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THE PROPER METHOD FOR USING DICTIONARIES TO CONSTRUE PATENT CLAIMS

Scott A. Turk*

“A word is not a crystal, transparent and unchanged; it is the skin of a living thought and may vary greatly in color and content according to the circumstances and the time in which it is used.”

-- Justice Oliver Wendell Holmes¹

Introduction

The first step towards analyzing potential patent infringement is construing the claims of the patent.² While construing the claims, or determining what the claims mean, may sound relatively simple, it is a task that federal district courts, the Court of Appeals for the Federal Circuit (“CAFC”), and even the United States Supreme Court have struggled with for years.³ Invention complexity, linguistic interpretation, and shifting court rules have kept inventors, the United States Patent and Trademark Office (“USPTO”), and patent attorneys guessing as to what patent claims actually cover.⁴

There have been and still are many problems with claim construction. Some examples include the use of dictionaries and what kind of evidence they constitute,⁵ the type of methodological approach used by the judges of the CAFC,⁶ the judicial panel dependency of

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¹ *Towne v. Eisner*, 245 U.S. 418, 425 (1918) (quoted in *Markman v. Westview Instruments*, 52 F.3d 967, 1006 (Fed. Cir. 1995) (en banc) (Newman, J., dissenting)).

² *Markman*, 52 F.3d at 976.

³ See Kimberly A. Moore, *Are District Court Judges Equipped to Resolve Patent Cases?*, 15 Harv. J.L. & Tech. 1 (2001) (finding that the Federal Circuit reverses district court claim constructions 33% of the time); see also Christian A. Chu, *Empirical Analysis of the Federal Circuit’s Claim Construction Trends*, 16 Berkeley Tech. L.J. 1075, 1098-1100 (2001) (finding a reversal rate between 36.6% and 47.3%, depending on the assumptions used, and noting that the rate was increasing).

⁴ See Stephen G. Kunin, Mark Nagumo, Brian Stanton, Linda S. Therkorn, Stephen Walsh, *Reach-Through Claims in the Age of Biotechnology*, 51 Am. U.L. Rev. 609, 617 n.46 (April, 2002); see also Peter Zura, *Looking for Fire Amidst the Smoke – Is the Federal Circuit Really Exceeding its Appellate Authority in Patent Infringement Cases?*, 12 U. Balt. Intell. Prop. L.J. 1 (Fall 2003).

⁵ Compare *Markman*, 52 F.3d at 980 with *Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1584 n.6 (Fed. Cir. 1996)

⁶ R. Polk Wagner and Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. Pa. L. Rev. 1105, 1111 (January 2004) (discussing two distinct methodological approaches, procedure and holistic, that lead to distinct results).

decisions,⁷ and the fact that the law of the claim (since claim construction is a matter of law) is not determined until after a lawsuit is initiated.⁸ It is, thus, “difficult – and in many cases impossible – to know whether one is ‘trespassing’ upon another’s intellectual property right.”⁹

Recently, the CAFC decided to tackle the problems of claim construction, including the use of dictionaries, through the *Phillips I* case.¹⁰ A key problem was defining the term “baffle” as used in a claim.¹¹ Phillips argued that the term should be given its ordinary and customary meaning.¹² The district court found the term ambiguous and, as opposed to the ordinary and customary meaning, limited the term to the structures in the specification since the claim contained means-plus-function¹³ language,¹⁴ which Phillips argued was improperly reading limitations from the specification into the claim.¹⁵ A majority of the original three-judge panel of the CAFC agreed with the district court’s claim construction,¹⁶ even though it did not agree that the claim contained means-plus-function language.¹⁷ Judge Dyk’s dissent disagreed with the majority’s structural limitations based upon the patentee’s preferred embodiments since this violated the plain meaning of the term “baffles” from a dictionary.¹⁸ Thus, the dissent highlighted the contention between referring to the intrinsic evidence, such as the specification, and the ordinary and customary meaning, such as the dictionary, in determining the scope of a word as used in a claim.¹⁹ The CAFC then withdrew this opinion and decided to hear the case en banc.²⁰ The Court decided to solidify how claims are construed and asked various questions: how dictionaries impact the public notice function of patent claims, if dictionaries should serve as the primary source for claim interpretation, what kind of dictionary should be used, what definition should be used if multiple ones are given for a particular word, and how should dictionaries and the patent specification inter-relate in determining claim term meaning.²¹ Many

⁷ *Id.* at 1112.

⁸ See Mark A. Lemley, *What’s Different About Intellectual Property?*, 83 Tex. L. Rev. 1097, 1100-01 (March 2005)

⁹ *Id.* at 1100.

¹⁰ 363 F.3d 1207 (Fed. Cir. 2004), *withdrawn* (“Phillips I”); 376 F.3d 1382 (Fed. Cir. 2004) (“Phillips II”).

¹¹ *Phillips I*, 363 F.3d at 1209.

¹² *Id.* at 1211.

¹³ “[A]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such a claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” *Id.* at 1212.

¹⁴ *Id.* at 1210.

¹⁵ *Id.* at 1211.

¹⁶ *Id.* at 1212.

¹⁷ *Id.* at 1214.

¹⁸ *Id.* at 1217.

¹⁹ See *id.*

²⁰ *Phillips II*, 376 F.3d at 1382.

²¹ *Id.* at 1383 (“Is the public notice function of patent claims better served by referencing primarily to technical and general purpose dictionaries and similar sources to interpret the 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?”)

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 claim 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 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?

amicus briefs were submitted attempting to answer these questions. The general consensus was that dictionaries have been used too much and should be scaled back. Finally, the CAFC recently issued its en banc opinion, agreeing with the many *amicus* briefs.²² However, scaling back would still not necessarily clarify patent claims.

This article proposes to not scale back dictionary use, but instead to formalize and regulate their use by the USPTO, well before there is any chance of claim construction confusion by patentees, accused infringers, or federal courts. The background of construing claims will first be explained, followed by a comparison of intrinsic to extrinsic evidence, how dictionaries fall into this mix, the results of court decisions expanding the role of dictionaries, the advantages and disadvantages of using dictionaries, how dictionaries should be used in the future, and, finally, how the *Phillips III* decision effects the recommended dictionary use.

I. Background of Construing Claims

Before discussing the role of dictionaries in claim construction, the reasons for definite claims and the early case law describing how to construe claims will be presented. Once this background has been established, then the need for dictionaries and the confusion in using them will be readily apparent.

A. Claim Definiteness

Claims are an extremely important part of the patent, since they put the public on notice as to what is protected and what would infringe,²³ and must be definite²⁴. Claim definiteness is described in statute and patent law policy, both of which will be summarized in this section.

35 U.S.C. § 112 describes the patent specification and states in the second paragraph that “[t]he specification shall conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as his invention.”²⁵ This section is commonly referred to by both patent examiners and attorneys as § 112 ¶ 2 and provides the entire basis for arguments around construing claims. As emphasized above, claims must particularly point out the invention subject matter and must also be distinct. The underlying reasons behind § 112 ¶ 2 can be found in patent law public policy.

The guideline for patent examiners, the Manual of Patent Examining Procedure (“MPEP”), states that “[t]he primary purpose of [the 35 U.S.C. § 112 ¶ 2] requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is

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 embodiment is disclosed and no other indications of breadth are disclosed?”).

²² *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (“Phillips III”).

²³ *McClain v. Ortmyer*, 141 U.S. 419, 424 (1891) (“The object of the patent law in requiring the patentee [to distinctly claim his invention] is not only to secure to him all to which he is entitled, but to apprise the public of what is still open to them.”)

²⁴ *Medtronic, Inc. v. Catalyst Research Corp.*, 547 F.Supp 401, 407 (D. Minn. 1982) (citing 35 U.S.C. § 112 generally).

