What's That Mean? A Proposed Claim Construction Methodology for *Phillips v. AWH Corp.*

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WHAT'S THAT MEAN? A PROPOSED CLAIM CONSTRUCTION METHODOLOGY FOR PHILLIPS V. AWH CORP.

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Man does not live by words alone, in spite of the fact that sometimes he has to eat them.¹

INTRODUCTION

Language by its very nature is ambiguous. The mathematician can start from first principles and use a series of equations to determine a final result. This result is either a number or an expression in terms of variables. Either way, the mathematician's result is clear and satisfying. The lawyer, however, works with words,² and words leave themselves open for argument about their meaning. Indeed, a lawyer makes a living arguing about the meaning of words in prior court decisions, about the meaning of words in statutes, and in the case of patent law, about the meaning of words in patent claims.

In patent litigation, judges must determine the proper meaning of terms in patent claims in a process called claim construction. Although judges are typically lay people or "generalists," judges must determine the meaning of patent claim terms from the standpoint of one of ordinary skill in the art.³ Therefore, in the case of a patent on a particular circuit design, the judge must determine what the term would mean to an electrical engineer who is the audience of the patent and not what the generalist judge would have thought the term meant.

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² By one estimate, there are four million words in the English lexicon. SIDNEY I. LANDAU, DICTIONARIES: THE ART AND CRAFT OF LEXICOGRAPHY 17 (1989) [hereinafter LANDAU, DICTIONARIES]. These include 700,000 words in the Merriam-Webster files and at least one million scientific words, as well as coined words, dialectal words, slang, new words, exotic words, and words derived from place names. Id.
³ Brookhill-Wilk I, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 (Fed. Cir. 2003) ("The words used in the claims are examined through the viewing glass of a person skilled in the art.").
In the Federal Circuit, the specialized court of appeals that reviews issues of patent law, an intracircuit split has developed over the proper methodology to use in claim construction. The Federal Circuit recently granted *en banc* review in *Phillips v. AWH Corp.* to resolve this intracircuit split and determine the appropriate methodology for claim construction. One methodology, first developed in *Texas Digital Systems, Inc. v. Telegenix, Inc.*, creates a bright-line rule that first looks to dictionaries to provide the ordinary meaning of terms contained in patent claims. This note argues that the Federal Circuit should not adopt this methodology in its *en banc* decision because dictionaries are not a good proxy for what one of ordinary skill in the art would have thought that a claim term meant. Instead, this Note recommends an approach that would give the court a greater chance of construing the term in accordance with what one of ordinary skill thought the term meant and that better promotes the policy goals of patent law.

Part I of this Note provides background on patent claim construction and patent law policies. Part II describes three different approaches that panels in the Federal Circuit have used to construe claim terms: the intrinsic/extrinsic dichotomy, the holistic approach, and the dictionary first approach. This part also provides the relevant questions that the Federal Circuit has set out to decide *en banc* in *Phillips v. AWH Corp.* These questions include ones designed to determine the proper methodology for claim construction. Part III argues that the Federal Circuit should not adopt the *Texas Digital* "dictionary first" approach. This part first provides background information on dictionaries and then discusses which dictionaries the Federal Circuit has used in conducting its de novo review of claim construction. Finally, this part discusses the problems with adopting the "dictionary first" approach. Part IV briefly discusses the reasons for rejecting the holistic approach, which is characterized as having no set methodology. Part V proposes a modified intrinsic/extrinsic approach, which effectuates the policy of public notice by encouraging patentees to remove ambiguity from their patent documents.

4. See *infra* Part II.
5. 376 F.3d 1382 (Fed. Cir. 2004).
6. 308 F.3d 1193 (Fed. Cir. 2002).
I. BACKGROUND

A. Patent Claim Construction

In a patent application, the patent applicant must include "one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." Claims define the boundaries of the patentee's right to exclude others from practicing the invention.

Issues of patent claim construction arise during patent infringement litigation. A patentee will file suit for patent infringement (or an alleged infringer will file a declaratory judgment action for noninfringement) when the alleged infringer makes, uses, sells, or offers to sell something that either literally or equivalently meets all the elements of a claim in the patent. The court then engages in a two-step process to determine if patent infringement has occurred: (1) the court first construes the patent claims at issue, and (2) the court then determines whether the accused device infringes the claim as properly construed.

In "claim construction," the court determines the proper meaning of words in patent claims. Typically, in a patent infringement suit, parties will dispute the construction of only a few terms and will agree on the proper construction of the other terms. Claim construction is a question of law to be decided by the judge, and therefore, the judge, not a jury, decides the appropriate construction of terms in patent claims. The judge must construe the claims from the view of "one of ordinary skill in the art at the time of invention."
B. Patent Law Policies Relevant to Claim Construction

In determining the appropriate construction of terms in a patent claim, courts consider several policies relevant to patent law. Federal patent law derives its authority from Article I, § 8, cl. 8 of the Constitution, which states that Congress can "promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." The Patent Clause itself reflects a balance between the need to encourage innovation and the avoidance of monopolies which stifle competition without any concomitant advance in the Progress of Science and useful Arts.

In exchange for the exclusive patent rights, the patentee must disclose his invention to the public. The patentee's disclosure "bring[s] new designs and technologies into the public domain." Disclosure is important in an effective patent system because there are certain instances where copying of an invention is desirable, particularly "imitation by refinement" or "designing around."

In claim construction, the patentee's obligation of disclosure in the bargain for patent rights is achieved only if the patent document provides "public notice" of what is covered by the patent. Competitors are entitled to rely on the public record of the patent document to determine when their conduct infringes and when their conduct legitimately "design[s] around the claimed invention.

In claim construction, courts also consider the policy that patent law is designed to encourage innovation. This policy may be best served by giving the patentee broad coverage for his invention. A patentee may be more likely to invest in innovating, because the broader the coverage of the patent, the more valuable the patent will be. On the other hand, this policy also can be served by providing certainty of claim scope coverage. If competitors are certain of the scope of an existing patent, then those competi-

17. Id. at 150–51 ("The federal patent system thus embodies a carefully crafted bargain for encouraging the creation and disclosure of new, useful, and non-obvious advances in technology and design in return for the exclusive right to practice the invention for a period of years.").
18. Id. at 151.
19. Id. at 146 ("From their inception, the federal patent laws have embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.").
tors will invest in designing around the patented invention. Additionally, competitors would be more likely to engage in secondary innovation, building off the original invention (and disclosure) by the patentee. This certainty therefore encourages competitors to innovate.

II. THREE APPROACHES TO CLAIM CONSTRUCTION IN THE FEDERAL CIRCUIT

The Federal Circuit has not used a consistent methodology for claim construction. Despite the Federal Circuit’s penchant for bright-line rules and certainty, the claim construction result in any case may be highly dependent on the panel drawn for that case. This Note discusses three methodologies employed by Federal Circuit panels for claim construction: (1) the intrinsic/extrinsic dichotomy, (2) the holistic approach, and (3) the dictionary first approach.

A. The Intrinsic/Extrinsic Dichotomy

In Vitronics Corp. v. Conceptronic, Inc., the court stated that, in performing claim construction, the court must look at the intrinsic evidence before considering any extrinsic evidence. Intrinsic evidence includes: (1) the language of the claims, (2) the specification, and (3) the prosecution history. For the language of the claims, the words are generally given “their ordinary and customary meaning.” Additionally, the patentee can be her own lexicographer as long as the patentee’s definition is given in either the specification or the prosecution history. The court should always review the specification to see if the patentee used terms “in a manner

22. Cf. Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1254 (Fed. Cir. 2000) (“Having prosecution history estoppel as a purely legal issue is consistent with fostering certainty as to a patent’s scope, a consideration that is important for reliance by those in the marketplace.”).

23. Indeed, Professor R. Polk Wagner has developed a website, www.claimconstruction.com, that includes a predictor tool. The predictor tool allows the user to input the three judges on the Federal Circuit panel, and the tool returns the type of methodology anticipated along with a percentage probability. Professor Wagner terms his methodologies the procedural and holistic approaches. For a more detailed description of these methodologies, see R. Polk Wagner & Lee Petherbridge, Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance, 152 U. PA. L. REV. 1105 (2004).

24. 90 F.3d at 1576. The judges on the Vitronics panel were Judges Michel, Lourie, and Friedman.

