# POST-PHILLIPS CLAIM CONSTRUCTION: QUESTIONS UNRESOLVED

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Interpretation of a written document, whether understanding the intent of the drafter or the meaning associated with words or phrases, represents a legal question often fraught with difficulty. Justice Frankfurter, on interpreting statutes, remarked that words "are symbols of meaning" that "seldom attain[] more than approximate precision." "If individual words are inexact symbols, with shifting variables, their configuration can hardly achieve invariant meaning or assured definiteness." Similarly, the imprecision of words in a patent complicates the delineation of property-right boundaries demarked by the language of a patent claim. Establishing the contours of property rights protected by patents is fundamental to a patent system whose goal is "[t]o promote the Progress of Science and useful Arts" by providing a limited monopoly in exchange for disclosure of the invention. The imprecision of claim terms in defining the disclosed invention complicates effective promotion of science and useful arts by failing to provide assured definiteness as to the scope of the invention protected by the patent.

The two-step analysis to determine if a property right associated with a patent has been violated, i.e. patent infringement, begins with the process of claim construction.<sup>4</sup> Claim construction is a question of law where the court interprets the words of the claim to determine their meaning and scope.<sup>5</sup> Often, however, claims are amenable to multiple interpretations and constructions. As a predecessor court to the Court of Appeals for the Federal Circuit (Federal Cir-

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Autogiro Co. of Am. v. United States, 384 F.2d 391, 396 (Ct. Cl. 1967) (quoting Felix Frankfurter, *Some Reflections on the Reading of Statutes*, 47 COLUM. L. REV. 527, 528 (1947)).

<sup>&</sup>lt;sup>2</sup> *Id*.

<sup>&</sup>lt;sup>3</sup> U.S. CONST. art. I. § 8, cl. 8.

<sup>&</sup>lt;sup>4</sup> See Cook Biotech Inc. v. Acell, Inc., 460 F.3d 1365, 1372 (Fed. Cir. 2006).

<sup>&</sup>lt;sup>5</sup> See Markman v. Westview Instruments, Inc., 517 U.S. 370, 391 (1996).

cuit) noted, "[t]he very nature of words . . . make[s] a clear and unambiguous claim a rare occurrence."

The Federal Circuit has struggled to articulate a coherent and uniform methodology in which to interpret the meaning of claim terms during claim construction.<sup>7</sup> Recognizing the confusion among district courts and the divide within the court itself, the Federal Circuit accepted the request for a rehearing en banc to address significantly disputed aspects of the law regarding claim construction.8 Upon rehearing, the Phillips II court determined that claim construction now requires a review of the totality of the evidence, both intrinsic and extrinsic, related to the meaning of a claim term. The court stated, however, that the district courts should not give intrinsic and extrinsic evidence equal weight.<sup>10</sup> The totality of the evidence approach to claim construction, while providing extensive flexibility for the adjudicator to determine property rights by accessing the essence of what the patentee actually invented, may fail to provide a workable framework for district courts and the public to evaluate the meaning of claims and the scope of patent protection prior to an infringement action. Thus, the claim construction methodology articulated in Phillips II is unlikely to improve predictability, consistency, or reduce the costs of interpreting the meaning of terms within Federal Circuit jurisprudence. Over time, potentially through case law, a coherent framework may develop from the Federal Circuit to guide district courts and parties in construing claims. A clearer claim construction methodology, however, will not alleviate the problems of the predictability, efficiency, and high reversal rate associated with determining the scope of patent rights. The Federal Circuit, in order to establish genuine predictability, needs to reconsider the standard of review regarding trial courts' claim constructions and grant greater deference to the claim interpretation decisions of trial courts.

Part I will discuss the emergence of competing claim construction methodologies within Federal Circuit jurisprudence and the effects of these methodologies on consistency, predictability, and uniformity of claim construction. Part II will focus on the Federal Circuit's endorsed claim construction methodology in *Phillips II*. Part III will expand to analyze potential effects of

<sup>&</sup>lt;sup>6</sup> Autogiro Co. of Am., 384 F.2d at 396.

<sup>&</sup>lt;sup>7</sup> See Jessica C. Kaiser, What's That Mean? A Proposed Claim Construction Methodology for Phillips v. AWH Corp., 80 CHI.-KENT L. Rev. 1009, 1013 (2005).

Phillips v. AWH Corp (*Phillips II*), 415 F.3d 1303 (Fed. Cir. 2005) (en banc), cert. denied, 126 S. Ct. 1332 (2006).

<sup>&</sup>lt;sup>9</sup> See id at 1324.

<sup>10</sup> See id.

the *Phillips II* case on the administrability and predictability of claim construction. The final section will discuss the importance of modifying the standard of review for claim construction post-*Phillips II* to increase predictability and consistency in claim construction.

# I. FEDERAL CIRCUIT JURISPRUDENCE REGARDING CLAIM CONSTRUCTION

In patent litigation, determining the contours of the property rights associated with a patent during claim construction is often a difficult and outcomedeterminative process.<sup>11</sup> The U.S. Supreme Court in *Markman v. Westview Instruments, Inc.*,<sup>12</sup> recognizing the need for uniformity in the treatment of a patents and for finding judges better suited to interpreting patent terms, held that claim construction is a matter of law exclusively in the province of the court.<sup>13</sup> Two years later, in *Cybor Corp. v. FAS Technologies, Inc.*,<sup>14</sup> the Federal Circuit held that "claim construction, as a purely legal issue, is subject to de novo review on appeal." Since the *Markman* and *Cybor Corp.* decisions, a wealth of jurisprudence has emerged within the Federal Circuit regarding patent claim construction. The *Markman* and *Cybor Corp.* decisions, however, did not result in a uniform framework for interpreting patent terms, as hoped for by the Supreme Court and the Federal Circuit, because issues have developed regarding the proper methodology for courts to employ.

Within Federal Circuit jurisprudence, two competing methodologies of claim construction have emerged since *Markman* and *Cybor Corp*. were decided.<sup>16</sup> The first methodology relies heavily on the ordinary and customary meaning of claim terms, often from dictionaries, while the second methodology relies on interpreting claim terms in the patent specification's context.<sup>17</sup> Two

<sup>13</sup> See id. at 388–90.

Daniel J. Melman, Note, *Post* Markman: *Claim Construction Trends*, 7 Rich. J.L. & Tech. 34 (Spring 2001), *available at* http://www.richmond.edu/jolt/v7i4/note2.html.

<sup>&</sup>lt;sup>12</sup> 517 U.S. 370.

<sup>&</sup>lt;sup>14</sup> 138 F.3d 1448 (Fed. Cir. 1998) (en banc).

<sup>&</sup>lt;sup>15</sup> *Id.* at 1451.

See R. Polk Wagner & Lee Petherbridge, Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance, 152 U. PA. L. REV. 1105, 1111 (2004).