²⁵ 35 U.S.C. § 112 (2000) (*emphasis added*).

informed of the boundaries of what constitutes infringement of the patent.”²⁶ There are two key reasons why the public must know the claim boundaries. First, the public must be put on notice as to what is claimed so that they can design around or otherwise avoid infringement.²⁷ Patents give the equivalent of monopolies to patent holders for the life of the patents,²⁸ and the rest of the public would be greatly harmed if they could only determine infringement after lawsuit. A goal of patent law is to allow the public to avoid infringement.²⁹ This can only be done if the claims are definite. Another related goal is to allow the public to design around existing patents.³⁰ This promotes scientific growth and leads to the second key reason: that patent law forces patentees to accurately divulge their secret as a trade off for their “monopoly.”³¹ Forcing patentees to divulge their secrets allows others to build off of those secrets, especially after the patent has expired.³² This also promotes growth and is the basic trade off that allows patentees to have a government-sanctioned “monopoly” in a free-market economy.³³

Another reason for claim definiteness is because claims must “provide a clear measure of what applicants regard as the invention so that it can be determined whether the claimed invention meets all the criteria for patentability and whether the specification meets the criteria of 35 U.S.C. 112, first paragraph with respect to the claimed invention.”³⁴ In other words, patent examiners must know what the applicant is claiming. An invention must be novel³⁵ and not obvious³⁶ to be granted a patent. Patent examiners must compare the application claims to the prior art³⁷ to determine if the patentability requirements have been met.³⁸ Patent examiners cannot perform this task without definite claims. Indefinite claims would lead, and have led, to inventions patented multiple times and patents granted for obvious extensions to existing patents. Therefore, patent claims must be definite.

Once the patent has been granted and the public has been put on notice as to the claimed invention, then the patentee has the right to sue anyone who infringes their patent.³⁹ The process for determining infringement is complicated and starts with the claims, as laid out in the *Markman* case.⁴⁰

²⁶ MPEP, Manual of Patent Examining Procedure, § 2173 (U.S.P.T.O. Feb. 2003).

²⁷ See *Athletic Alts., Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996).

²⁸ See *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 264-265 (1979); Life of a patent is 20 years from the filing date. 35 U.S.C. § 154 (2000).

²⁹ See *Athletic Alts.*, 73 F.3d at 1581.

³⁰ See *White v. Dunbar*, 119 U.S. 47, 52 (1886).

³¹ *Universal Oil Prods. Co. v. Globe Oil & Refining Co.*, 322 U.S. 471, 484 (1944).

³² See *id.* at 484-85.

³³ See *id.*

³⁴ MPEP, Manual of Patent Examining Procedure, § 2173 (U.S.P.T.O. Feb. 2003).

³⁵ 35 U.S.C. § 102 (2000).

³⁶ 35 U.S.C. § 103 (2000).

³⁷ Prior art refers to anything that might prevent a patent from being granted, such as printed publications, prior patents, etc. MPEP, Manual of Patent Examining Procedure, §§ 901 – 901.09 (U.S.P.T.O. Feb. 2003).

³⁸ MPEP, Manual of Patent Examining Procedure, § 2173.02 (U.S.P.T.O. Feb. 2003).

³⁹ 35 U.S.C. § 271 (2000).

⁴⁰ 52 F.3d at 976.

B. *Markman* case

Markman is best known for its holding that the judge, and not the jury, “has the power and obligation to construe as a matter of law the meaning of the language used in the patent claims.”⁴¹ One potential reason for this holding is that judges are in a better position to determine the meaning for complicated and scientific claims based upon the variety of evidence presented at trial. Another potential reason is that juries might decide the entire infringement case based upon the claim construction arguments, which might lead to inaccurate results since juries might have already made their decision for infringement before ever listening to arguments comparing the construed claims to the accused infringing device. While the arguments surrounding this decision are beyond the scope of this paper, construing the claims as a matter of law is a factor in the use of dictionaries and will be discussed further *infra*.

Markman also held that construing the claims, as stated *supra*, is only the first of a two-step process to determine patent infringement.⁴² The second step is to apply the construed claims to the accused device or method, which is a question of fact.⁴³ Therefore, construing the claims is vital, since inaccuracy at the first step of infringement analysis could lead to the wrong results in the second step.

A result of the *Markman* case is that *Markman* hearings usually precede the infringement trial.⁴⁴ The goal is to construe the claims, a matter of law, outside of the realm of the jury, which might be biased by any arguments they might hear.⁴⁵ Cases have been settled purely based upon claim construction before ever going to trial.⁴⁶ Therefore, determining the scope of the claims based upon term meaning is extremely important. Determining the meaning of the words used in the claim has caused a great deal of difficulty over the years and has resulted in the discrepancy over the use of dictionaries.⁴⁷

C. *Cybor Corp.* case

The CAFC confirmed in *Cybor Corp. v. FAS Technologies, Inc.* that any disputed questions concerning the meaning and scope of patent claims, including the meaning of technologic and other terms (‘the totality of claim construction’) are treated as questions of law and are determined *de novo* on appeal, without deference to the decision of the trial court.⁴⁸ This holding has two important effects. First, it confirms that construing the claims at the district court level is a matter of law for the judge to decide.⁴⁹ Second, the appellate court does not need

⁴¹ *Id.* at 979.

⁴² *Id.* at 976.

⁴³ *Id.*

⁴⁴ David B. Pieper, *The Appropriate Judicial Actor for Patent Interpretation: A Commentary on the Supreme Court’s decision in Markman v. Westview Instruments, Inc.*, 51 Ark. L. Rev. 159, 181 (1998) (citing *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 93 F.3d 1572 (Fed. Cir. 1996)).

⁴⁵ *See id.* at 185.

⁴⁶ *Id.* at 184.

⁴⁷ *See supra* footnote 3.

⁴⁸ *See* 138 F.3d 1448, 1455-1456 (Fed. Cir. 1998).

⁴⁹ *Id.*

to show any deference to the district court judge.⁵⁰ Therefore, the claims will be construed again at the CAFC, if necessary.⁵¹ This second time construing the claims may result in even greater confusion, especially when an exact interpretation procedure is not clear.⁵² Therefore, it is important to determine exactly what judges may consider when construing claims.

II. Intrinsic vs. Extrinsic Evidence

Evidence used for construing claim terms is generally put into one of two categories: intrinsic evidence or extrinsic evidence. The over-arching concern of evidence classification is notification to the public, similar to the notification through claim definiteness mentioned *supra*.⁵³ Intrinsic evidence refers to those sources that are part of the patent record and, thus, provide more public notice as to claim meanings.⁵⁴ Extrinsic evidence refers to any sources that are not part of the public record, such as expert testimony, and does not add to public notice for claim meaning.⁵⁵ Therefore, intrinsic evidence is stressed as the only kind of evidence to look at when construing patent claims, as long as any claim term ambiguity is resolved.⁵⁶ Only if claim term meaning is still not clear after considering the intrinsic evidence should extrinsic evidence be considered.⁵⁷ However, the question remains as to where dictionaries fall into this mix.

A. Intrinsic

Intrinsic evidence refers to evidence that is part of (or intrinsic to) the patent record, such as the claims, the specification, and the prosecution history.⁵⁸ In claim interpretation, the court “should look first to intrinsic evidence of record, i.e. the patent itself, including the claims, the specification and, if in evidence, the prosecution history,”⁵⁹ and in that respective order.⁶⁰ Additionally, in most situations the intrinsic evidence will resolve any ambiguity in disputed claim terms.⁶¹ This is, in part, because the specification “acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.”⁶²

The emphasis placed on using intrinsic evidence to construe claims goes back to the patent law public policy point regarding public notice.⁶³ The public must know from looking at the patent what is claimed so that they may invent around the patent and not infringe.⁶⁴ Along

⁵⁰ *Id.*

⁵¹ It is often necessary. See *supra* footnote 3 citing reversal rates by the CAFC ranging from 33% to 47.3%, and climbing as of 2001.

⁵² See *supra* footnote 4.

⁵³ See *Markman*, 52 F.3d at 980.

⁵⁴ See *id.* at 978-79; See also *Vitronics*, 90 F.3d at 1583.

⁵⁵ See *Vitronics*, 90 F.3d at 1583.

⁵⁶ See *id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.* at 1582.

⁶⁰ *Id.*

⁶¹ *Id.* at 1583.

⁶² *Id.* at 1582.

⁶³ See *id.* at 1583.