25. Id. at 1578.

26. Id.

27. Id.

28. Id. ("[A] patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.").
inconsistent with their ordinary meaning."

Finally, the prosecution history is relevant intrinsic evidence because it includes representations made by the patentee to the patent office. If the intrinsic evidence is clear and unambiguous, then it is improper for the court to rely on any extrinsic evidence. This approach serves the policy of public notice, which entitles the public to rely on the public record associated with the patent.

If the intrinsic evidence is ambiguous, then the court will look at extrinsic evidence. Extrinsic evidence can include: (1) expert testimony, (2) inventor testimony, (3) dictionaries, and (4) technical treatises and articles. Expert testimony that conflicts with the intrinsic evidence should be given no weight. As to dictionaries, the court did seem to elevate them to a special place to be used to educate the judge. The court stated: Although technical treatises and dictionaries fall within the category of extrinsic evidence, as they do not form a part of the integrated patent document, they are worthy of special note. Judges are free to consult such resources at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.

Further, the court favored prior art use of a term as extrinsic evidence over expert testimony.

B. The Holistic Approach

The holistic approach is primarily characterized by not having a set methodology. Instead, the court generally hears all the evidence and from the evidence divines the proper claim construction. For example, in EMI
**Group North America, Inc. v. Intel Corp.,**\(^{38}\) at the Markman hearing,\(^{39}\) the district court heard extensive testimony from experts about claim construction.\(^{40}\) The Federal Circuit recognized that it had previously ruled that "claims should preferably be interpreted without recourse to extrinsic evidence such as expert testimony, other than perhaps dictionaries or reference books, and that expert testimony should be received only for the purpose of educating the judge."\(^{41}\) The court said that in its de novo review it considered the analysis and conclusions of the district court, the record of the Markman hearing, and the conflicting testimony and opinions of expert witnesses.\(^{42}\) The Federal Circuit reviewed all of this and affirmed the district court's claim construction.\(^{43}\) Because the court used the holistic approach, it did not engage in a hierarchical intrinsic/extrinsic analysis but instead weighed all the evidence introduced and then reached its conclusion.

**C. The Dictionary First Approach**

A third approach taken by the Federal Circuit is the "dictionary first approach." The Federal Circuit used this approach in *Texas Digital Systems, Inc. v. Telegenix, Inc.*\(^{44}\) In this opinion, the Federal Circuit stated that the focus must be on the language of the claims.\(^{45}\) There is a "heavy presumption" that claim terms have the ordinary meaning that "would be attributed to those words by persons skilled in the relevant art."\(^{46}\)

Under this approach, dictionaries should be used to show ordinary meaning.\(^{47}\) The Federal Circuit cited both its own precedent and precedent from the Court of Customs and Patent Appeals—the predecessor court to the Federal Circuit—to show that "dictionaries, encyclopedias, and treatises are particularly useful resources to assist the court in determining the

\(^{38}\) 157 F.3d 887 (Fed. Cir. 1998). The judges on the *EMI* panel were Judges Newman, Plager, and Bryson. *Id.* at 889.

\(^{39}\) A *Markman* hearing is generally the hearing where the parties present evidence to the judge on the issue of claim construction. The name is derived from the case *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

\(^{40}\) *EMI*, 157 F.3d at 892.

\(^{41}\) *Id.* (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996)).

\(^{42}\) *Id.*

\(^{43}\) *Id.* at 895.

\(^{44}\) 308 F.3d 1193 (Fed. Cir. 2002). The judges on the *Texas Digital* panel were Judges Linn, Michel, and Schall. *Id.* at 1197.

\(^{45}\) *Id.* at 1201.

\(^{46}\) *Id.* at 1202.

\(^{47}\) *Id.*
ordinary and customary meaning of claim terms."\(^{48}\) The court further stated that, "[d]ictionaries are always available to the court to aid in the task of determining meanings that would have been attributed by those of skill in the relevant art to any disputed terms used by the inventor in the claims."\(^{49}\) Therefore, under the *Texas Digital* approach, courts are free to consult dictionaries even when such dictionaries have not been offered into evidence by the parties.

The *Texas Digital* panel stated that this approach best served the policy of providing public notice.\(^{50}\) The court found that reference to not only the intrinsic record of the patent but also dictionaries, encyclopedias, and treatises serves the policy of providing notice of the scope of the claims to the public.\(^{51}\) These references are "publicly available at the time the patent is issued, [and] are objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art."\(^{52}\) Further, these references are "unbiased reflections of common understanding not influenced by expert testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not inspired by litigation."\(^{53}\) The court therefore elevated dictionaries, treatises, and encyclopedias to a place above other forms of extrinsic evidence as the "most meaningful" to educate the judge in understanding the technology and the terminology used by those skilled in the art.\(^{54}\) The court stated that courts are free, not only to consult any dictionaries they choose *sua sponte*, but also to consult dictionaries "at any stage of the litigation."\(^{55}\) The court also said that these materials should not be categorized as either "extrinsic evidence" or a "special form of extrinsic evidence."\(^{56}\)

The court then stated that the intrinsic record could be used to determine which dictionary definitions are appropriate in the event that multiple definitions exist.\(^{57}\) If multiple definitions are consistent, then the court

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48. *Id.* (citing Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002); CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002); Optical Disc Corp. v. Del Mar Avionics, 208 F.3d 1324, 1334–35 (Fed. Cir. 2000); Quantum Corp. v. Rodime, PLC, 65 F.3d 1577, 1581 (Fed. Cir. 1995); *In re Ripper*, 171 F.2d 297, 299 (C.C.P.A. 1948)).

49. *Id.*

50. *Id.* at 1202–03.

51. *Id.*

52. *Id.* at 1203.

53. *Id.*

54. *Id.*

55. *Id.*

56. *Id.*

57. *Id.* ("Because words often have multiple dictionary definitions, some having no relation to the claimed invention, the intrinsic record must always be consulted to identify which of the different
should construe the term to encompass all consistent definitions.\textsuperscript{58} To determine if a definition is consistent, the court looks to see if "the inventor has disavowed or disclaimed scope of coverage, by using words or expression of manifest exclusion or restriction, representing a clear disavowal of claim scope."\textsuperscript{59}

The Federal Circuit expressly stated that it was inappropriate to review the written description or the prosecution history, part of the intrinsic evidence, before the court has determined the ordinary and customary meaning.\textsuperscript{60} The Federal Circuit worried that relying only on the intrinsic record in the first instance would lead to courts improperly limiting the claim to the preferred embodiment.\textsuperscript{61}

\textbf{D. Phillips en banc}

Faced with this intracircuit split, in July 2004, the Federal Circuit granted \textit{en banc} review in \textit{Phillips v. AHW Corp.}\textsuperscript{62} to decide in part:

1. Is the public notice function of patent claims better served by referencing primarily to technical and general purpose dictionaries and similar sources to interpret a claim term or by looking primarily to the patentee's use of the term in the specification? If both sources are to be consulted, in what order?

2. If dictionaries should serve as the primary source for claim interpretation, should the specification limit the full scope of claim language (as defined by the dictionaries) only when the patentee has acted as his own lexicographer or when the specification reflects a clear disclaimer of claim scope? If so, what language in the specification will satisfy those conditions? What use should be made of general as opposed to technical dictionaries? How does the concept of ordinary meaning will satisfy those conditions? What use should be made of general as opposed to technical dictionaries? How does the concept of ordinary meaning apply if there are multiple dictionary definitions of the same term? If the dictionary provides multiple potentially applicable definitions for a term, is it appropriate to look to the specification to determine what definition or definitions should apply?

3. If the primary source for claim construction should be the specification, what use should be made of dictionaries? Should the range of the ordinary meaning of claim language be limited to the scope of the invention disclosed in the specification, for example, when only a single em-

\textsuperscript{58} Id. at 1203.
\textsuperscript{59} Id. at 1204.
\textsuperscript{60} Id.
\textsuperscript{61} Id. at 1204–05.
\textsuperscript{62} 376 F.3d 1382 (Fed. Cir. 2004).
bodiment is disclosed and no other indications of breadth are disclosed.63

This *en banc* case and particularly these questions have brought the issue of the appropriate claim construction methodology to the forefront. This is a hotly contested issue; indeed, over thirty organizations and interested parties have filed amicus briefs in the *Phillips* case.64 The Federal Circuit has the opportunity to determine a consistent methodology for claim construction. This Note argues that the Federal Circuit should not adopt the “dictionary first” approach used by the court in *Texas Digital*, but that the court should instead adopt a methodology that better serves policy goals of patent law.