See id. at 1133–34. The classification of the Federal Circuit claim construction methodology into two approaches represents an oversimplification. The two claim construction methodologies, dictionary driven and patent-specification driven, represent two opposite poles of Federal Circuit judge's approaches to claim construction. As indicated in Wagner & Petherbridge, while some Federal Circuit judges adhere to the two opposing claim construction

claim construction canons illustrate the current controversy regarding claim construction methodology: "(a) one may not read a limitation into a claim from the written description, but (b) one may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part." The tension between these two axioms has led the Federal Circuit to recognize that "there is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification." The problem of choosing whether to rely on a dictionary definition or the specification is particularly evident when "the written description of the invention is narrow, but the claim language is sufficiently broad that it can be read to encompass features not described in the written description, either by general characterization or by example in any of the illustrative embodiments."

The two methodologies of claim construction have developed into distinct methods of analysis that are at odds doctrinally with one another. The first claim construction methodology assumes that there is "a heavy presumption that a claim term carries its ordinary and customary meaning," which may often be established by dictionary definitions.<sup>21</sup> The court has stated that "technical treatises and dictionaries . . . are worthy of special note" because they more likely represent the meaning understood by one of ordinary skill in the art at the time the application was filed.<sup>22</sup> In fact, dictionaries are available at any stage in the claim construction process to aid the court in determining the meaning of claim terms.<sup>23</sup> Yet, the meaning of a claim term must still be "considered in the context of the intrinsic evidence, namely the claims, the specification, and the prosecution history."24 The presumption of the ordinary and customary meaning, however, will only be overcome if the patentee acts as his own lexicographer and explicitly sets forth "a definition of a claim term distinct from its ordinary meaning or if the [patentee] has disavowed or disclaimed scope of coverage, by using words or expressions . . . representing a clear disavowal of claim

viewpoints, other judges are "swing judges," who oscillate between using the dictionary- and specification-driven claim construction methodologies. *Id.* at 1112.

<sup>18</sup> Renishaw PLC v. Marposs Societa' Per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998).

<sup>&</sup>lt;sup>19</sup> Comark Comme'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1186 (Fed. Cir. 1998).

<sup>&</sup>lt;sup>20</sup> Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 905 (Fed Cir. 2004).

<sup>&</sup>lt;sup>21</sup> CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002) (internal quotations omitted).

<sup>&</sup>lt;sup>22</sup> Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1584 n.6 (Fed. Cir. 1996).

<sup>&</sup>lt;sup>23</sup> See Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202 (Fed. Cir. 2002).

<sup>&</sup>lt;sup>24</sup> Housey Pharms., Inc. v. Astrazenca UK Ltd., 366 F.3d 1348, 1352 (Fed. Cir. 2004).

scope."<sup>25</sup> If more than one dictionary definition of a word is consistent with the intrinsic record, the claimed term should be construed to encompass all meanings.<sup>26</sup>

Conversely, the second claim construction methodology assumes that "[t]he intrinsic record . . . is the primary tool to supply the context for interpretation of disputed claim terms."<sup>27</sup> To ascertain the meaning of claim terms to one skilled in the art at the time the application was filed, the claims, specification, and prosecution history must be reviewed.<sup>28</sup> The second methodology generally adheres to the view that dictionaries "may aid the judge in achieving the understanding and viewpoint of a person having experience in the field of the invention. Dictionaries, however, provide general definitions rarely in sufficient detail to resolve close questions in particular contexts."<sup>29</sup> Claim terms are not to be "construed in a lexicographic vacuum, but in the context of the specification and drawings."30 The scope of claim terms is limited "[w]here the specification makes clear that the invention does not include a particular feature," even if the language of the claim "might be considered broad enough to encompass the feature in question."31 Accordingly, "claims are not properly construed to have a meaning or scope that would lead to their invalidity for failure to satisfy the requirements of patentability," i.e. written description or enablement.<sup>32</sup> If the specification describes the structure of the invention such that the structure "is not simply the preferred embodiment... it is the only embodiment," then the claim terms will be limited to the structure disclosed.<sup>33</sup> In summary, the second methodology primarily relies on a patent's intrinsic evidence to determine claim meaning and scope.

Nystrom v. Trex Co., 374 F.3d 1105, 1111 (Fed. Cir. 2004) (internal quotations omitted), withdrawn, 424 F.3d 1136 (Fed. Cir. 2005) (reheard in response to *Phillips II*).

<sup>&</sup>lt;sup>26</sup> Texas Digital Sys, Inc., 308 F.3d at 1203.

<sup>&</sup>lt;sup>27</sup> V-Formation, Inc. v. Benetton Group Spa, 401 F.3d 1307, 1310 (Fed. Cir. 2005).

Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996).

<sup>&</sup>lt;sup>29</sup> Toro Co. v. White Consol. Indus., Inc., 199 F.3d. 1295, 1300 (Fed. Cir. 1999).

<sup>&</sup>lt;sup>30</sup> *Id.* at 1301.

SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001).

Wang Labs., Inc. v. Am. Online, Inc., 197 F.3d 1377, 1383 (Fed. Cir. 1999); see 35 U.S.C. § 112 (2006).

<sup>&</sup>lt;sup>33</sup> *Toro Co.*, 199 F.3d. at 1301.

# A. Evolution of Claim Construction Division in the Federal Circuit

As illustrated *supra*, the two current claim construction methodologies that emerged after *Markman* and *Cybor Corp*. are vastly divergent from one another and have resulted in confusion and ambiguity in Federal Circuit claim construction jurisprudence. The twin methodologies have evolved in parallel with the interpretation of the general rule that words in patent claims are to be given their ordinary meaning as understood by one of ordinary skill in the relevant art.<sup>34</sup> The division in the Federal Circuit ultimately centers upon how the ordinary meaning is obtained.<sup>35</sup>

Historically, claim construction relied upon "three sources: [t]he claims, the specification, and the prosecution history" to ascertain the meaning of claim terms.<sup>36</sup> The Federal Circuit viewed intrinsic evidence as "the most significant source of the legally operative meaning of disputed claim language."<sup>37</sup> The court indicated that "[i]n most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. [Further,] [i]n such circumstances it is improper to rely on extrinsic evidence."<sup>38</sup> Dictionaries were considered extrinsic evidence that, if needed, could assist in determining the meaning and scope of claim terms but were not the basis for ascertaining the ordinary meaning.<sup>39</sup>

The textual basis for using dictionaries to determine a claim term's ordinary meaning can be traced to footnote six in the 1996 *Vitronics Corp. v. Conceptronic, Inc.*<sup>40</sup> decision. There, the Federal Circuit stated:

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 diction-

Markman, 52 F.3d at 979 (internal quotations omitted).

See id. at 1584 (stating that "[e]xtrinsic evidence is that evidence which is external to the patent and file history, such as expert testimony, inventor testimony, dictionaries, and technical treaties and articles"); see also Markman, 52 F.3d at 980 (stating that "[e]xtrinsic evidence consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries and learned treaties").

<sup>&</sup>lt;sup>34</sup> See Wagner & Petherbridge, supra note 16, at 1133–34.

<sup>35</sup> See id.

