurs later than the actual invention so the prior art in a first-to-file system is more expansive. This could lead to a causal chain where a patent's scope is narrower, and the patent may have less ambiguity as a result. Ambiguity, or uncertainty, is the downstream problem identified for litigants so a less ambiguous patent may lead to better notice for litigants.

Other effects of the first-to-file system include no more interference proceedings to determine who the first inventor is, which is incidental to the first-to-invent system. The first-to-file system also narrows the one-year grace period for disclosures.⁶³ These changes amount to front-end house cleaning that will reduce the patent backlog at the USPTO, which stands at about 1,200,000 applicants.⁶⁴

In sum, the AIA missed the boat when it came to improving notice to litigants. Some of the AIA's changes like the expanded prior art may or may not improve downstream notice at the litigation stage, but the primary goal was to alter the patent system at the USPTO, not the district courts or the Federal Circuit.

The patent system currently provides poor notice to litigants. The Federal Circuit accords no deference to district courts on the matter of claim construction, and the Federal Circuit does not decree a particular method of claim construction. Researchers in academia have conducted empirical studies that show how poorly the current patent regime performs at the litigation stage: 32.5% claim construction reversal rate at the Federal Circuit.⁶⁵ Researchers in academia also proposed reforms, both subtle and extreme, to cure the failing patent system. Recently, the federal government enacted legislation that makes upstream changes to the patent system at the USPTO, but the AIA does not address the

61. *Patents Examination*, U.S. PATENT & TRADEMARK OFF., http://www.uspto.gov/aia_implementation/patents.jsp.

62. *Id.*

63. *Id.*

64. John Schmid, *Patent Backlog Hinders Nation's Job Creation: When Innovative Ideas Sit in a Pile, Start-Ups Never Get Started*, JSONLINE (Jan. 9, 2011), <http://www.jsonline.com/business/114839694.html>.

65. Schwartz, *supra* note 1, at 248.

downstream issues that plague patent litigation.

II. AN ANNUALLY PUBLISHED USPTO DICTIONARY TO IMPROVE NOTICE

The procedural method of claim construction should be the method to interpret claim terms, and an annually published USPTO dictionary would greatly improve notice to a litigant. An annually published USPTO dictionary would (A) need to fit into the existing patent law system, (B) abrogate the Federal Circuit's arguments in *Phillips*, (C) address Professor Miller's concerns about centralized power at the USPTO, and (D) even if the Federal Circuit fully endorsed a procedural method of claim construction, the dictionary would thread an objective line between the Federal Circuit and the 94 district courts.

A. How a USPTO Dictionary Would Work in the Patent System

An annually published USPTO dictionary would fit within the existing patent system and offer notice benefits that did not exist before. Regarding the Federal Circuit-district court facet of notice (described in the *Markman-Cybor* line of cases), a USPTO dictionary normalizes claim construction resources across the various players in the patent system: litigants, the USPTO, district courts, and Federal Courts. Likewise, regarding the specific claim construction facet of notice (described in the *Telegenix-Phillips* line of cases), a litigant now has several sources in front of him or her to determine the scope of a patent: the claims, the specification, the wrapper, and the USPTO dictionary. However, for the USPTO dictionary to become a reality, the USPTO must resolve the logistics of such a venture as well as how the USPTO Dictionary would interact with existing rules such as the lexicographer rule.

As a practical matter, the USPTO would have a massive task of publishing an initial dictionary and then maintaining annual publications thereafter. However, the task has been done before: there is an existing, diffuse body of technical dictionaries. For example, a single professor, Phillip Laplante, published the *Comprehensive Dictionary of Electrical Engineering*.⁶⁶ Likewise, McGraw-Hill publishes the *Dictionary of Scientific and Technical Terms*.⁶⁷ Therefore, it is not an insurmountable task to generate this type of publication.