III. JUNK LEXICOLOGY: THE DICTIONARY FIRST APPROACH

In its *en banc* decision in *Phillips*, the Federal Circuit should not adopt the “dictionary first” approach used in *Texas Digital*. For the reasons discussed below, although dictionaries should be considered as extrinsic evidence, which a court can rely on to educate itself, dictionaries should not be consulted in the first instance, and patentees should not be required to rebut dictionary definitions if the ordinary meaning is clear from the intrinsic evidence and the knowledge of those skilled in the art.

This part begins with a discussion of dictionaries generally and the dictionaries on which the Federal Circuit has relied. This part then argues that the nature of dictionaries and the Federal Circuit’s use of them show that the Federal Circuit should not adopt the “dictionary first” approach in its *en banc* *Phillips* decision.

A. Background on Dictionaries

1. Dictionaries Generally

To understand the “dictionary first” approach, it is important first to understand precisely what dictionaries are. Generally, “[a] dictionary is a book that lists words in alphabetical order and describes their meanings. Modern dictionaries often include information about spelling, syllabication, pronunciation, etymology (word derivation), usage, synonyms, and grammar, and sometimes illustrations as well.”65 Dictionaries are divided into

63. *Id.* at 1383.
64. For a complete list of amicus briefs filed in the *Phillips* case, see http://www.faegre.com/custom/page_2185.aspx (last visited Apr. 4, 2005).
types depending on their coverage and type of use. The broadest type of dictionary is the unabridged, general use dictionary. An unabridged dictionary "gives full coverage to the lexicon in general use at a particular time in the history of a language," and general use refers to the "common use in the public press and in everyday speech... as distinguished from specialized lexicons such as those of law, medicine, or the physical sciences." Further, dictionaries capture the language at a specific point in time, and most dictionaries are meant to be contemporaneous. Webster's Third New International Dictionary and college dictionaries are generally concerned with the present time, but sometimes lag because "it takes years to produce any dictionary and even synchronic works include some archaic forms." Dictionaries are relevant precisely because they contain definitions. Definitions of general terms in modern general usage dictionaries are developed through "citation files." "A citation file is a collection of potential lexical units in the context of actual usage, drawn from a great variety of written sources and often some spoken sources, chiefly because the context illuminates an aspect of the meaning." Citations can provide illustrative quotations, preferred spellings, context, and pronunciation of the word. The Oxford English Dictionary was prepared solely on the basis of citations and took fifty years to complete. Webster's Third New International Dictionary also was developed using citation files. Today, definitions are determined on the basis of citations for new words, but also refer to earlier versions, other dictionaries, and specialists' opinions for technical and scientific terms.

66. Id. at 18. Unabridged English dictionaries generally have from 400,000 to 600,000 words. Id. Other types of dictionaries include semi-unabridged dictionaries, such as the Random House Dictionary, which includes 260,000 words; college dictionaries, which include from 150,000 to 170,000 words; desk dictionaries, which include from 60,000 to 100,000 words; and pocket dictionaries, which include from 40,000 to 60,000 words. Id. at 18-19.

67. Id. at 31.
68. Id. at 151.
69. Id.

70. Id. at 152. Indeed, this practice of basing definitions at least in part on actual usage dates back to Samuel Johnson's 1755 A Dictionary of the English Language. RONALD A. WELLS, DICTIONARIES AND THE AUTHORITARIAN TRADITION 22-23 (1973).

71. HERBERT C. MORTON, THE STORY OF WEBSTER'S THIRD: PHILIP GOVE'S CONTROVERSIAL DICTIONARY AND ITS CRITICS 4 (1994). The editor Philip Gove was criticized for making Webster's Third descriptive (reflecting actual usage) rather than prescriptive (stating how words ought to be used). Id. at 7. For an interesting recount of this criticism, see WELLS, supra note 70, at 74-86.

72. LANDAU, DICTIONARIES, supra note 2, at 152. Even terms with extensive citation files can be flawed. Kemp Malone assembled a much larger sampling than usual for comprehensive dictionaries for the term "mahogany" and discovered that the term in actual usage had a much different definition than the primarily scientific definition contained in Webster's Second New International Dictionary. Accord-
Although actual usage as developed in citation files is used to determine the meaning of general words, such is typically not the case for scientific terms. Scientific and technical terms in general dictionaries tend to be derived from expert advice "whose concern is maintaining the internal coherence of their discipline rather than faithfully recording how terms are used."\(^7\) Sidney Landau, a prominent commentator on dictionaries, estimates that forty percent of the entries in Webster's Third New International Dictionary, considered by Landau to be the only unabridged English dictionary, are scientific and technical terms.\(^7\) Therefore, although definitions of general terms are developed using actual usage, scientific terms are defined by "experts" who may take a normative approach to defining terms rather than providing a definition that reflects the actual usage of the term.

2. The Federal Circuit's Use of Dictionaries

Joseph Miller and James Hilsenteger conducted an empirical study ("the Miller Study") to review the use of dictionaries in patent claim construction.\(^7\) This study found that "[f]rom April 5, 1995 to June 30, 2004, the Federal Circuit used one or more dictionaries to help construe a disputed claim term 209 times."\(^7\) Usage increased from a low of nine times in 1998 to a high of forty-two times in 2003.\(^7\) The Miller Study also found that the Federal Circuit typically relied on only one source, and that the sources relied on were usually general purpose, not specialized, sources.\(^7\)

Among all sources cited, the Federal Circuit most often cited the Webster's Third New International Dictionary. That dictionary garnered


\(^{74}\) LANDAU, DICTIONARIES, supra note 2, at 21. Landau commented:

The inclusion of specialized scientific terms in such large numbers in our dictionaries diminishes the force of the claim that dictionaries are based on actual usage . . . . It also introduces, even in the most determinedly descriptive work, a normative element, since such definitions often have a prescriptive purpose. The overall descriptive nature of the dictionary is thus very substantially blurred.


\(^{76}\) Id. (manuscript at 25). An occurrence of a disputed claim was tabulated on the basis of the individual term, such that if a case had three disputed terms and the court referred to a dictionary three times, then the 209 total would include three from a single case. Id. (manuscript at 24).

\(^{77}\) Id. (manuscript at 25 tbl. 4). For the first half of 2004, the Federal Circuit used dictionaries to construe disputed claim terms thirty-four times. Id.

\(^{78}\) Id. (manuscript at 26) (stating that the Federal Circuit relied on one source 79.9% of the times it relied on dictionaries and that in 70.5% of the instances it relied on "general purpose English language sources").
"25.4% of all citations to any source (general or specialized), and 36.0% of all citations to a general purpose English language source."79 The Federal Circuit cited Webster's Third New International Dictionary more often than the next five dictionaries cited combined.80 Additionally, Merriam-Webster dictionaries, which include all editions of the Webster's New International Dictionary and editions of the New Collegiate Dictionary, represent over a third of all citations and over a half of general purpose citations.81

The Federal Circuit cited most specialized sources only once. Specialized sources that the Federal Circuit cited more than once generally pertain to medicine, computing, and electronics.82

B. An Illusion: The Failings of the Dictionary First Approach

The Texas Digital approach is flawed because Judge Linn incorrectly assumes that dictionaries are "reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art."83 The Federal Circuit should not adopt the "dictionary first" approach because (1) dictionaries are not a reliable proxy for the view of one skilled in the art; (2) the "dictionary first" approach allows the courts to arbitrarily choose among dictionaries; (3) the "dictionary first" approach allows a court to engage in a dictionary fishing expedition until the court finds the definition it wants to adopt; (4) the "dictionary first" approach ignores the context of the term within the claim and within the specification; and (5) dictionaries are not updated often enough to reflect relatively recent changes in technical language.