<sup>&</sup>lt;sup>37</sup> *Vitronics Corp.*, 90 F.3d at 1582.

<sup>&</sup>lt;sup>38</sup> *Id.* at 1583.

<sup>&</sup>lt;sup>40</sup> 90 F.3d 1576.

ary definition does not contradict any definition found in or ascertained by a reading of the patent documents.<sup>41</sup>

Vitronics opened the door to relying on dictionaries throughout claim construction by stating in dicta that judges are free to consult treatises and dictionaries at any time.<sup>42</sup> While the Vitronics court laid the initial ground work, the Federal Circuit in 2002 established the framework to guide the claim construction methodology dominated by dictionaries in CCS Fitness, Inc. v. Brunswick Corp. 43 and, in particular, in Texas Digital Systems, Inc. v. Telegenix, Inc. 44 The CCS Fitness court, after reiterating footnote six from Vitronics, indicated that "dictionary definitions may establish a claim term's ordinary meaning."<sup>45</sup> The court continued by stating that the presumption of ordinary meaning could only be rebutted if (1) "the patentee acted as his own lexicographer and clearly set forth a definition . . . in . . . the specification"; (2) the patentee expressly disclaimed the scope in the intrinsic evidence; (3) the term deprives the claim of clarity; or (4) the claim is phrased in step- or means-plus-function format.<sup>46</sup> In *Texas Digi*tal, the Federal Circuit articulated that "categorizing [dictionaries, encyclopedias, and treatises] as 'extrinsic evidence' or even a 'special form of extrinsic evidence' is misplaced and does not inform the analysis."47 Furthermore, the court stated that references such as dictionaries, encyclopedias, and treatises "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."48 The Federal Circuit in CCS Fitness and Texas Digital appeared to bless the dictionary as the primary tool to be used during claim construction, while the intrinsic evidence was relegated to a mere check on the dictionary definition.<sup>49</sup>

These cases represent the emergence of two fundamental changes in the method of interpreting claim terms for those Federal Circuit judges beginning to

<sup>41</sup> Id. at 1584 n.6 (emphasis added). Admittedly, dictionaries were used to interpret claims before Vitronics, but the ability to consult at any time during claim construction had not been previously explicitly espoused as valid by the Federal Circuit. See, e.g., 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).

<sup>&</sup>lt;sup>42</sup> 90 F.3d at 1584.

<sup>&</sup>lt;sup>43</sup> 288 F.3d 1359.

<sup>&</sup>lt;sup>44</sup> 308 F.3d 1193.

<sup>&</sup>lt;sup>45</sup> 288 F.3d at 1366.

<sup>&</sup>lt;sup>46</sup> *Id.* at 1366–67.

<sup>&</sup>lt;sup>47</sup> 308 F.3d at 1203.

<sup>48</sup> Id

<sup>&</sup>lt;sup>49</sup> *Phillips II*, 415 F.3d at 1320.

employ the dictionary-driven claim construction methodology. First, the dictionary definition became synonymous with the term's ordinary meaning, thus replacing historical reliance on intrinsic evidence. Second, the requirements for rebuttal of the dictionary definition's ordinary meaning became more stringent over time. These are significant variations of *Vitronics* footnote six, which only indicated that the dictionary definition could be relied upon as long as the definition did not contradict any definition found in or ascertained by a reading of the patent documents. Indeed, the *CCS Fitness* and *Texas Digital* courts implied that the dictionary definition was only rebuttable with an expressed disclaimer or definition in the specification. These fundamental changes in dictionary usage over time have only widened the conflict within the Federal Circuit between dictionary and contextual claim construction methodologies.

This conflict has lead to claim construction decisions that appear dependent on the panel of Federal Circuit judges hearing the case.<sup>54</sup> Since 1996, after the Supreme Court ruling in Markman, the Federal Circuit has issued 393 claim construction decisions, of which 63.1% construed claim terms according to their ordinary meaning as expressed in dictionaries, while 36.9% construed claim terms in light of intrinsic evidence.<sup>55</sup> Based on a study by Wagner and Petherbridge, the Federal Circuit could be divided into three groups according the judges' claim construction methodology. 56 Judges Dyk, Clevenger, and Linn were most likely to apply a claim construction methodology based upon the ordinary meaning found in a dictionary.<sup>57</sup> Conversely, Judges Lourie, Bryson, and Newman were most likely to apply a contextual approach to claim construction by evaluating claim term meaning in light of the intrinsic evidence.<sup>58</sup> Wagner and Petherbridge characterized the other circuit judges as "swing" judges who do not have a strong preference for either claim construction methodology.<sup>59</sup> Therefore, the methodology that the Federal Circuit employs to interpret claim language could significantly depend on the mix of judges hearing the ap-

<sup>&</sup>lt;sup>50</sup> See CCS Fitness, Inc., 288 F.3d at 1366.

<sup>&</sup>lt;sup>51</sup> See Texas Digital Sys., Inc., 308 F.3d at 1203.

<sup>&</sup>lt;sup>52</sup> 90 F.3d at 1584 n.6 (emphasis added).

<sup>&</sup>lt;sup>53</sup> See CCS Fitness, 288 F.3d at 1366–67; Texas Digital Sys., Inc., 308 F.3d at 1203.

<sup>&</sup>lt;sup>54</sup> See Wagner & Petherbridge, supra note 16, at 1105.

<sup>&</sup>lt;sup>55</sup> See id. at 1170.

<sup>&</sup>lt;sup>56</sup> See id. at 1112.

<sup>&</sup>lt;sup>57</sup> See id. at 1112, 1160.

<sup>58</sup> See id.

<sup>&</sup>lt;sup>59</sup> See id.

peal.<sup>60</sup> For instance, a panel composed of two judges that prefer dictionary-driven claim construction would employ one methodology while another panel composed of two judges that prefer contextual claim construction would use a different methodology. Because there appears to be two distinct mechanisms of claim construction at work in the Federal Circuit, the predictability and consistency of claim construction decisions have diminished as a result of the confusion.

### B. Effect of Dictionaries on Federal Circuit Claim Construction

The Federal Circuit most likely relied on the increased consistency, predictability, and objectivity of dictionary definitions in claim construction. For example, the Texas Digital court considered dictionaries, encyclopedias, and treatises as "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."61 Further, by looking to a dictionary to determine a term's ordinary meaning, the court avoids running afoul of the canon that "one may not read a limitation into a claim from the written description."62 In addition, using dictionaries tends to be a significantly more mechanical method of legal analysis and easily amenable to an algorithmic rule.<sup>63</sup> Therefore, the method is less prone to the ambiguity often associated with trying to interpret a term's meaning from the contextual analysis of a multi-page document.<sup>64</sup> The idea behind using dictionaries was to provide greater predictability and consistency in claim interpretation so that parties, prior to litigation or appeal, could readily ascertain a patent's scope, thereby reducing unnecessary litigation. 65

No empirical study to date has extensively analyzed the extent that the use of alternative claim construction methodologies alters the final claim construction outcome. It is likely that merely the use of a different claim construction methodology does not result in ultimately a different outcome. Based on 393 claim construction cases from April 23, 1996 to November 1, 2002, the rate of alternative opinions (as expressed as concurrences or dissents) was only 5.1%, which is much less than the rate of conflict one would expect if claim construction methodology resulted in alternative claim construction opinions as there was approximately a two-third/one-third methodological split. *Id.* at 1177.