⁶⁴ See *Athletic Alts.*, 73 F.3d at 1581.

these lines, everything in intrinsic evidence is part of the patent record.⁶⁵ The public has access to all this information and, thus, is on notice.⁶⁶ If the court refers to a defined term in the specification when construing the claims, then this court's interpretation should come as no surprise to the public, thus upholding patent law policy.⁶⁷ Neither the public nor the patentee should be surprised later by something not in the patent record.⁶⁸ Additionally, intrinsic evidence may indirectly convey the customary meaning of a disputed claim term⁶⁹ since "the specification may still define [it] 'by implication' such that the meaning may be found or ascertained by a reading of the patent documents."⁷⁰ However, the meaning of the claim terms may still not be entirely clear based upon the intrinsic evidence.

B. Extrinsic

Extrinsic evidence refers to evidence that is outside the scope of the patent record, such as expert testimony, inventor testimony, and articles.⁷¹ "Only if there were still some genuine ambiguity in the claims, after consideration of all available intrinsic evidence, should the trial court have resorted to extrinsic evidence, such as expert testimony...."⁷² Extrinsic evidence should be used to aid the court's understanding of the patent when attempting to resolve any ambiguity in construing the claims.⁷³

The primary advantage of using extrinsic evidence to construe claims is that not everything in the patent can always be defined by intrinsic evidence. However, the disadvantage is that extrinsic evidence, by its very definition, is not part of the patent record.⁷⁴ Use of such evidence could surprise the public since there is no indication in the patent record of what extrinsic evidence would be used.⁷⁵ Patentees might be similarly surprised when a word is defined in a way they never intended using a piece of extrinsic evidence that they or the PTO never considered during the prosecution process.⁷⁶ Thus, the *Vitronics* court stated that when intrinsic evidence alone will resolve any ambiguity in a disputed claim term, "it is improper to rely on extrinsic evidence."⁷⁷

III. How Dictionaries Fall into the Mix

Dictionaries and technical treatises were considered extrinsic evidence prior to *Vitronics*.⁷⁸ They were not part of the official patent record. However, when confused by a

⁶⁵ See *Vitronics*, 90 F.3d at 1583.

⁶⁶ See *id.*

⁶⁷ See *id.* at 1582.

⁶⁸ See *id.* at 1583 ("Allowing the public record to be altered or changed by extrinsic evidence introduced at trial, such as expert testimony, would make [the right to rely on the public record] meaningless.").

⁶⁹ Br. of Amicus United States at 12, *Phillips v. AWH Corp.*, 376 F.3d 1382 (Fed. Cir. 2004).

⁷⁰ *Novartis Pharm. Corp. v. Abbott Labs.*, 375 F.3d 1328, 1334 (Fed. Cir. 2004).

⁷¹ *Vitronics*, 90 F.3d at 1583, *Markman*, 52 F.3d at 980.

⁷² *Vitronics* at 1584.

⁷³ See *Gentry Gallery, Inc. v. Berklene Corp.*, 134 F.3d 1473, 1476 (Fed. Cir. 1998).

⁷⁴ See *Vitronics*, 90 F.3d at 1583.

⁷⁵ See *id.*

⁷⁶ See *id.*

⁷⁷ *Id.*

⁷⁸ *Markman*, 52 F.3d at 980.

word, most of the public would likely turn to a dictionary for the definition. Technical treatises and technical dictionaries perform the same function for more technical areas that have their own specialized terminology. In fact, the CAFC stated in *Vitronics* that “[a]lthough technical treatises and dictionaries fall within the category of extrinsic evidence, as they do not form a part of an integrated patent document, they are worthy of special note.”⁷⁹ This one statement points to the crux of the argument regarding dictionaries in claim construction. They were extrinsic evidence,⁸⁰ thus not part of the patent record and not part of public notice, but should now be treated at a higher level than other kinds of extrinsic evidence.⁸¹ Some courts have even put dictionaries on the same level or even ahead of intrinsic evidence, a fact that will be explored further *infra*. However, it is important to look at what many consider to be the two seminal cases that elevated the status of dictionaries: *Vitronics* and *Texas Digital*.

A. *Vitronics* case

The CAFC ruled on the *Vitronics* case in 1996. The court reiterated many steps in claim construction that were already widely known and formed the basis for the claim interpretation landscape, such as first looking to intrinsic evidence,⁸² reviewing the specification for any express term definitions,⁸³ reviewing the prosecution history if in evidence,⁸⁴ and only referring to extrinsic evidence if there is some ambiguity in the claims after reviewing the intrinsic evidence.⁸⁵ However, the court had one note in the opinion that completely changed the claim interpretation landscape:

Although technical treatises and dictionaries fall within the category of extrinsic evidence, as they do not form a part of an 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 contract any definition found in or ascertained by a reading of the patent documents.⁸⁶

Thus, the court elevated the status of dictionaries and allowed judges to use them at any time, even if not used by the parties.⁸⁷ The court reasoned that dictionaries were more objective and reliable than expert testimony and were accessible to the public in advance of litigation.⁸⁸ Therefore, the public was still on notice and should not be surprised by the use of dictionaries, thus overcoming the stated disadvantages of extrinsic evidence.

⁷⁹ *Vitronics*, 90 F.3d at 1584 n.6.

⁸⁰ *Markman*, 52 F.3d at 980.

⁸¹ *Vitronics*, 90 F.3d at 1584 n.6.

⁸² *Id.* at 1582.

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.* at 1584.

⁸⁶ *Id.* n.6.

⁸⁷ *See id.*

⁸⁸ *Id.* at 1585.

Part of the need for dictionaries is because the default rule for claim construction, as the CAFC stated, is that we give claim terms their “ordinary and accustomed meaning as understood by one of ordinary skill in the art.”⁸⁹ Since claim terms must be looked at from the perspective of one of ordinary skill in the art, technical treatises and technical dictionaries are included as reference items because those are the sources that scientists and inventors would likely turn to when defining technological terms.⁹⁰ General dictionaries are included for defining general terms⁹¹, such as the word “substantially.” While some still argue that *Vitronics* still only held that intrinsic evidence should be used before extrinsic and that dictionaries were extrinsic evidence,⁹² the one note mentioned *supra*⁹³ has been the focus of many patentees, accused infringers, district courts, and even the CAFC. Pandora’s box was opened a crack.

B. Texas Digital case

In *Texas Digital Systems, Inc. v. Telegenix, Inc.*, the CAFC confirmed the special status of dictionaries in determining the ordinary meaning of claim terms, above the status of extrinsic evidence,⁹⁴ thus further solidifying their *sua sponte* use by judges. “It has been long recognized...that dictionaries, encyclopedias and treatises are particularly useful resources to assist the court in determining the ordinary and customary meanings of claim terms.”⁹⁵ Additionally, “[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.”⁹⁶ The court even cited to its own 2000 opinion in *Vanguard Products Corp. v. Parker Hannifin Corp.*, where it stated that “[a] dictionary is not prohibited extrinsic evidence, and is an available resource of claim construction.”⁹⁷

The CAFC thus gave their stamp of approval for using dictionaries to define claim terms by judges at any time. The court even boldly stated that dictionaries “may be the most meaningful sources of information to aid judges in better understanding both the technology and the terminology used by those skilled in the art to describe the technology.”⁹⁸ They are objective sources of information on established meanings⁹⁹ and may be used by trial and appellate judges at any time.¹⁰⁰ However, the court did qualify the use of dictionaries. Since there may be multiple dictionary definitions, the one chosen must be consistent with the use of the words in the intrinsic record.¹⁰¹ Additionally, if more than one definition “is consistent with the words in the intrinsic record, the claim terms may be construed to encompass all such consistent

⁸⁹ *Bell Atlantic Network Servs., Inc. v. Covad Commun. Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). *See also Johnson Worldwide Assocs. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed. Cir. 1999).

⁹⁰ *See AFG Indus. v. Cardinal IG Co.*, 239 F.3d 1239, 1247-1248 (Fed. Cir. 2001)

⁹¹ *See id.*

⁹² Br. of Amicus United States at 4, *Phillips v. AWH Corp.*, 376 F.3d 1382 (Fed. Cir. 2004).

⁹³ Footnote 85.

⁹⁴ 308 F.3d 1193 (Fed. Cir. 2002).

⁹⁵ *Id.* at 1202.

⁹⁶ *Id.*

⁹⁷ *Id.* (citing *Vanguard Prods. Corp. v. Parker Hannifin Corp.*, 234 F.3d 1370, 1372 (Fed. Cir. 2000)).