1. Dictionaries are not a reliable proxy for the view of one skilled in the art.

The "dictionary first" approach assumes that dictionaries accurately and objectively reflect how one skilled in the art would have interpreted the

79. Id. (emphasis in original). Of the 209 citations to dictionaries, the Federal Circuit cited the different printings of the Webster's Third New International Dictionary sixty-eight times. Id.
80. Id. (manuscript at 26 n.94). The Federal Circuit cited Webster's Ninth New Collegiate Dictionary eighteen times; Webster's New World Dictionary fifteen times; American Heritage Dictionary twelve times; Webster's II New Riverside University Dictionary ten times; and McGraw-Hill Dictionary of Scientific and Technical Terms, the only specialized source to make the top six, nine times. Id.
81. Id. (manuscript at 26-27).
82. Id. (manuscript at app. B, tbl. 6).
Because this assumption is flawed, the Federal Circuit should reject this approach.

First, although modern dictionary definitions are generally descriptive, reflecting how the terms are actually used, dictionary definitions of technical terms are more likely to be prescriptive, reflecting how scholars believe the terms should be used. This distinction is particularly relevant in claim construction because any normative effect intended by the dictionary author may skew the definition away from the actual usage of the term. Instead, the definition of a technical term may not reflect how one of ordinary skill in the art read the term, but rather how an expert thought they should read the term. Because this is not the standard by which courts interpret claims, relying on prescriptive definitions could lead to incorrect claim construction.

Some technical dictionaries, such as the dictionary published by the Institute of Electrical and Electronics Engineers ("IEEE Dictionary"), are published by standards-setting organizations. The IEEE dictionary defines terms in the context of the IEEE standards. Although these definitions are heavily reviewed by experts in the field, the definitions nevertheless reflect the context of the IEEE standards and are not necessarily universal definitions that encompass all meanings that would be ascribed to the terms by one of ordinary skill in the art.

84. Id. (Dictionaries are "unbiased reflections of common understanding not influenced by expert testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not inspired by litigation.").
85. See Landau, of Matters Lexicographical, supra note 73, at 242.
86. IEEE 100: THE AUTHORITATIVE DICTIONARY OF IEEE STANDARDS TERMS (7th ed. 2000). The Federal Circuit has recognized that not everything written by a standards-setting organization rises to the level of a dictionary. ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1089-90 (Fed. Cir. 2003) (Linn, Friedman, & Plager, JJ.). The Federal Circuit chose not to rely on certain documents published as working papers by the World Wide Web Consortium because the purpose of the papers was to "collect commentary and to select language to facilitate a common understanding, or to select a standard, from a variety of competing technologies and vocabularies and from a variety of potentially competing interests." Id. at 1089. Nevertheless, the Federal Circuit declined to adopt a bright-line rule that would exclude all documents from standards-setting organizations, as those that could "aid in determining the ordinary and customary meaning of technical terms," if the document actually reflects the usage of those of ordinary skill in the art. Id. at 1090.
87. See IEEE, Frequently Asked Questions: IEEE Dictionary, at http://standards.ieee.org/faqs/Std100.html#Q1 (last visited Apr. 4, 2005) ("IEEE 100 compiles terms and definitions from over 800 IEEE standards."). Additionally, IEEE has not added any terms to its dictionary that are not in its standards. Id. ("[S]ince 1992, only terms from approved IEEE standards are being added.").
88. "This means that the terms and definitions have been created by actual working groups that are developing standards in particular areas. As such, the terms and definitions undergo extensive peer review, coordination with other related fields, and consensus broad-based balloting before they are accepted into practice as standard terminology." Id.
89. Tiersma notes that "[p]recise language is possible only when there is a unified speech community that consistently uses a term in the same way." PETER M. TIERSMA, LEGAL LANGUAGE 109 (1999)
Further, relying first on dictionary definitions, particularly those in general purpose dictionaries, isolates the interpretation of the term from the experiences of the reader. Instead of taking into account the scope of knowledge of one of ordinary skill in the art (including education, specialized training, and specialized experience that such a person would possess), the dictionary first approach removes the term from the context of this overall experience. Some documents, such as some statutes, are autonomous documents, not dependent on outside information to convey meaning, and these documents may stand on their own to provide meaning to those reading them. Patents, however, are not autonomous. Instead, they rely heavily on the knowledge of the reader in the art area to supply context. Dictionaries do not serve as a reliable proxy for one skilled in the art because dictionaries oversimplify the viewpoint of one skilled in the art and deprive courts from seeking information to better understand this viewpoint.

Because dictionaries may not provide descriptive definitions for technical terms and dictionary definitions do not convey the unique experiences of those skilled in the art, the Federal Circuit in its Phillips en banc decision should reject the "dictionary first" approach.


Even if dictionaries did reflect the view of one of ordinary skill in the art, the Federal Circuit should still reject the "dictionary first" approach because the approach has failed to realize its main goal of promoting certainty. The Federal Circuit has failed to develop any clear rules establishing (discussing varying usage of legal terms among the fifty state jurisdictions). Although dictionaries by standards-setting organizations may not convey actual usage, these dictionaries do provide a unique opportunity within a "unified speech community" to develop a coherent, and therefore more precise, standard for how terms are used. Some commentators believe that patentees should be required to choose their dictionaries of choice at the time they file their applications. See Miller & Hilsenteger, supra note 75, at 46. This requirement, however, fails to recognize that dictionaries alone may be insufficient to convey the meaning of the terms. Also, this requirement pushes the costs of locating references from the litigation phase to the application phase. Because most patents are not commercialized, let alone litigated, this shift of costs and resources seems unnecessary. See infra Part V.

90. See Paul Kay, Language Evolution and Speech Style, in SOCIOCULTURAL DIMENSIONS OF LANGUAGE CHANGE 21, 21–22 (Ben G. Blount & Mary Sanches eds., 1977). Kay discusses autonomous speech where the speech can be viewed only in the context of the words themselves without regard to other channels such as "paralinguistic, postural, and gestural." Id. Also, Kay says that this type of speech is only "minimally dependent on the contribution of background information on the part of the hearer." Id. Kay says that this type of speech is "ideal for technical and abstract communication among strangers and inappropriate for the communication of immediate and emotionally laden content between intimates." Id. at 22; see also TIERSMA, supra note 89, at 127–28.
on which dictionaries it will rely.\textsuperscript{91} The Federal Circuit also has not established guidelines for when it will use general or specialized sources.\textsuperscript{92} Further, if the Federal Circuit chooses to adopt the "dictionary first" method in its \textit{en banc Phillips} decision, such guidelines would be difficult to establish.

The Federal Circuit might consider establishing a bright-line rule that courts will only consult one general purpose dictionary, such as the prevalent Webster's Third New International Dictionary. This rule might seem attractive at first glance because it would promote certainty in litigation since litigants would know on which dictionary the court would rely. This rule also would provide one dictionary as a tool for future patent drafters and would serve the public notice function by providing a concrete reference for the public to refer to when reading the patent.

The Federal Circuit, however, should not adopt such a rule because it would disrupt the settled expectations of current patent holders.\textsuperscript{93} Owners of patents now expect that courts will allow their litigation attorneys to argue the meaning of claim terms as would have been understood by one of ordinary skill in the art. Even under the "dictionary first" approach, these arguments include which dictionary contains the proper definition of the term as used in the patent. If the Federal Circuit adopted a bright-line rule requiring the use of certain dictionaries, it would prevent attorneys from making such arguments. Under the "dictionary first" approach, attorneys would have to rebut a single dictionary, which may not encompass the ordinary meaning of the term.

In addition, choice of a single dictionary may exclude some relevant definitions. In \textit{Nystrom v. TREX Co.}, the parties disputed whether the term "board" included only wood boards or also synthetic boards.\textsuperscript{94} The Federal Circuit quoted definitions from both Webster's Third New International Dictionary and the American Heritage Dictionary.\textsuperscript{95} Webster's included only the restrictive definition limited to a "sawn piece of lumber," while the American Heritage Dictionary provided a broader definition that in-

\textsuperscript{91} See Miller & Hilsenteger, \textit{supra} note 75, at 32.
\textsuperscript{92} \textit{ld.}
\textsuperscript{93} \textit{ld.} at 45. Miller and Hilsenteger also consider this same bright-line rule and reject it because it "violate[s] existing patentees' settled expectations about the acceptability of numerous dictionaries, [and]... fail[s] to take any account of the court's preference, about 30% of the time, for specialized reference sources." \textit{ld.} Miller and Hilsenteger also conclude, as I do, that a rule allowing the court to consult multiple sources results in "predictability quickly begin[ning] to collapse." \textit{ld.}
\textsuperscript{94} 374 F.3d 1105, 1110-11 (Fed. Cir. 2004); see also Miller & Hilsenteger, \textit{supra} note 75, at 42-43.
\textsuperscript{95} \textit{Nystrom}, 374 F.3d at 1111-12.
cluded the phrase "or similarly rigid material." The Federal Circuit adopted the broader definition, but had the court been limited to one specific dictionary, it might not have been able to consider the broader definition at all.