<sup>&</sup>lt;sup>61</sup> 308 F.3d at 1203.

<sup>62</sup> Renishaw PLC, 158 F.3d at 1248.

See Wagner & Petherbridge, supra note 16, at 1133 (characterizes the dictionary methodology as the procedural approach that "follows a predetermined path of analysis")

<sup>64</sup> See Texas Digital Sys., Inc., 308 F.3d at 1204.

<sup>65</sup> See id. at 1202–03 ("Dictionaries, encyclopedias and treatises, publicly available at the time the patent is issued, are objective resources that serve as reliable sources of information on

Regardless of the factors motivating greater reliance upon dictionaries, the question remains whether dictionary-driven claim construction has led to case law reflecting consistency, predictability, or objectivity. The answer, unfortunately, is no. In particular, the deficiencies of dictionary-driven claim construction are evident when evaluating (1) the relative lack of Federal Circuit guidance regarding the choice of dictionary; (2) the unabated rate of reversal of district court claim construction decisions; and (3) the dictionary's failure to accurately reflect the understanding of one of ordinary skill in the art.

First, the ambiguity in Federal Circuit jurisprudence regarding choice of dictionary has led to inconsistent and unpredictable case law.<sup>66</sup> The Federal Circuit has not provided sufficient guidance to the district courts for determining which dictionary the court should use to interpret claim language.<sup>67</sup> The problem with using multiple dictionaries is they often define words differently, no matter how common the word is. As opposed to the traditional concern of forum shopping, litigants began to dictionary shop.<sup>68</sup> Litigants, zealously advocating for their clients, could focus on dictionary definitions that reinforced their position, while ignoring or minimizing other dictionaries that failed to articulate a definition consistent with their argument.<sup>69</sup> Litigants would bounce between various dictionaries to find a "cherry-picked" definition that most robustly supported their position.<sup>70</sup> In response, the district courts and the Federal Circuit defined claim terms based on the assortment of dictionaries provided by the parties.<sup>71</sup> Those decisions regarding choice of dictionary definition, however, often appeared to be made ad hoc. 72 Indeed, the Federal Circuit has relied on multiple dictionaries to define terms even within a single decision.<sup>73</sup> For example, in Anchor Wall, the panel used the Merriam-Webster Collegiate Dictionary

the established meanings that would have been attributed to the terms of the claims by those of skill in the art.").

See Kimberly A. Moore, Are District Court Judges Equipped to Resolve Patent Cases?, 15 HARV. J.L. & TECH. 1, 11 (2001); see also Christian A. Chu, Empirical Analysis of the Federal Circuit's Claim Construction Trends, 16 BERKELEY TECH. L.J. 1075, 1112 (2001).

See Joseph Scott Miller & James A. Hilsenteger, The Proven Key: Roles & Rules for Dictionaries at the Patent Office and the Courts, 54 Am. U. L. REV. 829, 869–70 (2005).

<sup>68</sup> See id.

<sup>&</sup>lt;sup>69</sup> See id. at 867–68.

<sup>&</sup>lt;sup>70</sup> See id. at 869–70.

Kaiser, *supra* note 7, at 1025 (characterizing the dictionary methodology as a "'dictionary fishing expedition' . . . [where] the court uses dictionaries, not to define the claim term itself, but to engage in a scavenger hunt of sorts").

<sup>72</sup> See id.

<sup>&</sup>lt;sup>73</sup> *Id.* at 1025–26.

to define "parallel" while using Webster's Third New International Dictionary (Webster's) to define "general."<sup>74</sup>

There was also some confusion in Federal Circuit jurisprudence as to how to interpret a claim term having either consistent or inconsistent definitions across multiple dictionaries.<sup>75</sup> Some Federal Circuit decisions indicated that "[i]f more than one dictionary definition is consistent with the use of the words in the intrinsic record, the claim terms may be construed to encompass all such consistent meanings."<sup>76</sup> For example, in *Nystrom v. Trex Co.*, <sup>77</sup> the court acknowledged that the term "board" was defined in some dictionaries, such as Webster's, as "a piece of sawed lumber . . . . "78 The court also noted that other dictionaries, such as the American Heritage Dictionary of the English Language, defined "board" as "1. A long flat slab of sawed lumber; a plank. 2. A flat piece of wood or similarly rigid material adapted for a special use."<sup>79</sup> Based upon the latter definition, the court found "board" to encompass any rigid material, even though the specification makes no mention of a "board" composed of a material other than wood.<sup>80</sup> Conversely, other Federal Circuit decisions indicated that if there was a range of possible meanings, the intrinsic evidence should be evaluated to determine which definition should apply.<sup>81</sup>

The court's failure to articulate coherent guidance as to dictionary choice further diminished consistency, predictability, and objectivity in Federal Circuit jurisprudence. Rather than dictionaries acting as "unbiased reflections of common understanding," litigants and judges engaged in dictionary-jousting contests to support their respective preferred term meaning. Not only was "forum shopping" a concern for courts and litigants, but "dictionary shopping" became an issue. 83

Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1311 (Fed. Cir. 2003).

<sup>75</sup> See Nystrom v. Trex Co., 374 F.3d 1105, 1120 (Fed. Cir. 2004) (Gajarsa, J., dissenting-in-part).

<sup>&</sup>lt;sup>76</sup> Tex. Digital Sys., Inc., 308 F.3d at 1203.

<sup>&</sup>lt;sup>77</sup> 374 F.3d 1105.

<sup>&</sup>lt;sup>78</sup> *Id.* at 1111–12.

<sup>&</sup>lt;sup>79</sup> *Id.* at 1112.

<sup>80</sup> See id.

<sup>81</sup> See, e.g., Novartis Pharms. Corp. v. Eon Labs Mfg., Inc., 363 F.3d 1306, 1310 (Fed. Cir. 2004).

<sup>82</sup> Tex. Digital Sys., Inc., 308 F.3d at 1203.