⁹⁸ *Id.* at 1203.

⁹⁹ *Id.* at 1202-03.

¹⁰⁰ *Id.* at 1203.

¹⁰¹ *Id.*

meanings.”¹⁰² Also, the intrinsic record may show evidence that the inventor acted as his own lexicographer, thus rebutting the ordinary and customary meaning, and rebutting the dictionary definition.¹⁰³ Therefore, the claim terms are first given, with the help of dictionaries, their ordinary and customary meanings, which must then be confirmed or rebutted by the inventor’s use or definition of the terms in the specification.¹⁰⁴ However, even though the court did put some limits on the use of dictionaries, no additional guidance on their function in the claim construction process was provided. Several problems still remain, such as what dictionaries to use, when to use them, and how to make sure the patent law public policy issue of notice is followed.

IV. Pandora’s Box Opened

The combination of *Markman*, *Vitronics*, and *Texas Digital* has allowed for a steady increase in the use of dictionaries. In fact, “the last nine years have seen more than a ten-fold increase in the number of times per year that the Federal Circuit expressly relies on publicly available reference sources such as dictionaries, encyclopedias, and learned treatises...in majority opinions for the court.”¹⁰⁵ Professor James A. Hilsenteger and Professor Joseph Scott Miller compiled statistics to determine “whether the apparent increase in courts’ reliance on dictionaries is simply an artifact of the general increase in the overall number of patent decisions” or the result of post-*Markman* claim construction case law.¹⁰⁶ They ran both a broad and narrow search in Westlaw’s district court (dct) and Federal Circuit (ctaf) databases to find opinions wherein the court likely used a dictionary or similar source to construe a claim term, whether for infringement or validity analysis.¹⁰⁷ The broad search looked for key words in the same paragraph, while the narrow search looked for the same key words in the same sentence.¹⁰⁸ The professors also ran a baseline search to determine the increase in the overall number of patent decisions, regardless of whether or not a dictionary was used.¹⁰⁹ They discovered that during the 1993 to 2000 time period, the number of CAFC decisions using dictionaries compared to the overall increase in patent decisions went from 3.3% to 8.7% based on the broad search proportions, and from about 2% to 2.6% based on the narrow search proportions.¹¹⁰ However, a more interesting discovery was that during the 2000 to 2003 time period, the number of CAFC decisions using dictionaries compared to the overall increase in patent decisions went from 8.7% to 26.5% based on the broad search proportions, and from 2.6% to 9.3% based on the narrow search proportions.¹¹¹

¹⁰² *Id.* (citations omitted).

¹⁰³ *Id.* at 1204.

¹⁰⁴ *Id.*

¹⁰⁵ Joseph Scott Miller and James A. Hilsenteger, *The Proven Key: Roles and Rules for Dictionaries in the Patent Office and the Courts*, 54 Am. U. L. Rev. 829, 834 (April 2005).

¹⁰⁶ *Id.* at 842.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* Broad search string: “patent! /p claim! /p (constru! or interpret!) /p (dictionar! or encyclopedia! or treatise! or handbook!) and date([restrictor]).” Narrow search string: “patent! /s claim! /s (constru! or interpret!) /s (dictionar! or encyclopedia! or treatise! or handbook!) and date([restrictor]).”

¹⁰⁹ *Id.* Baseline search string: “patent! /p claim! /p (constru! or interpret!) and date([restrictor]).”

¹¹⁰ *Id.* at 846-847.

¹¹¹ *Id.*

“It is interesting to note, in connection with this tripling in annual dictionary citation rates from 2000 to 2003 in the Broad Search (and the more-than-tripling in the Narrow Search), that two of the six most active claim construction dictionary citers on the Federal Circuit revealed by our data – Judges Dyk and Linn – began their active service at the court in the first half of 2000.”¹¹²

Therefore, even though written CAFC decisions in patent cases roughly tripled from 1993 to 2003, “the rate at which the Federal Circuit appeared to be citing dictionaries in aid of its claim construction analysis increased about nine-fold in the same period.”¹¹³

Hence, the use of dictionaries has become much more relevant. However, the small questions regarding dictionary use have now exploded into much larger problems. For example, which type of dictionary to use (general or specific), which dictionary within a specific type should be used, and what to do when the dictionary chosen has several different meanings for the claim term and the specification provides no guidance.¹¹⁴ There has been very little guidance in answering these questions, resulting in the confusion and the increased patent litigation that takes place today.

Two examples should provide adequate illustrations of how dictionaries can either help or hurt claim definiteness, thus proving that more guidance in using dictionaries is needed. First, in *Gemstar-TV Guide International, Inc. v. International Trade Commission*, the parties agreed that “visual identification” was not a term of art or explicitly used in the written description and, thus, the court decided to use a non-technical dictionary to determine the ordinary meaning.¹¹⁵ The CAFC then used the Webster’s Third New International Dictionary to separately define “visual” and “identification,” linked these two meanings together in the context of the relevant claim, and determined the meaning of “visual identification” with regards to the patent at issue.¹¹⁶ This method was relatively straight-forward since only one dictionary was used and the meanings used for the two words were supported by the context of the claim. However, compare this to the *Novartis Pharmaceuticals Corp. v. Eon Labs Manufacturing* case, where the court, in attempting to define the claim term “hydrosol,” chained together six dictionary definitions.¹¹⁷ First, “hydrosol” was defined as “a sol in which the liquid is water.”¹¹⁸ Second, “sol” was defined as “a dispersion of solid particles in a liquid colloidal solution.”¹¹⁹ Third, “solution” was defined using the second and more relevant to the claim dictionary definition as “a liquid and usually aqueous medicinal preparation with the solid ingredients soluble.”¹²⁰ Fourth,

¹¹² *Id.* at 848 (citing to data in Table 7, Appendix B and citing to www.fedcir.gov/judgbios.html (Judge Linn began active service on January 1, 2000, and Judge Dyk began active service on June 9, 2000)).

¹¹³ *Id.* at 857.

¹¹⁴ The CAFC attempted to answer this last question in *Inverness Medical Switzerland GmbH v. Warner Lambert Co.* by stating that if the specification or prosecution history does not demonstrate which of the two meanings was intended, then the ordinary meaning may encompass both of the relative alternatives. 309 F.3d 1373, 1379 (Fed. Cir. 2002) (citations omitted). However, the question still remains, especially if there are 3 or more meanings, if all the meanings should be combined together, or if just the common elements from all the meanings should be used.

¹¹⁵ 383 F.3d 1352, 1366 (Fed. Cir. 2004).

¹¹⁶ *Id.* at 1366-67.

¹¹⁷ 363 F.3d 1306, 1308-9 (Fed. Cir. 2004).

¹¹⁸ *Id.* at 1308.

¹¹⁹ *Id.* at 1309.

¹²⁰ *Id.*

“medicinal” was defined as “of or relating to medicine.”¹²¹ Fifth, “medicine” was defined as “a substance or preparation used in treating disease.”¹²² Sixth, “preparation” was defined as “a medicine made ready for use.”¹²³ The first four words were defined using two different general purpose dictionaries, and the last two words were defined using a combination of a general purpose dictionary and three different specialized medical dictionaries.¹²⁴ This last case points out that we need some set of rules and standards when applying dictionary definitions to claim terms, since many different dictionaries were used to define a cascading waterfall of terms based upon only one word used in the claim. Each defined term led to more terms that needed to be defined, some by a different dictionary. It would be extremely unlikely that anyone, including the patentee or accused infringer, could have predicted the result in *Novartis*. The patent policy notification function has thus been compromised.

V. Advantages and Disadvantages of Using Dictionaries

There are advantages and disadvantages for using dictionaries to construe patent claims. Unfortunately, many of the *amicus* briefs filed as part of the *Phillips* en banc rehearing focus more on the disadvantages rather than the advantages. However, many of the disadvantages highlighted relate to the lack of formal structure surrounding the use of dictionaries. Dictionaries are not bad or biased forms of evidence, such as inventor testimony, but just need some structure and guidance regarding their use. They can be quite helpful and informative. As such, just relegating the dictionaries back to extrinsic evidence may not be the best course of action.