Based on these arguments, it seems unlikely that the Federal Circuit could or should adopt certain references as controlling. Therefore, if the Federal Circuit adopts the "dictionary first" approach, which has been justified on the basis on promoting certainty, it seems likely that parties would continue to engage in a "battle of the dictionaries." Beyond this, different judges may simply arbitrarily choose on which dictionary to rely. If there is no way for parties to predict on which dictionary the court will rely, then the "dictionary first" method will continue to fail to achieve its goal of certainty.

3. Gone Fishing? The dictionary first approach allows courts to fish for additional definitions.

The Federal Circuit also should reject the "dictionary first" approach because it allows the court to go on a "dictionary fishing expedition." In this type of expedition, the court uses dictionaries, not to define the claim term itself, but to engage in a scavenger hunt of sorts, collecting new definitions as they arise from the previous definition.

Novartis Pharmaceuticals Corp. v. Eon Labs Manufacturing, Inc. illustrates the danger of such a scavenger hunt. In Novartis, the Federal

96. Id.
97. Id. at 1112.
98. Cf. Hibbs v. Winn, 542 U.S. 88, 124 S. Ct. 2276, 2294 (2004) (Kennedy, J., dissenting). In Hibbs, the dissent recognized that, had the lower court looked at different general purpose dictionaries or specialized tax and law dictionaries, it would have found definitions that supported a broader definition of the term at issue in the statute. Id. This recognition by four Justices, in the context of statutory construction, that different dictionaries can contain definitions of varying breadth counsels against adopting a bright-line rule for patent claim construction that would adopt one dictionary while excluding all others. This would exclude definitions in specialized dictionaries as well as definitions of varying breadth in different general purpose dictionaries.
99. Miller & Hilsenteger, supra note 75, at 33 (discussing Judge T.S. Ellis' (E.D. Va.) comment that "[he] use[s] the dictionary in [his] library") (citing Judge Lourie Defends CAFC Reversals, PTO Chief Rogan Promises Patent Quality, 66 PAT. TRADEMARK & COPYRIGHT J. (BNA) 580, 581 (Sept. 26, 2003)). The study also notes that in four cases the Federal Circuit used a different dictionary than the district court used and that the Federal Circuit did not state a reason for doing so. Id. Certainly, the Federal Circuit could require in its en banc Phillips decision that its panels rely on the same references as the district court unless the Federal Circuit provides its reasons for relying on different references.
100. This phenomenon also was recognized in the Miller study, which found six precedential Federal Circuit cases where the court "used a dictionary to define a word from the dictionary definition it had just quoted." Id. at 27 (emphasis in original).
101. 363 F.3d 1306 (Fed. Cir. 2004); see also Brief for Federal Circuit Bar Association as Amicus Curiae at 2–3, Phillips v. AWH Corp., 376 F.3d 1382 (Fed. Cir. 2004) (Nos. 03-1269, 03-1286).
Circuit used a succession of terms found in general purpose dictionary definitions to find that dictionaries supported both a narrow and a broad definition of the claim term. The court then used the specification of the patent to determine that the claim encompassed only the narrow definition. Use of different dictionaries, such as medical dictionaries, however, would not have allowed the court to reach the terms that led to the narrow definition. Thus, under the "dictionary first" approach, the court's choice of dictionaries and the resulting definitions the court "chained together" dictated the result of the court's claim construction.

In Novartis, the court had to determine the appropriate construction of the term "hydrosol" and to decide whether the term "is limited to medicinal products prepared outside of the body or whether it also includes products formed within the stomach of a patient after a particular medicinal product has been ingested." The court found that the term included only the former and not the latter. In reaching this conclusion, the court cited Texas Digital and began its claim construction "with an examination of general purpose dictionary definitions." These included the definitions of "hydrosol," "sol," "solution," "medicinal," and "medicine" in Webster's Third New International Dictionary; and the definition of "medicine" in the Oxford English Dictionary. The court also reviewed the definition of "preparation" in medical dictionaries. Although the disputed claim did not include any of these terms, other than "hydrosol," the court relied on dictionary definitions for each term that came from the previous definition. The court found that the dictionary definitions were broad enough to cover both proposed meanings and looked to the intrinsic evidence, particularly the patent specification, to determine that the narrower definition was consistent with the specification.

102. Novartis, 363 F.3d at 1308–09.
103. Id. at 1310–11.
104. Id. at 1314 (Clevenger, J., dissenting).
105. Id. at 1308.
106. Id.
107. Id.
108. Id. at 1308–09 (citing WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 1110 (Philip Gove ed., 2002); 9 THE OXFORD ENGLISH DICTIONARY 549 (2d ed. 1989)).
109. Id. at 1309 (citing MERRIAM WEBSTER MEDICAL DICTIONARY (2003), available at www.intelhealth.com; DORLAND'S ILLUSTRATED MEDICAL DICTIONARY (30th ed. 2003); STEDMAN'S MEDICAL DICTIONARY (27th ed. 2000)).
110. Id. at 1307 (quoting claim 1 of the patent-in-suit).
111. Id. at 1308–09. For example, the definition of "hydrosol" was "a sol in which the liquid is water," so the court then looked to the definition of "sol." Id.
112. Id. at 1309–11.
Judge Clevenger, in dissent, rejected the majority’s use of the dictionary definitions. Judge Clevenger agreed with the majority’s definition of “hydrosol,” but he disagreed with the way the majority defined the terms that sprang from the “hydrosol” definition. Had the majority used medical dictionaries instead of general purpose dictionaries, the majority’s definitions would not have included the term “solution,” which led to the term “preparation,” which led to the narrower construction being an acceptable “definition” of the term “hydrosol.”

Thus, in this case, the majority and the dissent argued over the proper way to use dictionary definitions within the “dictionary first” approach. The Novartis case shows that, if the court engages in a “dictionary scavenger hunt,” then it matters a great deal which dictionary the court chooses. In Novartis, the court started with general purpose dictionaries, and not medical dictionaries. This choice allowed the court to develop a narrow definition as an acceptable definition, whereas a similar approach using only medical dictionaries would not have allowed such a result because medical dictionaries did not use the term “solution.”

This type of scavenger hunt is dangerous because the parties cannot predict which on dictionaries the court will choose to rely. Although Webster’s Third New International Dictionary seems to be a safe bet, the court here referred to medical dictionaries for the definition of “preparation” but not for the definition of “hydrosol” or “sol.” Therefore, the dictionary first approach promotes neither certainty nor predictability, the primary justifications for this approach in Texas Digital.

4. The dictionary first approach allows courts to ignore the context of the disputed term.

The Federal Circuit should not adopt the “dictionary first” approach because this approach does not appropriately take into account the context of the term as used both in the claim and in the specification. A patent is meant to stand on its own, needing only the knowledge of one skilled in the art to be fully understood. “[C]laim construction is ‘a necessarily sophis-

113. Id. at 1313 (Clevenger, J., dissenting).
114. Id. at 1313–14.
115. Id. at 1314.
116. The majority rejected this contention stating that it was not foreclosed from referring to the definition of “solution” even if it did not appear in a prior definition. Id. at 1309 n.2. The majority, however, did not refer to other definitions for words that did not appear in a prior definition.
ticated analysis of the whole [patent] document required by the standard construction rule that a term can be defined only in a way that comports with the instrument as a whole.””118

Patents require generalist judges to put themselves in the shoes of the hypothetical person of ordinary skill in the art, which is not an easy task. To do so, a court must look at how this hypothetical person would interpret the claim term, and courts should keep in mind that “[p]ersons steeped in the specialized language of a trade, or the business norms against which the language was written, often eschew ‘plain meaning’ in favor of context, while generalists use a more text-bound approach because that is easier and less error-prone for outsiders.”119 Indeed, for any text, the reader is likely to take the meaning of any term from context and only go to a dictionary to determine the meaning of a term that the reader cannot divine from context clues.120

The “dictionary first” approach deprives the court of the opportunity to divine the meaning of a claim term from context alone, in the way that the intended audience of the patent would.121 By requiring that the judge determine the ordinary and customary meaning before even looking at the written description or the prosecution history,122 the “dictionary first” approach may in fact deprive judges from determining the ordinary meaning of a term, from the standpoint of one of ordinary skill in the art, because the approach prohibits judges from fully appreciating the context of the claim term as used in the integrated patent document.