See Phillips II, 415 F.3d at 1318 ("There is a virtually unbounded universe of potential extrinsic evidence of some marginal relevance . . . [, and i]n the course of litigation, each party

For instance, the *Novartis* court's sequential use of dictionaries to define claim terms only exacerbated the confusion and unpredictability of claim construction among practitioners.84 Moreover, the decision appeared to be made ad hoc by a tortured manipulation of the claim language.85 In Novartis, an issue arose during claim construction as to the meaning of the term "hydrosol." The Federal Circuit used Webster's to define the term "hydrosol" as "a sol in which the liquid is water."87 The court, however, did not complete its use of the dictionary at defining hydrosol.88 The court also used a dictionary to define "sol," a term found in the definition of "hydrosol." The court stated that "sol," according to Webster's, is "a dispersion of solid particles in a liquid colloidal solution."90 Again, the court used a dictionary to define "solution," a term found in the definition of "sol." The court found a dictionary definition of "solution" as "(1): a liquid containing a dissolved substance and (2): a liquid and usu[ally] aqueous medicinal preparation with the solid ingredients soluble."91 The chain of dictionaries did not end there. 92 In the end, the Federal Circuit used dictionaries to define terms and to define terms in the definition of terms, eventually forming a chain of terms—"hydrosol," "sol," "solution," "medicinal," "medicine," and "preparation"—oscillating between Webster's, the Oxford English Dictionary, and the Merriam Webster Medical Dictionary. 93 Eventually, the court defined "hydrosol" as "a preexisting product that is administered to treat disease, and therefore, must necessarily be prepared *outside the body*."94 The court arrived at this limitation by relying on the definition of the last dictionary term, "medicinal preparation," as a "preexisting product . . . [that] must necessarily be prepared outside the body."95 As indicated by the dissenting judge, if the majority had relied on the Merriam-Webster's Collegiate Dictionary defini-

will naturally choose the pieces of extrinsic evidence most favorable to its cause, leaving the court with the task of filtering the useful extrinsic evidence from fluff.").

<sup>&</sup>lt;sup>84</sup> 363 F.3d at 1308–09.

<sup>85</sup> See id.

<sup>&</sup>lt;sup>86</sup> *Id.* at 1308.

<sup>&</sup>lt;sup>87</sup> *Id.* 

<sup>&</sup>lt;sup>88</sup> *Id.* at 1308–09.

<sup>&</sup>lt;sup>89</sup> *Id*.

<sup>&</sup>lt;sup>90</sup> *Id.* at 1309.

<sup>91</sup> *Id.* (internal quotations omitted).

<sup>&</sup>lt;sup>92</sup> *Id*.

<sup>&</sup>lt;sup>93</sup> *Id.* at 1308–09.

<sup>&</sup>lt;sup>94</sup> *Id.* at 1309–11 (emphasis added).

<sup>95</sup> Id. (emphasis added).

tion of "sol," "a fluid colloidal system; *esp[ecially]*: one in which the continuous phase is a liquid," it would have been foreclosed from continuing the dictionary chain beyond the word "solution." Therefore, the majority would not have had the opportunity to limit "hydrosol" to "a preparation outside the body." In summary, the Federal Circuit's failure to establish guidance as to dictionary choice and usage led to increased unpredictability in claim construction jurisprudence. 98

Second, the dictionary-driven methodology of claim construction has resulted in inconsistency, as evidenced by the Federal Circuit's rate of altering the claim construction decisions made by lower courts. Since claim construction is an issue of law subject to de novo review, a district court's claim interpretation—including its choice of dictionaries—is not binding, nor is it given deference by the Federal Circuit. Because the district court and the Federal Circuit could rely upon different dictionaries to arrive at the ordinary meaning of a claim term, the consistency and predictability of claim construction was diminished. Indeed, the Federal Circuit reversed district courts' constructions of at least one claim term between twenty-eight and fifty-one percent of the time. This high reversal rate illustrated the inability of the dictionary-driven

<sup>&</sup>lt;sup>96</sup> *Id.* at 1314 (emphasis original) (Clevenger, J., dissenting).

<sup>97</sup> Id. (Clevenger, J., dissenting).

See Kimberly A. Moore, Markman Eight Years Later: Is Claim Construction More Predictable?, 9 Lewis & Clark L. Rev. 231, 246 (2005). The mere fact that there was no guidance as to the choice of dictionary definitions is a solvable problem and does not represent an inherent defect of the dictionary driven methodology. The Federal Circuit could have established clear guidelines regarding dictionary choice, dictionary definitions, and prohibitions on chain use of dictionaries, which would have addressed much of the confusion regarding the use of dictionaries. Further, as one commentator indicated, the problem of dictionary choice could be addressed by requiring the patentee in the patent specification as originally filed at the United States Patent and Trademark Office ("PTO") to specify which dictionary should be used to interpret the meaning of claim terms in the patent. See Miller & Hilsenteger, supra note 67, at 886–87.

<sup>&</sup>lt;sup>99</sup> See Moore, supra note 98, at 241–46.

<sup>&</sup>lt;sup>100</sup> See Markman, 517 U.S. at 391; see also Cybor Corp., 138 F.3d at 1456.

See Int'l Rectifier Corp. v. IXYS Corp., 361 F.3d 1363, 1373-74 (Fed. Cir. 2004) (The claim term "adjoining" was defined by the district court using Webster's Ninth New Collegiate Dictionary while the Federal Circuit relied on a usage note in Webster's Third New International Dictionary to reverse the district courts claim construction.).

See Moore, supra note 66, at 11 ("[T]he district court claim constructions were wrong 28% of the time" and at least one patent claim term was misconstrued by the district court in 33% of appealed patent cases when data collected from April 23, 1996 to December 31, 2000 was analyzed.). See also Chu, supra note 66, at 1112 ("[T]he Federal Circuit has changed the lower court's claim construction in 51% of summary judgment cases ..., 32% of cases in-

methodology to improve the consistency and predictability of the district court's claim construction decisions. The trial court's claim interpretation "provides no early certainty at all, but only opens the bidding. The meaning of a claim is not certain (and the parties are not prepared to settle) until nearly the last step in the process—decision by the . . . Federal Circuit." This lack of consistency between the Federal Circuit's and trial court's claim constructions causes uncertainty, increasing litigation and transaction costs associated with the enforcement of other patents or development of technology similar to a patented invention. Perhaps, if dictionaries were selected by the patentee prior to patent litigation, or if the Federal Circuit proffered rules to guide the use of dictionaries, the dictionary-driven claim construction methodology could actually reduce inconsistency, unpredictability, and institutional costs. The current use of dictionaries in defining the meaning of claim terms capriciously and *ad hoc* at trial, however, has not increased the overall predictability as to how a claim term will ultimately be interpreted by the Federal Circuit.

Finally, the dictionary-driven methodology failed to facilitate predictability and objectivity because courts construed claim terms in the abstract, often independent of the understanding by one of ordinary skill in the art.<sup>104</sup> In this methodology, the dictionary definition became synonymous with the ordinary meaning.<sup>105</sup> The court, however, lost sight of prior precedents indicating that "the correct meaning of claim terms is that determined from the standpoint of a person of ordinary skill in the relevant art and at the time of the patent."<sup>106</sup>

volving jury or JMOL rulings . . . , and 40% of bench trial decisions" when Federal Circuit cases from January 1998 to April 2000 were analyzed.). The significant variation in reversal rates are likely due to differences in the method of collection of the empirical data. According to Moore, the Chu study "skewed their results and they report[ed] a significantly higher reversal rate" because they omitted Rule 36 cases from their claim construction reversal rate determinations. Moore, *supra* note 98, at 235–36. The most recent empirical study of all Federal Circuit claim construction decisions, reviewing decisions from the 1996 *Markman* decision to 2003, the Federal Circuit held that 34.5% of the claim terms were wrongly construed by the district court, which required the Federal Circuit to reverse or vacate the district court's decision in 29.7% of the cases. *Id.* at 239.