A. Advantages

Construing claims with the help of dictionaries has several advantages over just referring to them as part of the extrinsic evidence. First, they are readily available to the public. Second, even though they are not part of the patent record, they are commonly referred to for word definitions. Third, dictionaries are more reliable than experts or asking the inventor. Overall, these advantages, given the proper direction, would help increase claim definiteness. Thus dictionaries should continue to be used readily.

The first advantage is that dictionaries are readily available to the public. Almost everyone in the United States has learned to use a dictionary and most also own at least one dictionary. Dictionaries are readily available through either walk-in bookstores or on-line bookstores.¹²⁵ Large unabridged dictionaries are even available at most local libraries. Dictionaries are also available online, such as at [dictionary.com](http://www.dictionary.com) where a word search will reveal definitions from multiple sources, such as the *The American Heritage Dictionary of the English Language* and *Miriam-Webster's Dictionary*.¹²⁶ Also, for technical terms, many technical

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.* at 1308-9.

¹²⁵ *Amazon.com, All results for: dictionary* <http://www.amazon.com/exec/obidos/search-handle-url/ref=br_ss_hs/002-0224330-2636878?platform=gurupa&url=index%3Dbled&field-keywords=dictionary> (accessed May 5, 2005) (where a simple search for “dictionary” resulted in a list of thirty-five dictionaries in electronic and book format).

¹²⁶ *Dictionary.com* <<http://www.dictionary.com>> (accessed May 5, 2005).

dictionaries or treatises are similarly available to experts in the relevant fields and some are also available online.¹²⁷

The second advantage is that the general public, due to availability, familiarity, and ease of use, is likely to first turn to a dictionary when attempting to define a word that is unclear. Consequently, this would indicate that lack of a record in the patent regarding dictionaries would not hinder the patent notification function since people would turn to dictionaries. Since the public would likely first turn to a dictionary to define an unfamiliar term in a patent claim, then the court should be granted a similar opportunity. However, while this view is valid from a broad perspective, there are several other factors that detract from this reasoning, which will be discussed *infra*.

The third advantage is that dictionaries are more reliable than other kinds of extrinsic evidence, such as experts or asking the inventor to elaborate on the disputed claim term.¹²⁸

Dictionaries, encyclopedias and treatises, publicly available at the time the patent is issued, 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. Such 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.¹²⁹

It is likely that each side of the dispute will be able to find an expert to support their particular claim term interpretation.¹³⁰ “Many experts are willing for a generous (and sometimes for a modest) fee to bend their science in the direction from which their fee is coming.”¹³¹ This is referred to commonly as the “battle of the experts” and does not help the judge determine the ultimate meaning.¹³² Also, asking the inventor would not be wise, and should not be given any deference, since it is likely that the inventor will have a vested interest in the outcome.¹³³ He or she may testify to a new meaning that makes sense based upon the current patent conflict, but was not what they intended when the patent was initially filed.¹³⁴ Dictionaries do not suffer from either the expert or inventor objectivity problems¹³⁵ (although they do suffer from a similar

¹²⁷ *Amazon.com, All results for: technical dictionary* <http://www.amazon.com/exec/obidos/search-handle-url/103-0502260-1651058?url=index%3Dstripbooks%3Arelevance-above&field-keywords=technical+dictionary> (accessed April 8, 2006) (where a simple search for “technical dictionary” resulted in a list of 1,037 technical dictionaries in electronic and book format).

¹²⁸ *Vitronics*, 90 F.3d at 1585.

¹²⁹ *Texas Digital*, 308 F.3d at 1202-03.

¹³⁰ See *Indianapolis Colts v. Metropolitan Football Club, Ltd. Partn.*, 34 F.3d 410, 415 (7th Cir. 1994). Although a trademark case, the comments therein regarding experts are generally applicable to any area where experts testify, including patents.

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Vitronics*, 90 F.3d at 1585; *Markman*, 52 F.3d at 983 (where “the testimony of Markman and his patent attorney on the proper construction of the claims is entitled to no deference”).

¹³⁴ See *Vitronics*, 90 F.3d at 1585.

¹³⁵ *Id.*

“battle of the dictionaries, as will be discussed *infra*), are more reliable than these extrinsic sources,¹³⁶ and thus should not be part of the extrinsic evidence group.

B. Disadvantages

Though there are several advantages listed *supra*, there are also several disadvantages to using dictionaries. Many of these are documented in the various *amicus* briefs filed with the CAFC regarding the *Phillips* en banc rehearing. However, what all these disadvantages have in common is that there is no structure to put the public, patentees, and alleged infringers on notice for claim definiteness. A proper system would severely limit all these disadvantages.

There are four primary disadvantages. First, many different general dictionaries exist with subtle differences in definitions. Second, a word in just one dictionary may have several different meanings. Third, a choice must be made between a general and a specific/technical dictionary. Fourth, the public has no notice as to the dictionary that will be used by the courts in construing the claims.

The first disadvantage is that many different general dictionaries exist with subtle differences in definitions. Part of the reason for this is that various dictionary companies approach defining words differently:

A definition in Webster’s Third, for example, is consciously designed to be “a single coherent and clearly expressed phrase that need[s] no punctuation except where commas [are] essential to separate words or groups of words in a series.” In addition, the definitions in Webster’s Third carry only minimal status and usage labeling. A definition in American Heritage, by contrast, is not confined to the single-statement defining style of Webster’s Third, and American Heritage provides both copious status labeling and usage advice from a 200-member “usage panel.”¹³⁷

Having different meanings for the same word across multiple dictionaries creates a problem similar to expert witnesses. Instead of a “battle of the experts,” we now have a “battle of the dictionaries.”¹³⁸ Both parties to the dispute would present the dictionary definition that most closely represents their side.¹³⁹ The court might then accept the definition from one of the parties, find their own definition, or find a way to combine definitions from multiple sources to create a new, “unique” definition.

For example, in the *Intl. Rectifier Corp. v. IXYS Corp.* case, the CAFC switched from the *Ninth New Collegiate* dictionary cited by the district court to the *Webster’s Third New International Dictionary* when defining the word “adjoining” and reversed the district court’s

¹³⁶ *Id.*

¹³⁷ Miller & Hilsenteger, 54 Am. U. L. Rev. at 871-872.

¹³⁸ *Premier Networks, Inc. v. Lucent Tech. Inc.*, 2003 U.S. Dist. LEXIS 9030, 12 (N.D. Ill. 2003).

¹³⁹ *Id.* (where plaintiff’s expert first used a non-technical dictionary to define “solid state,” defendant’s expert witness countered with a dictionary from the field of solid state physics, and then plaintiff’s same expert witness countered with the Modern Dictionary of Electronics).

claim construction and finding of infringement.¹⁴⁰ However, “had the Federal Circuit switched to an American Heritage dictionary rather than switching to Webster’s Third, it might well have affirmed the district court’s construction of ‘adjoining’ and the concomitant infringement liability judgment. ... Dictionary selection seems to have made the difference between liability and no liability.”¹⁴¹ Also, rather than simply choosing one definition over another as was done in *IXYS*, the court could select only the material common to all definitions, or take the totality of the material from all the definitions.¹⁴² The CAFC used the first methodology in the *Intellectual Property Development, Inc. v. UA-Columbia Cablevision of Westchester, Inc.* case in construing “high frequency” to mean “between 3 and 30 megahertz,”¹⁴³ but used the second methodology in the *Nystrom v. TREX Co.* case in construing “board” to mean “an elongated, flat piece of wood or other rigid material” combining the definition of “a piece of sawed lumber of little thickness but considerable surface area usually being rectangular and of a length greatly exceeding its width” with “[a] long slab of sawed lumber; a plank; [a] flat piece of wood or similarly rigid material adapted for a special use.”¹⁴⁴

All these examples show that, based upon the current system, dictionaries hurt the claim definiteness process rather than help it. The CAFC did state that when two relevant alternatives existed between meanings, the prosecution history and the specification should be consulted to determine the correct meaning.¹⁴⁵ However, based upon the great number of general dictionaries and their apparent random use by the CAFC alone, using the prosecution history and specification as clarification is not enough. In fact, 26 different general-purpose English language dictionaries were used by the CAFC during the period from April 5, 1995 to June 30, 2004.¹⁴⁶ Based upon this final statistic, in conjunction with all the examples provided *supra*, greater structure must be provided to the courts in their use of dictionaries. Only then will claim definiteness be restored.