118. Id. (quoting Markman, 517 U.S. at 389). Judge Linn also has recognized that context can trump “definitions” if those definitions are in prescriptive working papers as opposed to objective references that convey actual usage. ACTV, Inc. v. Walt Disney Co, 346 F.3d 1082, 1089–90 (Fed. Cir. 2003) (determining that working papers from the World Wide Web Consortium were “extrinsic” evidence and could not be used to show the ordinary meaning of the claim term).


120. TIERSMA, supra note 89, at 116 (“I mostly look up a word because I heard or read someone use it and do not know what she meant by it.”).

121. Tiersma discusses sentence meaning as including “possible word meanings, as well as grammatical relationships between the words.” Id. at 124. In the patent context, “sentence meaning” is more relevant than “utterance” or “speaker’s” meaning, which Tiersma describes as what the speaker meant by the sentence. Id. Instead, in claim construction, the court is trying to determine what the reader, as one of ordinary skill in the art, perceived the meaning of the term to be. Tiersma’s discussion of “speaker’s meaning” is useful in the patent context, however, because he discusses taking background information into account in determining the intended meaning. Id. at 125. In the patent context, the court must review the meaning of the disputed term given the art area of the patent and the appropriate level of skill in the art—all background information necessary to accurately determine the meaning of the term.

5. Left Behind? The dictionary first approach ignores the fact that dictionaries cannot keep up with fast-changing technologies.

The dictionary first approach also is flawed because dictionaries lag behind changes in language, particularly in fast-changing areas of technology. Webster’s Third New International Dictionary is the dictionary most often used by the Federal Circuit, but the latest printing of this dictionary was published in 2002. Indeed, “[t]o be included in a Merriam-Webster dictionary, a word must be used in a substantial number of citations that come from a wide range of publications over a considerable period of time.” This lag time creates a problem when people in a given art area may be familiar with a usage of a term, but the Federal Circuit may erroneously rely on an out-of-date definition in a general purpose dictionary.

The term “cookie” provides a helpful illustration of this problem. According to the addenda of the 2002 edition of Webster’s Third New International Dictionary, “cookie” means “a small file or part of a file stored on the computer of a World Wide Web user, created and subsequently read by a Web site server, and containing personalized user information (as a user identification, customized preferences, or a record of pages visited).” The main body of the Webster’s Third does not include any computer-related definitions for “cookie.” Nor does the 1993 Webster’s Third or its addenda include a computer-related definition of “cookie.”

However, many patents issued before 2002 included the word “cookie” in the computer (and not baking) context. The first patent that used the term “cookie” in a patent claim in the computer context was issued in 1998, well before the 2002 printing of Webster’s Third. This patent included the following claims:

123. See supra Part III.A.2.
124. WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY (Philip Gove ed., 2002). It is interesting to note that, at least in Chicago, it is not terribly easy to find a copy of this printing of Webster’s Third. No copies are held in the Harold Washington branch (main branch) of the Chicago Public Library, the Seventh Circuit library, or the Chicago-Kent Law Library.
126. WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 75a (Philip Gove ed., 2002).
127. Id. at 500. It is interesting to note that the Federal Circuit has never cited to the addenda of Webster’s Third. Miller & Hilsenteger, supra note 75, at 39 n.153 (“We suspect that many who use post-1961 printings of Webster’s Third do not know about the existence of, much less the importance of consulting, the Addenda Section. The Federal Circuit appears never to have cited it.”).
128. WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 69a, 500 (Philip Gove ed., 1993).
129. U.S. Patent No. 5,796,952 (issued Aug. 18, 1998). This patent was found using the search feature on the USPTO’s website, and searching for the term “cookie” in the “claims” field. Then, the titles were manually sorted to find the earliest issued patent that used the term “cookie” in the internet context. See http://patft.uspto.gov/netahml/search-bod.html.
17. A method of monitoring according to claim 1; wherein the step of acquiring client identifying indicia from the client comprises the steps of embedding a link to the second executable program in the file downloaded from the first server, the second executable program being executable on the third server, using the client to activate the link to the second executable program by sending a request having a request header containing client identifying indicia in an attempt to fetch the second executable program; using the third server to execute the second executable program in response to activation of the link using the server to check the request header issued by the client to determine if a client ID has been set for the client, and, if no client ID has been set, setting an ID for the client, and storing the client ID in a first database.

18. A method according to claim 17; wherein the client ID comprises a cookie.130

The written description of the patent helps to illuminate what the patentee meant when the patentee used the term “cookie” in claim 18. The “Background of the Invention” portion of the patent discusses a “customizable home page” where the user submits preferences and “[t]he server returns a Web page with a response header which creates, or ‘sets’ an ID field located in a file on the client computer (this file is known as the ‘client ID’ or ‘cookie’) to include information about the user’s preferences.”131

This patent appears to be using the term “cookie” consistently with the definition in the Webster’s Third addenda. A court construing this term, however, would not be able to look to the 2002 edition of Webster’s Third because it would not be contemporaneous with the patent document,132 which was filed on March 21, 1997.133 Courts are not allowed to consult references that are not contemporaneous with the patent because they “do not reflect the meanings that would have been attributed to the words in dispute by persons of ordinary skill in the art as of the grant of the... patent.”134

131. Id. at col. 1, ll. 65 to col. 2, ll. 16 (emphasis added).
132. Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings, 379 F.3d 1354, 1361 (Fed. Cir. 2004) (“[T]he court’s task [in claim construction] of ascertaining the meaning of the claim terms [is conducted from the view of] one of ordinary skill in the art at the time of invention.”).
134. Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1299 (Fed. Cir. 2003) (refusing to consider noncontemporaneous references cited by the district court). It is appropriate that courts only consult contemporaneous dictionaries (those in existence at the time the invention was made), even though those dictionaries may be terribly out-of-date. The simple reason is that contemporaneous dictionaries are the ones available to competitors and people of ordinary skill in the art at the time of the invention. Even if later issued or later revised dictionaries better reflect the meaning of the term at the time of the invention, they should not be acceptable evidence or at least should not be accorded much weight. It would be unfair to competitors to allow the patentee to use evidence of meaning that was not available at the time of the invention. Cf. Hibbs v. Winn, 542 U.S. 88, 124 S. Ct. 2276, 2294 (2004) (Kennedy, J., dissenting) (criticizing the lower court’s use of a dictionary definition for
Even though a court would almost certainly realize that "cookie" in this patent should not be construed in the baking sense and would look to other evidence, this example illustrates an important point: dictionaries lag behind changes in technical language. Those skilled in the art were receiving patents that included the term "cookie" in claims in 1998 (and applying for patents that included this term even earlier). Yet, the term did not appear in Webster's Third until the 2002 printing. Although this problem may not result in an erroneous claim construction for the term "cookie" (because the new usage is so different from the prior usage), this problem may have an effect when definitions change over time, but less radically. If people skilled in the art begin to use a term in a slightly different sense or in a broader or narrower way, a dictionary may not adequately reflect this usage until well after the shift has taken place. Therefore, although one skilled in the art might read a term in a patent claim and believe that it had a certain meaning, a court using the "dictionary first" method might construe the term using an antiquated meaning because the court relied on an out-of-date dictionary.

IV. NO CERTAINTY OR NOTICE: THE HOLISTIC APPROACH

In its en banc decision, the Federal Circuit also should reject the holistic approach. Although the holistic approach does provide the judge with the most flexibility, it does little to promote the policies behind patent law.