Cybor Corp., 138 F.3d at 1476 (Rader, J., concurring). Admittedly, the inconsistency between trial court and Federal Circuit claim constructions is partially the result of having appellate de novo review with no deference given to the district court's claim interpretations. See id. at 1451. The use of the dictionary-driven claim construction methodology, however, has not improved consistency between trial court and Federal Circuit claim construction decisions. See Moore, supra note 66, at 11.

<sup>&</sup>lt;sup>104</sup> *Phillips II*, 415 F.3d at 1321.

<sup>&</sup>lt;sup>105</sup> See CCS Fitness, Inc., 288 F.3d at 1366.

Superguide Corp. v. DirectTV Enters., Inc., 358 F.3d 870, 898 (Fed. Cir. 2004) (Michel, C.J., concurring).

Frequently, the Federal Circuit emphasized general dictionaries to interpret the ordinary meaning, rather than technical dictionaries or treatises, which are more likely to express the understanding of a skilled artisan.<sup>107</sup> In fact, the Federal Circuit relied on general-purpose English language dictionaries more than twice as often as more technical or specialized references. 108 The court's heavy reliance on these general dictionaries, which were not specific to the relevant technology, obscured the proper perspective in which to evaluate the ordinary meaning of claim terms: the understanding of the skilled artisan.<sup>109</sup> Indeed, general dictionary definitions were "rarely in sufficient detail to resolve close questions in particular contexts." "The ultimate result of this trend" was to interpret the claim language as broad as the ordinary meaning of a general dictionary, irrespective of the ordinary meaning to the skilled artisan and "regardless of what the inventors actually invented."111 This is particularly disconcerting because "it is only fair (and statutorily required) that [patent holders and] competitors be able to ascertain to a reasonable degree the scope of the patentee's right to exclude;" disclosure is the foundation of the patent system. 112 By failing to limit a term's meaning to the understanding of one skilled in the art after reading the entire patent, the court has increased the unpredictability of claim construction by opening the door to ex-post reinterpretations of the invention as set forth in the claims.

See Miller & Hilsenteger, supra note 67, at 861. Please note, however, that with the use of any dictionary, scientific or otherwise, claim terms are interpreted outside the context of the patent specification and there may be discrepancies between specification and the scientific dictionary particularly when the technology is new and novel. See Phillips II, 415 F.3d at 1321–22. The increased use in general dictionaries may also simply have resulted from general dictionaries potentially having definitions for more claim terms. "Unabridged English dictionaries generally have from 400,000 to 600,000 words." Kaiser, supra note 7, at 1019. One medical dictionary, for example, contains a word count of only 107,000. See, e.g., Stedman's Medical Dictionary (27th ed. 2005), available at http://www.stedmans.com/product.cfm/481.

Miller & Hilsenteger, *supra* note 67, at 861 ("[O]ut of the 268 sources used, the [Federal Circuit] used 189 (70.5%) general purpose English language sources and [79] (29.5%) specialized sources.").

<sup>&</sup>lt;sup>109</sup> See Superguide Corp., 358 F.3d at 898.

<sup>&</sup>lt;sup>110</sup> *Toro Co.*, 199 F.3d. at 1300.

Superguide Corp., 358 F.3d at 898 (Michel, C.J., concurring).

<sup>&</sup>lt;sup>112</sup> Markman, 52 F.3d at 978; see 35 U.S.C. § 112 (2006).

#### II. THE PHILLIPS CASE

Recognizing the current chasm between claim construction methodologies, the Federal Circuit accepted a rehearing en banc to confront many of the issues regarding claim construction raised by the now-vacated majority and dissenting opinions of the initial panel decision in Phillips v. AWH Corp (Phillips 1). In Phillips I, the plaintiff, Phillips, appealed the entry of summary judgment of noninfringement in favor of the defendants, AWH Corporation and Lofton Corporation.<sup>114</sup> The patent at issue was U.S. Patent 4,677,798 (the '798 patent), which is directed towards vandalism-resistant modular wall panels that "exhibit desirable sound and fire resistance, impact resistance, . . . and axial and lateral load bearing qualities."115 During claim construction, a key issue was the meaning of the term "baffle." While "baffle" was not specifically defined in the specification, both parties stipulated that the term meant a "means for obstructing, impeding, or checking the flow of something."117 The stipulated meaning of "baffle" is similar to the dictionary definition of "baffle," "something for deflecting, checking, or otherwise regulating flow."118 The district court, after determining that the claim contained means-plus-function language, concluded that "baffle," in the context of the '798 patent, required that (1) the "baffles extend inward from the shell walls at oblique or acute angles" and (2) the "baffles form an intermediate, interlocking barrier in the interior of the wall module."119 While the Phillips I court found the district court erred in considering the term "baffle" to be in mean-plus-function format, a majority of the panel, Judge Lourie along with Judge Newman, concluded that the district court ultimately construed the meaning of the term "baffle" properly. 120 Relying on the second methodology for claim construction discussed in this paper, the majority indicated that the "ordinary meaning of a term must be considered in view of the intrinsic evidence: the claims, the specification, and the prosecution history."<sup>121</sup> Based on the specification of the '798 patent, the majority concluded

<sup>363</sup> F.3d 1207 (Fed. Cir. 2004), vacated, Phillips II, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

<sup>114</sup> *Id.* at 1209.

<sup>115</sup> Id

<sup>116</sup> *Id.* at 1210.

<sup>117</sup> Id

<sup>&</sup>lt;sup>118</sup> Id. at 1212 (quoting Webster's Third New International Dictionary 162 (1993)).

<sup>&</sup>lt;sup>119</sup> *Id.* at 1210; see 35 U.S.C. § 112 ¶ 6 (2006).

<sup>&</sup>lt;sup>120</sup> See Phillips I, 363 F.3d at 1212.

<sup>&</sup>lt;sup>121</sup> *Id.* at 1213.

that the baffles were limited to angles other than ninety degrees.<sup>122</sup> As support for this conclusion, the majority contended that the patent disclosed baffles positioned at angles other than ninety degrees as the only embodiment.<sup>123</sup> Further, baffles angled at ninety degrees would be ineffective at deflecting projectiles; they were also already disclosed in the prior art.<sup>124</sup> The majority found that the district court correctly interpreted the claims in view of the specification and upheld the motion for summary judgment of noninfringement.<sup>125</sup>

The dissenting opinion, written by Judge Dyk, specifically disagreed with the claim construction methodology promulgated by the majority. 126 Relying on the dictionary-driven methodology of claim construction discussed in this paper, the dissent argued that construing the term "baffle" to angles other than ninety degrees is contrary to the plain meaning of the term. 127 The dissent suggested that in the absence of the patentee acting as his own lexicographer, thereby giving special meaning to a term in the specification, a claim term should be interpreted based on its ordinary meaning. 128 The dissent argued that the majority effectively limited the claims to the preferred embodiment disclosed in the specification. 129 Furthermore, the dissent was not persuaded by the majority's contention that the baffles must be limited to angles other than ninety degrees in order to comply with the inventor's objective of deflecting projectiles. 130 The dissent emphasized that deflecting projectiles is only one of several objectives found in the specification.<sup>131</sup> Indeed, a baffle at an angle of ninety degrees could still exhibit the thermal-acoustical isolation or load-bearing objectives identified in the specification.<sup>132</sup> Finally, the dissent found the prior art's disclosure of baffles directed at ninety degrees to be an insufficient basis to nar-

<sup>&</sup>lt;sup>122</sup> See id.