¹⁴⁰ 361 F.3d 1363, 1370-71 (Fed. Cir. 2004).

¹⁴¹ Miller & Hilsenteger, 54 Am. U. L. Rev. at 876.

¹⁴² *Id.* at 876-877 (where the totality of the material from all definition represents starting with the first definition and appending to it each subsequent definition, thus creating a definition that encompasses all the definitions).

¹⁴³ *Id.* at 877-878 (citing *Intell. Prop. Dev., Inc. v. UA-Columbia Cablevision of Westchester, Inc.*, 336 F.3d 1308, 1317 (Fed. Cir. 2003)).

¹⁴⁴ *Id.* at 878 (citing *Nystrom v. TREX Co.*, 374 F.3d 1105, 1110, 1113 (Fed. Cir. 2004)). Had the court used the first common-element method, the definition would have been “a slab of sawed lumber.” *Id.* at 43.

¹⁴⁵ *Inverness*, 309 F.3d at 1379.

¹⁴⁶ Miller & Hilsenteger, 54 Am. U. L. Rev. at Apndx. B, Table 5 (providing a list of the following dictionaries: American College Dictionary, American Heritage College Dictionary (3d ed.), American Heritage Dictionary, American Heritage Dictionary Second College Edition, Chambers Concise Dictionary, Merriam-Webster’s New Collegiate Dictionary (10th ed.), Webster’s New Collegiate Dictionary (6th ed.), Webster’s New International Dictionary, Webster’s New International Dictionary Second Edition, Webster’s Ninth New Collegiate Dictionary, Webster’s Seventh New Collegiate Dictionary, Webster’s Third New International Dictionary, Oxford English Dictionary, Oxford Reference Dictionary, Shorter Oxford English Dictionary, Random House College Dictionary, Random House Unabridged Dictionary, Random House Webster’s College Dictionary, Random House Webster’s Unabridged Dictionary, Strunk & White’s *The Elements of Style* (4th ed.), “the dictionary,” Webster’s II New Collegiate Dictionary (Houghton Mifflin), Webster’s II New Riverside University Dictionary (Riverside), Webster’s Encyclopedic Unabridged Dictionary (Gramercy Books), Webster’s New 20th Century Dictionary (Simon & Schuster), and Webster’s New World Dictionary (various publishers)).

The second disadvantage is that the definition of a word in just one dictionary may have several different meanings or senses.¹⁴⁷ In fact, different dictionaries order several senses for the same word differently.¹⁴⁸ “There are two conventional approaches to ordering these senses: chronologically (or historically), ranging from earliest to most recent sense; and logically, ranging from more to less important or frequent sense.”¹⁴⁹ As with the first disadvantage, there is little guidance to determine which definition to use. As stated by the CAFC, the prosecution history and specification should be consulted to determine the correct meaning,¹⁵⁰ but there could still be a “battle of the meanings,” a random selection of the court of one meaning over another, use of the common elements of many meanings, or use of all the elements of many meanings.

The third disadvantage is that the court has to choose between a general and a specific/technical dictionary. As with the previous two disadvantages, the problem again revolves around claim definiteness and the ability of the public to understand the claim language. The courts would have to determine when to use a general versus a specific/technical dictionary, such as when attempting to define a common word or a technical word, respectively. If a specific/technical dictionary should be used, then which one and which definition (implicating the first and second disadvantages listed *supra*). Also, some courts might use standards guidelines for certain industries since they provide the relevant definitions, such as the web standards from the World Wide Web Consortium (“W3C”).¹⁵¹ These might be known to those of ordinary skill in the art,¹⁵² or they might only be known to those of exceptional skill in the art.¹⁵³

For example, the word “test” has eighteen definitions on dictionary.com from eight sources covering various senses and definitions.¹⁵⁴ The general definition from the *American Heritage Dictionary of the English Language, Fourth Edition* is “[a] procedure for critical evaluation; a means of determining the presence, quality, or truth of something; a trial[.]”¹⁵⁵ The same general dictionary provides another definition as “[a] hard external covering, as that of certain amoebas, dinoflagellates, and sea urchins.”¹⁵⁶ Then there is the first definition from the

¹⁴⁷ Sense – one of the meanings of a word or phrase. *Dictionary.com, Sense* <<http://dictionary.reference.com/search?q=sense>> (accessed May 5, 2005).

¹⁴⁸ Miller & Hilsenteger, 54 Am. U. L. Rev. at 872.

¹⁴⁹ *Id.*

¹⁵⁰ *Inverness*, 309 F.3d at 1379.

¹⁵¹ The parties in *ACTV, Inc. v. Walt Disney Co.* attempted to refer various Request for Comments documents from the W3C in providing the ordinary and customary meaning of the term URL, but the CAFC refused to use these since their purpose was just to collect commentary and not to give meaning to a word or phrase. 346 F.3d 1082, 1088-1090 (Fed. Cir. 2003). However, the court also stated that “[i]t should be understood, however, that there is no general prohibition on the use of publications from standards-setting organizations to aid in determining the ordinary and customary meaning of technical terms.” *Id.* at 1090.

¹⁵² *Id.* at 1090.

¹⁵³ It is hard to say if a standards setting organization would be known to those of ordinary skill in the art. For example, the W3C might not be known to many web developers, even though they may be thought of as having ordinary skill in the art. It is important that any court using a standards setting organization determine if that organization is known to those of ordinary skill in the relevant art.

¹⁵⁴ Lexico Publishing Group, LLC., *Dictionary.com Results for “test”* <<http://dictionary.reference.com/search?q=test>> (accessed April 4, 2005).

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

American Heritage Stedman's Medical Dictionary as “[a] procedure for critical evaluation; a means for determining the presence, quality, or truth of something; an examination, or experiment.”¹⁵⁷ But there is also the definition from the *Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor* which states test is “[t]he attempt by a stock price or a stock market average to break through a support level or resistance level.”¹⁵⁸ Finally, there is the definition from the *Jargon File 4.2.0* which states test is “[r]eal users bashing on a prototype long enough to get thoroughly acquainted with it, with careful monitoring and followup of the results.”¹⁵⁹ Based upon one simple word “test,” all these definitions are a possibility for a court to use. In fact, if the patent is for a software application that tracks investments in medical technology and procedures, then any or all of these definitions are fair game. Neither the patentee nor the accused infringer (the rest of the public) would be able to determine the scope of the claims. Claim definiteness has been ruined.

The fourth disadvantage is the result of the previous three: the public has no notice as to the dictionary used by the court. Based upon the wide variety of dictionaries, definitions, and claim words used, determining the scope of the claims based upon the patent document itself might be close to impossible. This opens the door to greater amounts of litigation and appeals. Courts relying on dictionaries provide insufficient notice of the scope of those claims, substantially impeding licensing or business decisions.¹⁶⁰ Therefore, dictionary use, as it currently exists, destroys the primary goal of patent law to promote claim definiteness.

VI. Dictionaries Should Still be Used, but Differently

The *Phillips* case, at the time this article was originally written, was awaiting a ruling from the en banc Federal Circuit. One of its goals was to determine the role of dictionaries when construing claims. Many *amicus* briefs had been filed in conjunction with this hearing. While it was not surprising that many had stated a problem existed with the way in which dictionaries were used, it was surprising that almost all of them advocated moving dictionaries back towards extrinsic evidence. The United States Government, American Intellectual Property Law Association, IBM, and Intellectual Property Law Association of Chicago briefs all pushed to have dictionaries in a more subordinate role.¹⁶¹ In many cases, only when a term is unclear from the intrinsic evidence should a dictionary be considered.¹⁶² However, this is a step backwards that puts the patent system back to where it was before *Vitronics*. Since claim construction is a matter of law for the district court¹⁶³ and the appellate court can show no deference and re-construe the claims again with a different set of dictionaries¹⁶⁴, claim meaning uncertainty

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ Br. of Amicus Intl. Bus. Mach. at 10-11, *Phillips v. AWH Corp.*, 376 F.3d 1382 (Fed. Cir. 2004).

¹⁶¹ See Dennis Crouch, *Patently-O: Patent Law Blog – Phillips v. AWH: The Amicus Briefs* <http://www.patentlyobviousblog.com/2004/09/phillips_.html> (September 23, 2004).