Another ground-level concern is the financing of such an

66. See PHILLIP A. LAPLANTE, *COMPREHENSIVE DICTIONARY OF ELECTRICAL ENGINEERING* (1998).

67. MCGRAW-HILL PROFESSIONAL, *DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS* (6th ed. 2002).

undertaking. Access to expert knowledge in a wide range of technical fields as well as the publication of the USPTO dictionary will require capital. The USPTO could charge a fee to use digital or physical copies of the dictionary. However, a downside is that this model will price out patent law practitioners with limited funds. A solution to this problem would be to subsidize production and dissemination of the USPTO dictionary. Politics control funding to federal agencies, and any proponent of a USPTO dictionary will need to justify the costs of any subsidy. However, such a cost would need to be clearly outweighed by a subsequent benefit. The discussion below justifies that benefit.

The USPTO dictionary would have characteristics of both extrinsic and intrinsic evidence in practice. The USPTO dictionary would not be completely extrinsic because it is published by the USPTO, the same body that grants patent rights. In the same vein, the USPTO dictionary would not be completely intrinsic because it is not physically embodied within the patent itself. The extrinsic-intrinsic evidence paradigm does not categorize an annually published USPTO dictionary well.

So how would a USPTO dictionary work? When a person is discerning the meaning of a claim term, he or she would reference the USPTO dictionary. A USPTO dictionary would be the implied, default reference for this task. This initial choice of the USPTO dictionary is better than conventional extrinsic and intrinsic resources for several reasons. The USPTO dictionary would be an objective source, but it would still retain an eye towards patent claim construction because the USPTO publishes the dictionary. If the USPTO dictionary does not yield a decisive answer, then a person would then defer to either extrinsic or intrinsic resources.

An annually published USPTO dictionary would maximize notice to litigants when it is used in a procedural claim construction regime. If the litigant uses the USPTO dictionary to discern the ordinary meaning of a claim term and succeeds, then the issue is resolved and conclusive. The litigant will be able to predict the claim term's definition as it will be interpreted in a district court and in the Federal Circuit. If the USPTO dictionary does not yield a conclusive answer but yields multiple answers, then a litigant has narrowed the possible interpretations to a few possibilities, and he or she may turn to extrinsic or intrinsic evidence to arrive at a narrower interpretation of the claim term.

An additional benefit of a USPTO dictionary is that it would be assembled by persons who are skilled in the relevant art. Electrical engineers, botanists, and computer programmers could pin down lexicons in their respective areas of expertise. This aspect of the USPTO dictionary clears a significant hurdle in patent litigation: the idea that a lay judge, as a matter of law, can interpret how a person who is skilled in the art would define a contested claim term. Academics have criticized

the United States patent system on this very point.⁶⁸ If teams of experts are standardizing technical lexicons, then judges would not have to sustain this particular legal fiction anymore.

A final component of the USPTO dictionary is the fact that it would be published once a year. Patents have a twenty-year lifespan, and claim term interpretation may happen during litigation many years after the patent was filed. To further complicate things, the lexicon of some sciences changes rapidly over time. Therefore, the annual component of the USPTO dictionary would serve to pin down scientific lexicons as those lexicons change. If you would like to know the definition of “computer” from 1991, then you would reference that definition from the hypothetical 1991 USPTO dictionary.

The USPTO dictionary would not override the lexicographer rule. The lexicographer rule allows an inventor to define his or her own terms within the patent. The lexicon in a particular field of technology may change extremely rapidly, or there might not be a lexicon at all, and the lexicographer rule may be a necessity. Even further, an inventor may simply want to define a claim term with an unorthodox definition. In any event, a USPTO dictionary would not override the lexicographer rule. A USPTO dictionary would be the presumed source of claim term definitions *unless* the inventor exercised his or her lexicographer rights and defined a claim term otherwise. The retention of the lexicographer rule along with the presumptive USPTO dictionary provides certainty and thus notice to the claim construction process.