<sup>&</sup>lt;sup>123</sup> *Id.* at 1214.

See id. at 1213–14. If the term "baffle" was limited to any angle other than ninety degrees, the accused devise would not infringe the Phillips patent. See id. at 1210 ("Phillips conceded that he could not prove infringement under the [district] court's claim construction.").

<sup>125</sup> Id. at 1214.

See id. at 1217 (Dyk, J., dissenting).

<sup>127</sup> See id.

<sup>128</sup> Id

<sup>129</sup> Id. ("My dispute is with the majority's imposition of an additional structural limitation based upon the patentee's preferred embodiments that limits baffles to structures 'oriented at angles other than 90 degrees."")

<sup>130</sup> Id. (noting that the patentee identified other objectives such as "thermal and acoustical isolation of two spaced walls").

<sup>131</sup> Id

<sup>&</sup>lt;sup>132</sup> See id. at 1217–18.

rowly construe the claims.<sup>133</sup> The dissent argued that "the 'axiom' that claims should be construed to preserve validity is not an invitation to narrowly construe unambiguous claim language contrary to its plain meaning."<sup>134</sup>

### A. Phillips Advocates Reliance on the Totality of the Evidence

The en banc *Phillips* decision ("*Phillips II*"), authored by Judge Bryson for a nearly unanimous court, directly addressed the existing division in Federal Circuit jurisprudence regarding specification- and dictionary- driven claim construction methodologies.<sup>135</sup> Judges Lourie and Newman joined the majority opinion in part, but dissented from the conclusion based on the particular facts of Phillips, while Judge Mayer wrote a dissenting opinion which Newman joined. 136 The *Phillips II* court acknowledged that "a bedrock principle of patent law [is] that the claims of a patent define the invention."<sup>137</sup> Furthermore, claim terms should be given their ordinary meaning as understood by one of ordinary skill in the art "at the time of invention, i.e., as of the effective filing date of the patent application." The court continued by explicitly stating that a skilled artisan would understand the claim term "in the context of the entire patent" and rearticulating the importance of intrinsic evidence, such as the claims, specification, and prosecution history, in interpreting the meaning of claim terms. <sup>139</sup> The court noted that a patent is a fully-integrated document. 40 As such, the specification is highly relevant to and usually dispositive of a claim term's meaning.<sup>141</sup> The specification, according to the *Phillips II* court, is "the single best guide to the meaning of a disputed [claim] term."<sup>142</sup> The importance of the specification during claim construction is derived from the statutory requirement that the specification describe the claimed invention under 35 U.S.C. § 112 ¶ 1.143 Furthermore, the reliance on the specification is supported and consistent with the

<sup>&</sup>lt;sup>133</sup> *Id.* at 1218.

<sup>134</sup> Id.

Phillips II, 415 F.3d at 1312–18. Nine of the twelve Circuit Judges hearing the Phillips II case joined the opinion with respect to all parts. See id. at 1308.

<sup>&</sup>lt;sup>136</sup> *Id.* at 1312.

<sup>137</sup> *Id.* (internal quotes omitted).

<sup>&</sup>lt;sup>138</sup> *Id.* at 1313.

<sup>139</sup> *Id.* (emphasis added).

<sup>&</sup>lt;sup>140</sup> *Id.* at 1315.

<sup>&</sup>lt;sup>141</sup> Id

<sup>142</sup> *Id.* (quoting *Vitronics Corp.*, 90 F.3d at 1582).

<sup>&</sup>lt;sup>143</sup> *Id.* at 1316; see 35 U.S.C. § 112 ¶ 1 (2006).

manner by which the U.S. Patent and Trademark Office ("PTO") analyzes patent claims. He court noted that "[t]he [claim] construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." In summary, the *Phillips II* court strongly emphasized construing claim terms within the specification's context. He

The *Phillips II* court also emphasized the importance of other intrinsic evidence in claim interpretation, such as the claims and prosecution history.<sup>147</sup> The court stated that the "context in which a term is used in the asserted claim can be highly instructive." Furthermore, as claim terms are generally used consistently throughout the claims, both asserted and unasserted claims "can also be valuable sources of enlightenment as to the meaning of a claim term." <sup>149</sup> For example, a dependent claim that espouses a new limitation creates the presumption that the limitation is not present in the independent claim. <sup>150</sup> The *Phil*lips II court also noted that the prosecution history is important because it provides evidence of the inventor's and PTO's understanding of the claimed invention.<sup>151</sup> The court, however, cautioned that the prosecution history is not the final product of a negotiation and, therefore, lacks the clarity of the specification. 152 As a result, the prosecution history is often less useful than the specification for claim construction.<sup>153</sup> In summary, the predominant message emphasized by the *Phillips II* court was the importance of intrinsic evidence in guiding claim construction. 154

In contrast, the *Phillips II* court denounced the recent elevation of extrinsic evidence—particularly dictionaries—as the primary tool to guide claim construction.<sup>155</sup> While extrinsic evidence can be useful in shedding light on the meaning of a claim term, the court noted that "extrinsic evidence in general [is]

Phillips II, 415 F.3d at 1316–17.

<sup>&</sup>lt;sup>145</sup> *Id.* at 1316 (quoting *Renishaw PLC*, 158 F.3d at 1250).

<sup>146</sup> See id

<sup>&</sup>lt;sup>147</sup> *Id.* at 1314.

<sup>&</sup>lt;sup>148</sup> *Id*.

<sup>149</sup> Id

<sup>&</sup>lt;sup>150</sup> *Id.* at 1315; see 35 U.S.C. § 112 ¶ 4 (2006).

<sup>&</sup>lt;sup>151</sup> *Phillips II*, 415 F.3d at 1317.

<sup>&</sup>lt;sup>152</sup> *Id.* 

<sup>153</sup> Id.

<sup>&</sup>lt;sup>154</sup> See id. at 1312–17.