¹⁶² *Id.*

¹⁶³ *Markman*, 52 F.3d at 979.

¹⁶⁴ See *Cybor Corp.*, 138 F.3d at 1455-1456

increases exponentially¹⁶⁵. A better defined system needs to be created that will constrain courts on all levels to construe claims in the same fashion.

In tennis, the worst place to get stuck is in “no-man’s land,” or about half-way between the base line and the net. Almost any instructor will teach that after hitting a ball in “no-man’s land,” either run back to the base line or up to the net, but never stop in the middle. Running back to the base line is usually considered the mark of a conservative player, who is waiting for the other player to make a mistake. However, running to the net is the mark of an aggressive player who wants to take charge and try to win the game. The current way that courts have been using dictionaries has been the equivalent of being stuck in “no-man’s land.” By standing there, patentees and the public continue to get hammered by flying tennis balls or dictionary definitions. Instead, we need to either move forward or back. While many of the large corporations and intellectual property organizations advocate moving back to the base line, the conservative safe procedure, that may still cost the public the game in the long run. Instead, we should run up to the net, go for the win, and mandate all patent applications to specify any dictionaries to use for any words not specifically defined by the intrinsic evidence and push for an appendix listing any possible confusing words with their meanings.

A. Why

There are several reasons why dictionaries should be used as part of the basic claim construction process and part of patent prosecution, rather than relegated back to the world of extrinsic evidence. First, patent claims contain a great many words, many of which are left undefined by the patent applicant. While the general assumption may be that people in the art know what these words mean, the words may have different possible definitions, even to those people in the art. Additionally, word definitions may change over the years, such as in the field of computers, and it may become very difficult to determine what a person of skill in the art might have originally thought the words meant. Determining up front the dictionaries to be used with the patent would prevent any confusion with what people in the art may or may not know and how word definitions might change in the future. Any words not defined in any dictionary or not defined correctly for the invention could still be defined in the specification by the inventor acting as his own lexicographer. A specification defined word would supersede all dictionary definitions since the public would be on notice regarding the definition.

Additionally, an appendix with word definitions would eliminate almost any confusion and make the patent more impervious to the effects of time. For each potentially confusing general or technical term, the appropriate definition, relevant to the context of the patent, would be placed in the appendix. The inventor would choose one or more definitions from one or more dictionaries to represent the term. Also, an inventor acting as his own lexicographer could define any words in both the specification and the appendix for clarity. There may be some concerns by inventors and patentees that specifying definitions for each word might prevent the patent from covering unforeseen equivalents in the future, similar to a narrowing amendment causing

¹⁶⁵ Since the district court may use one set of dictionaries while the appellate court may use a completely different set of dictionaries.

prosecution history estoppel to block claims to any equivalents as surrendered.¹⁶⁶ However, as long as the patentee could show that any future alleged equivalent would have been unforeseeable at the time the word was defined,¹⁶⁷ then providing a clarifying definition would not prevent the inventor or patentee from claiming equivalents not explicitly covered by the patent in the future.

Second, intrinsic evidence of claim term meaning is not always clear, even when looking to the specification for possible guidance. If it were, then claim term meanings would not be highly litigated, the CAFC would likely not have elevated the status of dictionaries, and we would not be in the current mess. Defined dictionaries and word appendices would now be part of the intrinsic evidence and would increase claim clarity. Third, to promote claim definiteness claim terms should be specifically and clearly defined for the context of the patent. This would decrease the amount of litigation and promote greater amounts of licensing and designing. Thus, defined dictionaries and word appendices would promote claim definiteness and allow business greater leverage in licensing their technology, or designing around existing technology. Fourth, dictionaries are more reliable than asking experts or inventors during the trial, as was discussed *supra*. Also, with defined dictionaries and word appendices, experts would likely not be needed as the inventor's thoughts are already part of the intrinsic evidence.

Fifth, dictionaries are readily available to the public. Especially if not all the terms are defined in the word appendix, any dictionaries specified in the patent application will allow the public to make a claim term determination that will more likely be the same as the court. Finally, forcing the patent applicant to specify any dictionaries and a word appendix up front would make the life of the patent examiner easier in reviewing the application and increase the probability that any patents granted would not be found invalid in the future. Therefore, specifying the reference dictionaries and word appendix as part of the patent prosecution will increase claim definiteness, decrease litigation and appeals, and make everyone's life in the patent world a little easier.

B. How

Professor Miller and Professor Hilsenteger suggest that the solution to the problem is to require patent applicants to state their dictionary preferences, both general and specific, on the face of their application.¹⁶⁸ Patent applicants should also specify different dictionaries for different claims or sections of claims, in case greater than one technology is implicated by the patent and no single dictionary is appropriate. This should be taken one step further, requiring patent applicants to also include an appendix of words and definitions. This would serve to further limit any confusion in the future. Since it would be very difficult and time consuming to define every single word used in the patent claims, the patent applicant would only need to define those words that might be considered confusing or ambiguous. Any remaining words would be defined by the relevant specified dictionary. However, this would not prevent a patent

¹⁶⁶ See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359 (Fed. Cir. 2003) for details regarding narrowing amendments and prosecution history estoppel.

¹⁶⁷ See *Id.* at 1369 (where showing that any future alleged equivalent was unforeseeable represents the first presumption of surrender rebuttal criterion).

¹⁶⁸ Miller & Hilsenteger, 54 Am. U. L. Rev. at 883.

applicant from defining every word used in the patent claims to eliminate any confusion with any simple words, such as “to” or “is.” The additional benefit of specifying the dictionaries and word appendices at the beginning, is that the patent examiner can use these in the prosecution process to make sure that the patent is novel and not obvious, thus decreasing the chances of a later invalidity ruling. Also, if any words are unclear during prosecution, the patent applicant would have a chance to expand the word appendix as intrinsic evidence now, rather than as extrinsic testimony later. Expanding the word appendix would not be prohibited new matter added to the patent, but instead would be clarification of existing matter, since the existing words would have been already used in the existing claim terms. Expanding the word appendix might even be considered limiting the existing matter, since claim terms would be limited to only the definition in the appendix.

For the USPTO to promulgate this rule, it must do so under the notice-and-comment rulemaking in accordance with the Administrative Procedure Act.¹⁶⁹ The CAFC would then give the procedural rule controlling weight, unless it is arbitrary, capricious, or manifestly contrary to statute.¹⁷⁰ The proposed rule is similar to the English language rule passed by the USPTO, requiring a patent application “[b]e in the English language or be accompanied by a translation of the application...into the English language together with a statement that the translation is accurate.”¹⁷¹ Both rules are similar since both regulate a patent applicant’s engagement with the machinery of the patent system. Therefore, the proposed rule of specifying reference dictionaries and providing a word appendix in the patent application should be easily created by the USPTO and used by the CAFC.

However, while the proposed rule would be great for new patent applications, the current problem would still exist for issued patents. The patent holder could try and incorporate the reference dictionaries and word appendix through reexamination and reissue. As was mentioned *supra* in the context of patent prosecution, this is not new matter, in violation of the prohibition against broadening the scope of a patent, but is clarification of existing matter and possibly narrowing scope. However, it is unlikely that many patent holders would elect to spend the time and money to do this. Therefore, the better procedure is to have the USPTO set a standard general dictionary and standard technical dictionary for each major technology area. Since these dictionaries were probably not considered by the original patent applicant, the patentee should have the ability to rebut those definitions. Since the specification is still the ultimate guide, only if it and the claim terms are completely ambiguous would the patentee possibly be stuck with a definition they did not intend. Also, since the reference dictionaries should be used as of the

¹⁶⁹ See 5 U.S.C. § 553 (2000) (establishing “notice and comment” rulemaking); 35 U.S.C. § 2(b)(2)(B) (2000) (requiring that Patent Office procedural rules “shall be made in accordance with section 553 of title 5, United States Code”). The current rules governing the conduct of Patent Office proceedings are codified in Title 37 of the Code of Federal Regulations. For a concise description of notice-and-comment rulemaking in federal agencies, see 1 RICHARD J. PIERCE, JR., ADMINISTRATIVE LAW TREATISE § 7.3 (4th ed. 2002). There is no question that the Patent Office is an “agency” for purposes of the Administrative Procedure Act. See *Dickinson v. Zurko*, 527 U.S. 150, 154 (1999).