A USPTO dictionary can provide clarity and notice in a patent process that is currently muddled and rife with uncertainty. The USPTO would have to consider issues such as publishing the initial volume of the dictionary as well as funding the effort. Fortunately there is precedent on these points. After publication the USPTO dictionary would have to fit into the patent system scheme. A USPTO dictionary can dovetail into the current system, and litigants can realize the benefit of improved notice.

B. Addressing Arguments in Phillips

While the initial efforts of creating a USPTO dictionary are feasible, and such a dictionary could fit within the patent system, the USPTO would have to comport with Federal Circuit case law. The Federal Circuit’s most recent decision on claim construction methodology is *Phillips*. In *Phillips*, the Federal Circuit checked the *Telegenix* decision, and it favored a holistic method of claim construction without completely ruling out the procedural method of claim construction.⁶⁹ A procedural

68. Rai, *supra* note 46, at 881-82; Gitter, *supra* note 6, at 191-92.

69. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (2005).

method of claim construction provides better notice to litigants, and a USPTO dictionary could abrogate the Federal Circuit's arguments against the procedural method of claim construction in *Phillips*.

In its opinion, the Federal Circuit listed a series of five arguments against using the procedural method of claim construction. The Federal Circuit's first argument was that, "extrinsic evidence by definition is not part of the patent and does not have the specification's virtue of being created at the time of patent prosecution for the purpose of explaining the patent's scope and meaning."⁷⁰ Presumably the virtue that the Federal Circuit mentions is fidelity to the intentions of the inventor. However, a USPTO dictionary can achieve the same temporal fidelity to the inventor. As mentioned above, a litigant can retrieve a hypothetical USPTO dictionary from when the patent was prosecuted to determine the meaning of a claim term. As for the purpose prong of the virtue, the USPTO dictionary does not usurp the lexicographer rule, and the inventor is free to define the claim terms within a patent.

The second argument against extrinsic evidence proffered by the Federal Circuit is that extrinsic evidence is not written by technically-minded people, and thus the dictionaries definitions may not reflect the same definitions that a person who is skilled in the relevant art may use.⁷¹ This concern with dictionaries does not exist in a USPTO dictionary by its nature. The USPTO dictionary would be composed exclusively from people who are skilled in the relevant art. For example, as mentioned in section II-A, a committee of electrical engineers would standardize electrical engineering terminology and lexicography to normalized definitions. The Federal Circuit's concern on this point does not carry weight with a USPTO dictionary.

Third, the Federal Circuit argues that extrinsic evidence in the form of expert reports and testimony that are prepared for litigation are biased.⁷² In other words, the experts are retained because their reports and testimony are favorable to one side. A USPTO dictionary would not suffer from any biases in preparation for litigation.

The Federal Circuit next argues that there is "a virtually unbounded universe of extrinsic evidence of some marginal relevance that could be brought to bear on any claim construction question."⁷³ This is certainly true with dictionaries. Litigants would likely pick their friends out of a crowd, *i.e.* litigants would choose from a wide range of dictionaries the definition that best helps the litigant's case. However, this issue does not pertain to a USPTO dictionary because there is no unbounded universe

70. *Id.* at 1318.

71. *Id.*

72. *Id.*

73. *Id.*

of evidence; there is only one USPTO dictionary. When litigants are assessing the scope of the patent, their ability to pick their friends out of a crowd is limited because the singular USPTO dictionary would be the presumed default source of claim term definitions.

Lastly, the Federal Circuit ironically states that extrinsic evidence undermines the public notice function of patents.⁷⁴ The Federal Circuit argues that undue reliance on extrinsic evidence might change the meaning of claim terms at the expense of the indisputable public record that is intrinsic evidence (claims, the specification, and prosecution history).⁷⁵ Since the USPTO dictionary would be published by a federal agency, the USPTO, the USPTO dictionary would become a part of the public record. Unlike the intrinsic evidence, the USPTO dictionary is objective. With the other examples that the Federal Circuit cites as public records, a litigant must formulate the context of the patent to discern the meaning of the claim terms. It is more difficult to predict how a court will interpret the context of a patent than it is to predict how a court will determine the objective definition of a claim term, especially if a USPTO claim term dictionary is established. The concept of a USPTO dictionary goes directly to the notice function in the patent system, and the Federal Circuit's argument on this point would not carry weight.