While the "dictionary first" approach provides at least an illusion of certainty, the holistic approach does not even supply this illusion. Because under this approach the court is free to adopt a claim construction without disclosing a methodology or even a clear rationale, the holistic approach does not provide any advance notice to the parties of what the court is likely to do. This uncertainty means that competitors cannot adequately structure their conduct to avoid infringement. The holistic approach will likewise not encourage innovation because patentees will be unaware of the scope of their patents until the patents are tested in litigation. This uncertainty means that patentees may be more likely to keep their inventions as trade secrets, if possible, rather than disclosing the information to competitors and later finding that their right to exclude is narrower than they anticipated.

statutory interpretation because "[the lower court] relied on a dictionary that was unavailable when the [statute] was enacted"). The dissent then looked to "[c]ontemporaneous dictionaries from the time of the [statute's] enactment." Id. at 2295.
Because the holistic approach promotes neither innovation nor certainty, the Federal Circuit should not adopt the holistic approach in its *en banc* Phillips decision.

**V. PRESERVING PUBLIC NOTICE: THE MODIFIED INTRINSIC/EXTRINSIC APPROACH**

Although the Federal Circuit should not adopt the "dictionary first" approach, the court should try to further one of the stated goals of the dictionary first approach—preserving public notice—by adopting a methodology that gives full effect to the public record of the patent but also encourages patentees to remove ambiguity from the patent documents. To do so, the Federal Circuit should adopt a modified intrinsic/extrinsic dichotomy which requires the following steps:

1) the court reviews the intrinsic evidence to determine if the meaning of the claim term is clear from the intrinsic evidence only;

2) if the term is ambiguous, the court reviews the parties’ proposed constructions to determine if the constructions are equally plausible or if one party’s construction is unsubstantiated;

3) if one party’s construction is unsubstantiated, the court construes the term in favor of the substantiated meaning;

4) if the parties’ proposed constructions are equally plausible, the court construes the term against the patentee.

In claim construction, preserving public notice is especially important because the public should be entitled to rely on the public record of the patent. The public record includes the claims themselves, the specification, and the prosecution history. The claims and specification are particularly relevant because they make up the patent document, the document that a competitor would first read when trying to determine if a patent covers the competitor’s device. The prosecution history also is relevant because it includes representations that the patentee made to the United States Patent & Trademark Office so that his patent would issue. If the examiner rejected a claim based on interpretation A, the patentee proposed a different interpretation B of the claim, and the examiner allowed the claim based on the proposed interpretation B, the public should be entitled to rely on the patentee’s representation that the claim means B and not A.

135. The prosecution history, although not a part of the patent document, is publicly available through the United States Patent & Trademark Office.
Given that the claims, specification, and prosecution history are publicly available, the Federal Circuit should adopt a methodology that looks to these sources first. This approach will ensure that, if a competitor reviews the public record and attempts to design around the patent, the court bases its claim construction primarily on the documents available to the competitor.

A claim term, however, may not be clear from the public record of the patent. In that instance, the court should analyze the competing interpretations of the parties to determine the plausibility of each interpretation. The court must take this second step because, if the judge automatically construed ambiguity against the patentee, then the patentee might never prevail on claim construction, even if the accused infringer's interpretation was tortured and the patentee's interpretation was significantly more likely to represent the view of one skilled in the art. The key to the second step is two equally plausible interpretations. Presumably a party will always be able to hire an expert who will testify to any interpretation that the party wants to bring forward. Therefore, court must review the interpretations to determine if the interpretations are equally plausible.

To determine if two interpretations are equally plausible, a court should look to other evidence supporting an expert’s testimony, such as other patents, technical articles, technical treatises, and dictionaries. If the interpretations have equal support in contemporaneous literature, then the two interpretations are equally plausible. If one side’s interpretation has copious support, while the other side puts forward only unsubstantiated expert testimony, the two sides are not equally plausible, and the court

136. The determination of the appropriate claim construction is binding only on the parties before the court. Markman v. Westview Instruments, Inc., 517 U.S. 370, 391 (1996) ("[I]ssue preclusion could not be asserted against new and independent infringement defendants even within a given jurisdiction... "). Therefore, interested third parties, such as other competitors, who might not agree with the current accused infringer’s construction, would have the opportunity to fully litigate the issue of claim construction if they too are later accused of infringement. A detailed explanation of issue preclusion and collateral estoppel as related to patent claim construction, however, is beyond the scope of this Note.

137. The expert’s testimony should not be that of the inventor of the patent-in-suit. In infringement litigation, the inventor’s own testimony is generally entitled to no or little weight. N. Am. Vaccine, Inc. v. Am. Cyanamid Co., 7 F.3d 1571, 1577 (Fed. Cir. 1993) ("[A]fter-the-fact [inventor] testimony is of little weight compared to the clear import of the patent disclosure itself."). The reason for according little weight to inventor testimony is analogous to the parole evidence rule in contract law, where the parties are often limited to the written contract as opposed to any oral agreements outside the written document. See Tiersma, supra note 89, at 37. In the patent context, the inventor is presumed to convey his intent in the actual patent document, much like the parties to a fully integrated, written contract are presumed to have conveyed their intent in the written contract. An inventor has the added advantage of having much of his "negotiations" memorialized in writing in the prosecution history. Therefore, an inventor's testimony about what he "meant" is entitled to little weight because he had ample opportunity to memorialize his meaning in writing, as supplemented by the knowledge of one of ordinary skill in the art.
should favor the side that has put forward the substantiated testimony, regardless of whether that side is the patentee or the accused infringer.

If the two interpretations are equally plausible, then the court should construe the term against the patentee. Reasonable people could differ on the proper interpretation of a term with two equally plausible meanings, and the public would not have clear notice of what the term meant in the patent. The patentee's competitors would read the patent, choose an interpretation, and then attempt to avoid infringement of the patent. The competitors, however, may choose the "incorrect" interpretation, according to the patentee. If a term is unclear and there are two equally plausible interpretations of the claim term, the patentee, and not the competitor, should bear the risk associated with this ambiguity.

The patentee should bear the risk of ambiguity because the patentee is in the best position to clarify any ambiguity when he is drafting the patent document. The patentee has control over the terms he chooses and can choose terms that are more or less precise.138 The patentee also can choose to act as his own lexicographer and define his own terms, and the patentee can specify relevant prior art.139 These options allow the patentee to solidify the meaning of claim terms at the time the patent is drafted. If the patentee chooses to leave ambiguity in the patent document, perhaps in the hope of gaining a broader claim scope than the patentee can envision at the time the patent is drafted, then the patentee should bear the risk that the court will choose a narrower interpretation, perhaps even narrower than the patentee foresaw when he drafted the patent.

On the other hand, competitors have only the public record of the patent and cannot ask the patentee what he intended when he drafted his patent. Competitors also do not have access to the patentee's experts until the competitors have been accused of infringement. Therefore, competitors who make reasonable interpretations of a claim term's meaning should not

138. Lawyers have a tendency to employ flexible terminology when they foresee a possibility that the language could apply more broadly than if they use precise language. See TIERSMA, supra note 89, at 78–79 ("When lawyers want to ... have a provision apply as broadly as possible, [passive voice and nominalizations] can be very handy."). Additionally, "[l]awyers sometimes deliberately employ terminology exactly because of its pliability." Id. at 79.

139. It is particularly relevant that this proposed approach encourages patentees to define any "new" terms the patentee uses. These definitions are declaratory definitions. Id. at 117 ("[D]eclaratory definitions may promote precision by making explicit which of the various possible meanings a word has in a particular legal document."). In the cookie example in Part III.D, under the proposed approach, the patentee would have added incentive to clearly define this term, because it is not well-documented in dictionaries (and may not be well-documented in other references), even though people in the art area know the meaning of the term. Indeed, because the meaning of the term may be evolving over time, the patentee will have an incentive to give a preferred meaning so that people in the art area have a true understanding of the meaning of the term as used in the patent.
have to risk later finding themselves liable for infringement. Competitors have no control over the patent application process, which is ex parte, and competitors cannot object to ambiguous terms.

Because patents are obtained in an ex parte proceeding, the case for construing ambiguity against the drafter is arguably even stronger in the patent context than in other areas of law where courts construe documents against the drafter, such as contract law. In contract law, under the doctrine of contra proferentum, ambiguity is "construed against the drafter who is solely responsible for [the contract's] terms." Even under this doctrine where one party was responsible for the terms of the contract, both parties presumably had the opportunity to review the document, and the nondrafter had the opportunity to object to the terms or refuse to accept the contract altogether.