¹⁷⁰ *In re Sullivan*, 362 F.3d 1324, 1328 (Fed. Cir. 2004) (quoting *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 844 (1984)) (rejecting challenge to validity of Patent Office procedural rule); *Tamai*, 366 F.3d at 1333-34 (upholding reasonableness of Patent Office procedural rule).

¹⁷¹ 37 C.F.R. § 1.52(b)(ii). See also 37 C.F.R. § 1.52(d) (requiring English translations of non-English applications). There is also a similar provision requiring translation of any non-English documents that parties submit in an interference proceeding at the Patent Office. See 37 C.F.R. § 1.647.

patent filing date, these general and technical dictionaries should be set for each patent to the current editions as of the filing date. This list of dictionaries should then be published, so that the public would be able to more accurately construe the claims. However, this procedure might be too costly for the USPTO to implement. Only if the savings of decreased litigation is greater than the USPTO cost, a study that is beyond the scope of this paper, should this additional rule be implemented.

Based upon the above rules, USPTO examiners would be able to refer to published dictionaries, rather than relying themselves as walking dictionaries or using a dictionary only to get a “feel” for a word.¹⁷² Also, judges at all levels should follow the dictionaries and word appendices used by the patent applicant and PTO examiner, unless there is clear and convincing evidence not to, such as if the patentee can clearly show that a previously unforeseen equivalent now exists that was not covered by the dictionary definition or word appendix. As long as these procedures are followed, even with *Markman* hearings and *de novo* review by the CAFC, the public should be able to fairly accurately predict the outcome of both sets of claim constructions. Therefore, there will be less litigation and more licensing and designing.

Finally, it is important to note that when dictionaries are used to interpret claims, either through use of the above rules or under the current environment, they must be used in context of the patent. As Judge Linn stated in *Ferguson Beauregard/Logic Controls v. Mega Sys., LLC.*,

Words often have different meanings to different people and in different contexts, accounting for the multiple ordinary meanings found in dictionaries. Dictionary definitions, while reflective of the ordinary meanings of words, do not always associate those meanings with context or reflect the customary usage of words by those skilled in the particular art. The words used in the claims must be considered in context and are examined through the viewing glass of a person skilled in the art.¹⁷³

Additionally, Judge Rader stated in the same case that “[w]ithout proper context in selecting a dictionary definition, a court can err by importing a limitation into patent claims from a dictionary as well as from a patent specification.”¹⁷⁴ Therefore, whenever dictionaries are used, they should be used in context of the patent.

VII. The *Phillips en banc* Decision Demotes Dictionaries, but does not Change this Paper’s Recommendations

The CAFC, in the recent *Phillips III* en banc decision, attempted to resolve the dictionary confusion.¹⁷⁵ The court, however, did not clarify the problems, but instead pushed dictionaries back down to extrinsic evidence.¹⁷⁶ “[T]he methodology [the court] adopted placed too much reliance on extrinsic sources, such as dictionaries, treatises, and encyclopedias and too little on

¹⁷² Dennis Crouch, *Patently Obvious Blog – Phillips v. AWH: Review of Oral Arguments on Claim Construction Methodology* <http://patentlaw.typepad.com/patent/2005/01/phillips_v_awh_.html> (accessed Apr. 4, 2005).

¹⁷³ 350 F.3d 1327, 1338 (Fed. Cir. 2003).

¹⁷⁴ *Id.* at 1348 (Rader, J., concurring).

¹⁷⁵ 415 F.3d 1303. This was the result of *Phillips I* being withdrawn by *Phillips II* (see footnote 10 *supra*).

¹⁷⁶ *Id.* at 1320.

intrinsic sources, in particular the specification and prosecution history.”¹⁷⁷ The court stated several problems with the high weight given to dictionaries, such as the multiple dictionary definitions for a term extending beyond the construction of the patent¹⁷⁸, the fact that a technical treatise definition may be different than the definition intended by the inventor¹⁷⁹, the potential use of many dictionaries with various definitions for the same word¹⁸⁰, and the fact that “the authors of dictionaries or treatises may simplify ideas to communicate them most effectively to the public and may thus choose a meaning that is not pertinent to the understanding of particular claim language.”¹⁸¹ Much of the court’s concerns in *Phillips III* are over the differences between the patentee’s intent and the dictionary definitions.¹⁸² Thus, the court took the conservative approach and “demoted” dictionaries to pure extrinsic evidence.¹⁸³ Or did it?

“[W]e do not intend to preclude the appropriate use of dictionaries.”¹⁸⁴ The court reiterated the *Vitronics* decision allowing judges to consult dictionaries and technical treatises at any time¹⁸⁵ since a dictionary definition has the value of being an unbiased source “accessible to the public in advance of litigation.”¹⁸⁶ A primary concern was that any particular source consulted, such as dictionaries, should not contradict claim meaning that is unambiguous in light of the extrinsic evidence.¹⁸⁷ Thus, dictionaries might still be used, as long as the concerns of the court are addressed. Having the inventor specify all dictionaries relied upon and the word definitions up front in the patent application (the solution suggested in the previous section of this article *supra*) would address the problems of inventor/dictionary conflict. Also, there would be no confusion over which dictionary or which definition within a dictionary to use. The decision of the court in *Phillips III* does not effect the recommendations of this article. Therefore, the USPTO should change the patent application process to incorporate dictionary definitions of words as specified by the inventor.

Conclusion

Dictionaries have been a source of great confusion regarding construing patent claims. Initially dictionaries were considered extrinsic evidence and only to be considered if the intrinsic evidence, or evidence of patent record, was ambiguous as to claim term meaning. However, the combination of *Markman*, *Vitronics*, and *Texas Digital* changed the construing landscape. In some cases, dictionaries were used after looking at the intrinsic evidence, but in others, dictionaries were used to determine the ordinary meaning of claim terms and the intrinsic evidence was used to make sure the correct meaning was chosen. Also, there were and are problems with different meanings between different dictionaries, different meanings within one dictionary, and choosing between general and specific/technical dictionaries. Very little

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 1321-1322 (extending the patent prosecution beyond what was meant in the inventor’s patent).

¹⁷⁹ *Id.* at 1322.

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Id.* at 1321-1322.

¹⁸³ *See id.* at 1321-1322.

¹⁸⁴ *Id.* at 1322.

¹⁸⁵ *Id.* at 1322-1323 (citing *Vitronics*, 90 F.3d at 1584 n. 6).

¹⁸⁶ *Id.* at 1322 (citing *Vitronics*, 90 F.3d at 1585).

¹⁸⁷ *Id.* at 1324.

guidance has been given by the courts and many of the courts, including the CAFC, applied different standards in different cases. The result has been increased litigation, lack of certainty, and a collapse of the important patent goal of claim definiteness.

The CAFC opened the door to suggestions to correct these and other claim interpretation problems through the *Phillips* en banc rehearing. Many of the organizations filing *amicus* briefs have argued to put dictionaries back as extrinsic evidence. Unfortunately, the *Phillips III* court agreed with those *amicus* briefs. However, dictionaries serve a very valuable and useful purpose. They can provide guidance to claim terminology, especially when the patentee has been careless about being his own lexicographer, and are readily available to the public. There must be rules, however, to guide the public and judges.

The USPTO should require that all future patent applications contain a word appendix, listing any confusing claim terms and their meanings, and a listing of the appropriate dictionaries to use for terms that might not appear in the word appendix. With this new rule, dictionaries become intrinsic evidence. For existing patents, the USPTO should set a standard general dictionary and technical dictionary for each relevant technical area, with a publication date just previous to each patent's filing date. Based upon these rules, the public would be put on notice for word meaning and dictionary use. The federal courts, besides following the dictionaries and word meanings set by the patent application or by the USPTO, should always make sure that any claim term defined from a dictionary matches the term as used in the specification. In other words, the definition should make sense in the context of the patent. This would reduce the problems with multiple definitions within a dictionary. By following these rules, dictionaries will have a proper role in claim construction, litigation will be reduced, licensing or designing around will be easier, and claim definiteness will once again be an achievable goal.