C. Addressing Professor Miller's Concerns

Joseph Miller is a law professor who is sympathetic to the procedural method of claim construction for mostly the same reasons I have described throughout the paper, including notice. In his legal scholarship, Professor Miller proposes many ways to improve the patent system because he also sees the system as needing reform. Miller never speculates on the idea of a USPTO dictionary, but he does broach the topic of centralized authority at the USPTO.⁷⁶ Since a USPTO dictionary would fall into the gambit of centralized authority at the USPTO, it is worthwhile to address Miller's arguments.

For context, one of Miller's propositions for improved notice was the USPTO requirement that inventors would specify dictionaries and technical treatises that anyone could use to interpret the scope of the patent.⁷⁷ This drives against an inventor's natural tendency to make patents as broad as possible. If an inventor has to specify several extrinsic sources for claim term interpretation, then the possible interpretations of the scope of the patent are fewer, and litigants have better notice. As I have argued in this Note, a USPTO dictionary is better

74. *Id.* at 1318-19.

75. *Id.* at 1319.

76. Miller & Hilsenteger, *supra* note 10, at 903.

77. *Id.* at 836.

than inventor-specified extrinsic sources because if an inventor specifies more than one extrinsic source, the extrinsic sources might conflict, providing no notice benefit. Also, an inventor has the incentive to specify the most obscure extrinsic sources to avoid painting himself or herself into a corner. This also does not benefit notice because a litigant might not have access to the most obscure extrinsic sources.

Aside from these points, Miller comments on why it would be bad for the USPTO to specify an official list of extrinsic sources.⁷⁸ Again, Miller does not mention a USPTO dictionary, but his arguments can be cast as arguments against centralized authority at the USPTO.

Miller's first argument is that the patent process is applicant driven, and centralized authority is antithetical to this aspect of the process.⁷⁹ At first blush this may seem true, but one must take the long view to see how centralized authority on this point would affect the applicant-driven patent process. Assume that the USPTO dictionary becomes a reality, then an applicant with adequate legal counsel would not be oblivious to this fact. An applicant would know that a USPTO dictionary is the presumed source of claim term definitions, and the lexicographer rule would not be abandoned. Thus, a USPTO dictionary would not steal any power from the applicant in the patent process because an applicant retains the freedom to define the claim terms as he or she sees fit.

Miller's second argument is that centralized USPTO authority on extrinsic evidence is on the wrong side of an information asymmetry.⁸⁰ He argues that applicants know more than patent examiners about the best, most up-to-date resources.⁸¹ However, if a USPTO dictionary became a reality, it would necessarily require persons who are skilled in the relevant art to determine the content of the dictionary. So the USPTO could establish a normalized version of the lexicon in a given technical field. If the application wanted to deviate from the norm, then again, he or she is free to become his or her own lexicographer.

Miller's third argument criticizes the costs associated with centralized USPTO authority on extrinsic sources.⁸² The USPTO dictionary would certainly require resources. However, as mentioned above in section II-A, there are various pricing models that could accommodate the expense of publishing a USPTO dictionary. Even if the dictionary required a subsidy, it would certainly be justified by the benefit the USPTO dictionary would provide in the way of notice to litigants.

A strictly procedural method of claim construction is the ideal

78. *Id.* at 903.