Patents are not documents between private parties. Instead, patents are a bargain between the patentee and the public in which the patentee discloses his invention to the public in exchange for the exclusive right to practice the invention for a limited time. The patentee has an obligation to fulfill his side of this bargain by providing public notice of what is covered by the patent claims. If the patentee does not fulfill this obligation, then the court should construe the document against the patentee because the patentee has received the benefit of the bargain (the exclusive right to practice his invention) without fully complying with his obligation (providing adequate disclosure of his invention).

The competitor to a patentee, unlike the nondrafter of the contract, did not have an opportunity to review the patent and object to provisions or refuse his assent before the patent issued. Therefore, in the case of patent claim construction, the court has stronger reasons to construe ambiguity against the drafter of the patent than in contract interpretation under the doctrine of contra preferentum.

140. See e.g., Intel Corp. v. VIA Techs., Inc., 319 F.3d 1357, 1363 (Fed. Cir. 2003).
141. Id.; see also Transact Techs., Ltd. v. Evergreen Partners, Ltd., 366 F.3d 542, 546 n.2 (7th Cir. 2004) (declining to apply the doctrine of contra proferentum where both parties were involved in the drafting of the agreement).
142. In some instances, such as "click" agreements on the internet, the nondrafter does not have even the opportunity to object. Such contracts are purely "take it or leave it." Even in such instances, however, the nondrafter has the chance to leave it—that is, to choose not to click and thereby not accept the terms of the agreement. For an interesting discussion of contracts of adhesion in the Federal Circuit, see Christopher M. Kaiser, Take it or Leave it: Monsanto v. McFarling, Bowers v. Baystate Technologies, and the Federal Circuit's Formalistic Approach to Contracts of Adhesion, 80 CHI.-KENT L. REV. 487 (2005).
Miller & Hilsenteger ("Miller") have proposed an approach that would require patentees to specify references such as dictionaries and treatises in their patent applications. This approach also may eliminate ambiguity from the patent documents because competitors will have references to review to determine the meaning of unclear terms, and judges, presumably, would be required to rely on those references in claim construction analysis in litigation. My proposed approach, however, allows the patentee to choose when to incur the expense of defining terms and specifying references in the patent application and when to defer the cost to litigation and potentially incur the risk of leaving ambiguity in the patent document.

Under Miller’s approach, the cost of applying for patents would greatly increase because patentees would have to spend time and money searching for references and verifying that all terms in the references are defined in the way that the patentee intended. If the patentee cannot find a good reference, the patentee could act as her own lexicographer and define the term. While this is ultimately a desirable result because it would serve the policy of public notice, this approach requires significantly more up-front expense by patentees. Inventors, however, pursue patents for many different reasons. An inventor may want a patent purely so he can say that he is a “patented inventor.” A company may want to collect lots of patents, so it can tell its investors that it is an innovator in the field. The majority of patents are never commercialized. Therefore, Miller’s approach requires that a patentee pay significantly more for a patent even if the patentee never intends to commercialize the patent and even though the patent will never be the subject of litigation.

Under my proposed approach, the patentee can choose whether to define terms and specify references in the patent document. If the patentee intends to commercialize the patent and knows either that the area of the patent is highly competitive or is likely to become so, the patentee can spend money upfront to ensure that the scope of the claims, including references and definitions, is adequately defined. The patentee also can choose to leave ambiguity in the document if the patentee does not believe that the patent will ever become the subject of litigation.

The modified intrinsic/extrinsic approach provides a good balance between the policies of public notice and encouraging disclosure. Public notice is served by encouraging patentees to remove ambiguity from the

144. Miller & Hilsenteger, supra note 75, at 46.
 patent document. The policy of encouraging disclosure is served because, if patents are prohibitively expensive, then potential patentees may keep their inventions as trade secrets rather than apply for patents. Society is served by the patent disclosure because the disclosure puts technical information into the public domain and can lead to secondary innovation. Miller's approach, however, promotes public notice but may discourage some people from applying for patents altogether.

Some may argue that the modified intrinsic/extrinsic approach supplants the "battle of the dictionaries" of the dictionary first approach with a "battle of the experts plus other references" of the suggested approach. First, the modified intrinsic/extrinsic approach will not devolve into a "battle of the experts plus" in cases where the meaning of a claim term is clear from the intrinsic evidence. Second, where the meaning is not clear from the intrinsic evidence, it is true that, under this approach, the parties will present expert testimony along with additional references in prior art, treatises, and other sources to support their proffered definition of the disputed term. Where there is a dispute between parties, however, a case will devolve into a battle of something. In the proposed approach, this "something"—expert testimony plus references such as prior art patents—better approximates the view of one of ordinary skill in the art at the time the invention was made than solely using dictionaries to determine the meaning of the disputed term.146

In sum, the Federal Circuit should adopt a claim construction methodology in its en banc Phillips decision that best furthers the public notice function of the claims. I describe this methodology as a modified intrinsic/extrinsic dichotomy, with a similar starting point to the methodology used in Vitronics.147 The court should first look at the intrinsic evidence of the patent because this evidence is the public record of the patent on which the public is entitled to rely. If the term is clear from the intrinsic evidence, then the court should not rely on extrinsic evidence to determine the mean-

146. Further, some may be concerned that this proposed approach will lead to judges importing limitations from the specification into the claim. See Brief for Parus Holdings as Amicus Curiae at 8–9, Phillips v. AWH Corp., 376 F.3d 1382 (Fed. Cir. 2004) (Nos. 03-1269, 03-1286). Claim terms, however, should not be construed in a vacuum, and the specification provides valuable context to the claim, including who one of ordinary skill in the art would be. Of course, judges must be aware of the concern of importing limitations into the claim, but this result is a possibility regardless of the methodology adopted. Instead of adopting a rigid methodology such as dictionary first to avoid this result, the Federal Circuit should instead warn judges that they should give claim terms the full breadth of their appropriate construction even though specific examples are given in the specification. The requirement that judges not import limitations from the specification into the claim can be effectively argued by the parties outside the specific claim construction methodology as a maxim of construction.

147. See supra Part II.A.
of the term. The court could, however, review extrinsic evidence to educate itself on how one skilled in the art would view the term.

If the court determined that the meaning of the term was ambiguous from the intrinsic evidence, then the court would review the extrinsic evidence to determine if the interpretations proposed by each side are equally plausible. If one side's argument is plausible while the other side's is not, then the court should choose the plausible, substantiated argument. If the arguments are equally plausible, then the court should construe the term against the patentee.

CONCLUSION

Depending on the term, the context, and the technology involved, dictionaries may be highly relevant evidence that can help a court determine what one of ordinary skill in the art thought the term meant. A bright-line rule that looks to dictionaries as the primary evidence of the proper interpretation, however, assumes too much. This rule assumes that dictionaries will always—except in the rare instance of a clear disavowal—represent the view of one skilled in the art, regardless of whether the term is general or whether the term comes from a specialized field. It assumes that dictionaries are contemporaneous with rapidly changing fields of technology. Finally, it assumes that dictionaries are objective evidence. The dictionary first approach ignores the possibility of differing outcomes depending on the dictionary chosen and the choice of the appropriate definitions within that dictionary. It ignores the fact that this rule can devolve into a "battle of the dictionaries."

Instead, in its en banc Phillips decision, the Federal Circuit should adopt an approach that comports with the public notice function of the patent claims. The modified intrinsic/extrinsic approach will allow competitors to rely on the public record of the patent when choosing a course of conduct. This approach also will construe ambiguous terms against the patentee if there are two equally plausible constructions because the patentee was in the best position to resolve any ambiguity at the time the patent was drafted. This approach will provide guidance to courts while at the same time allowing courts the flexibility to educate themselves in the relevant technical areas, so that judges can view the patent as would one of skill in the art.

Therefore, while dictionaries may be relevant as background information, courts should not use dictionaries as conclusive evidence of ordinary meaning, particularly where the terms at issue have a specialized meaning in the relevant field. In its en banc Phillips decision, the Federal Circuit
should reject the “dictionary first” method and instead adopt the modified intrinsic/extrinsic approach, a method for claim construction that better approximates the view of one of ordinary skill in the art and furthers the public notice function of patent claims.