79. *Id.*

80. *Id.*

81. *Id.*

82. *Id.*

regime for a USPTO dictionary, but such a dictionary's costs and benefits cannot be measured in a vacuum. *Phillips* endorses the holistic method of claim construction, and it is the current law. Thus, the facet of notice relating to the *Telegenix-Phillips* line of cases (clarity of claim construction methodology and the methodology itself) cannot be quickly remedied. However, even in a holistic regime of claim construction methodology, a USPTO dictionary would still aid in improving notice to litigants because it can improve the facet of notice relating to the *Markman-Cybor* line of cases (the level of defense that the Federal Circuit accords a district court).

The Federal Circuit does not accord any deference to a district court on matters of claim construction, and the result is a disjointed claim construction methodology between a district court and the Federal Circuit. This is reflected in the ever-glaring 32.5% claim construction reversal rate at the Federal Circuit.⁸³ There are also other issues at the intersection of the Federal Circuit and the district courts: the breakdown of the teacher-learner dynamic between the Federal Circuit and the district courts⁸⁴ and different dictionary selections by different courts.⁸⁵

In a holistic claim construction regime, a USPTO technical dictionary likely would not be the silver bullet in each case, but it would still provide enough benefit to the patent system to justify its publication. Currently, the patent system does not have a singular, objective resource like a USPTO technical dictionary. In the instance of the teacher-learner dynamic, a USPTO dictionary would be a common touchstone between the district courts and the Federal Circuit that carries the weight of the USPTO.

In an instance of different dictionary selection, the presence of a USPTO dictionary would not directly solve the problem because, in theory, both the Federal Circuit and the district courts would be free to choose from a litany of extrinsic resources. However, a USPTO dictionary would carry more gravitas than other extrinsic resources, and courts would likely utilize a USPTO dictionary as the go-to resource if the intrinsic resources leave ambiguity as to the ordinary meaning of a claim term.

Finally, the claim construction reversal rate at the Federal Circuit would be dependent on a variety of issues such as the teacher-learner dynamic and dictionary choice, but a USPTO dictionary would be worth publication in the wake of *Phillips* because *Phillips* still left the door open to procedural claim construction, and a USPTO dictionary could at least normalize those cases. According to a working paper by Professors

83. Schwartz, *supra* note 1, at 248.

84. *Id.* at 252.

85. Miller & Hilsenteger, *supra* note 10, at 877.

Wagner and Petherbridge, Federal Circuit judges still use a procedural claim construction method in 63.8% of cases.⁸⁶

Therefore, even in a holistic regime, a USPTO dictionary can still realize a benefit because the procedural method of claim construction is utilized more often than the holistic method, and objective resources like a USPTO dictionary are paramount in the procedural method. In sum, a strictly procedural claim construction regime would allow a USPTO dictionary to realize its full potential and provide litigants with the best notice, but a USPTO dictionary will still incur benefits in the *Phillips*, quasi-holistic regime.

CONCLUSION

The current patent system provides poor notice for litigants. The claim construction methodology at the Federal Circuit haphazardly swings between procedural and holistic. The professoriate has done much research, but their proposals for solutions have fallen on deaf ears in Congress, which is noted by the AIA's administrative focus. In this Note I propose a strict procedural claim construction regime where an annually published USPTO dictionary provides the intellectual cover from the Federal Circuit's arguments against procedural claim construction in the *Phillips* decision.

An annually published USPTO technical dictionary would have both intrinsic qualities (inherent in every patent) as well as extrinsic qualities (akin to an objective dictionary). Such a dictionary would be the default resource for interpreting claim terms unless the patentee invokes the lexicographer rule. The annual publication aspect of a USPTO dictionary would help litigants track the changing meanings of claim terms over time, and the compilation of the dictionary by persons skilled in the art would help lay judges see the claims through the eyes of such persons.

Even if the Federal Circuit does not endorse a strict procedural regime of claim construction, a USPTO dictionary still provides a benefit. A USPTO dictionary could help bridge the gap between the district courts and the Federal Circuit, a dynamic that patents cases and variable court claim constructions have strained.

86. Wagner & Petherbridge, *supra* note 22, at 15.