<sup>&</sup>lt;sup>155</sup> *Id.* at 1317.

less reliable than the patent [or] prosecution history."<sup>156</sup> The court considered extrinsic evidence less reliable because (1) the evidence was not created at the time of prosecution to define claim scope; (2) the publication may not reflect the understanding of the skilled artisan; (3) the evidence is often generated for litigation; (4) there is a "virtually unbounded universe of potential extrinsic evidence" that could affect claim construction; and (5) there is a risk that the public notice function of patents would be undermined by changes to the meaning of claim terms based upon reliance on extrinsic evidence.<sup>157</sup>

In particular, the Phillips II court strongly repudiated the Texas Digital line of cases, which elevated the importance of extrinsic evidence such as dictionaries.<sup>158</sup> The court noted that the dictionary approach "improperly restricts the role of the specification." Primary reliance on dictionaries "risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract" and out of the patent's context. 160 The court acknowledged the legitimate attempt in Texas Digital to avoid importing limitations from the specification into the claims, but indicated that the fine line between reading claims in view of the specification and importing limitations can be discerned with "reasonable certainty and predictability if the court's focus remains on understanding how a person of ordinary skill in the art would understand the claim terms."<sup>161</sup> For example, the Federal Circuit rejected the proposition that a patent disclosing a single embodiment would be limited to that embodiment because a skilled artisan rarely would confine the meaning of a term to the exact embodiment depicted in a patent. 162 Therefore, the intrinsic evidence as understood by one of ordinary skill in the art, rather than extrinsic evidence such as dictionaries, should provide the primary guidance in claim construction. 163

Rather than deciding that dictionaries can no longer be relied upon or that they should be consulted only after intrinsic evidence, the *Phillips II* court endorsed a claim construction methodology where the totality of the evidence is evaluated in construing claim terms.<sup>164</sup> Specifically, the court refused to articu-

<sup>&</sup>lt;sup>156</sup> *Id.* at 1318.

<sup>&</sup>lt;sup>157</sup> *Id.* at 1318–19.

<sup>&</sup>lt;sup>158</sup> *Id.* at 1320.

<sup>&</sup>lt;sup>159</sup> *Id.* at 1320.

<sup>&</sup>lt;sup>160</sup> *Id.* at 1321.

<sup>&</sup>lt;sup>161</sup> *Id.* at 1323.

<sup>&</sup>lt;sup>162</sup> *Id*.

<sup>&</sup>lt;sup>163</sup> *Id.* at 1315.

<sup>&</sup>lt;sup>164</sup> *Id.* at 1324.

late an algorithmic rule for future claim construction cases. 165 The Federal Circuit gave courts wide latitude in the type of sources that could be used in construing claim meaning, stating that during claim construction the court is not "barred from considering any particular source[] or required to analyze sources in any specific sequence." The critical factor in claim construction for the Phillips II court was not the particular type of source used, but the significance and value allocated to the different types of evidence. 167 The court indicated that the sequence of sources is not important; "what matters is for the court to attach the appropriate weight to be assigned to those sources." While dictionaries and other extrinsic sources can be consulted at any time, the court shifted its emphasis away from dictionaries by pointing to their weakness in shedding light on the ordinary meaning of a claim term as understood by one of ordinary skill in the art. 169 Instead, the court endorsed attaching significant weight during claim construction to the specification and the claims themselves. 170 In summary, the Phillips II court established a framework for claim construction where the totality of the evidence, both intrinsic and extrinsic, albeit weighted differently, determines the meaning and scope of a claim term. 171

Turning to the particular facts of *Phillips II*, the court construed the term "baffle" to encompass all angles. The court contended that, in view of the other claims, the term "baffle" in the '798 patent was not restricted to any specific angle. To example, dependent claim two indicated that the baffles may be oriented to deflect projectiles. The court reasoned that the inclusion of such a limitation in claim two made it unlikely that the patentee considered that the term "baffle" already contained that limitation. Furthermore, the specification disclosed several objectives other than deflecting projectiles, where the baffles could be directed at any angle. Based on the claims and the specifica-

<sup>&</sup>lt;sup>165</sup> *Id*.

<sup>&</sup>lt;sup>166</sup> *Id*.

<sup>&</sup>lt;sup>167</sup> *Id*.

<sup>168</sup> Id

<sup>&</sup>lt;sup>169</sup> *Id.* at 1322–23.

<sup>&</sup>lt;sup>170</sup> See id. at 1321.

<sup>&</sup>lt;sup>171</sup> *Id.* at 1324.

<sup>&</sup>lt;sup>172</sup> *Id.* at 1327.

<sup>173</sup> *Id*.

<sup>&</sup>lt;sup>174</sup> *Id.* at 1324.

<sup>&</sup>lt;sup>175</sup> *Id*.

<sup>&</sup>lt;sup>176</sup> *Id.* at 1325.

tion, the *Phillips II* court disagreed with the district court's claim construction and reversed the summary judgment of noninfringment.<sup>177</sup>

The Federal Circuit, in the *Phillips II* case, declined to address whether the trial court should be accorded any deference as to their claim construction. 178 The failure to address the issue of deference formed the basis of the dissent filed by Circuit Judge Mayer and joined by Judge Newman.<sup>179</sup> Currently, claim construction is subject to de novo review, and the findings of the trial court are not given deference. 180 As previously mentioned *supra*, on appeal, the Federal Circuit alters a trial court's claim construction between 25% and 50% of the time.<sup>181</sup> Accordingly, to give the claim construction decisions of trial courts some level of deference could reduce the unpredictability and inconsistency between Federal Circuit and trial court claim construction. Judge Mayer argued that "the trial court is better, that is, more accurate, by way of both position and practice, at finding facts than appellate judges."182 Particularly when expert witness testimony is relevant to claim construction, the trial court may be better positioned to make factual determinations as to the reliability or believability of a witness testifying at the court, than the Federal Circuit based on a written transcript of the testimony.<sup>183</sup> The Federal Circuit could have adopted a similar deference standard for claim construction as it has for obviousness. For obviousness analysis under 35 U.S.C. § 103, which is also a question of law, the Federal Circuit applies a de novo appellate review standard to district court decisions on obviousness and a "clearly erroneous" standard to findings of fact that underlie those decisions.<sup>184</sup> A similar standard of review for claim construction may reduce the level of unpredictability and inconsistency between trial court and Federal Circuit claim construction decisions. Circuit Judge Mayer remarked that the "court's opinion today [not reevaluating the standard of deference given to lower courts' claim construction decisions] is akin to rearranging the deck chairs on the Titanic—the orchestra is playing as if nothing is amiss, but the ship is still heading for Davey Jones' locker."185

<sup>&</sup>lt;sup>177</sup> *Id.* at 1328.

<sup>&</sup>lt;sup>178</sup> See generally id.

<sup>179</sup> *Id.* at 1330 (Lourie, J., dissenting).

<sup>&</sup>lt;sup>180</sup> See Markman, 517 U.S. at 391; see also Cybor Corp., 138 F.3d at 1456.

See Moore, supra note 98, at 234.

Phillips II, 415 F.3d at 1334 (Mayer, J., dissenting).

<sup>&</sup>lt;sup>183</sup> See id. at 1334.

<sup>&</sup>lt;sup>184</sup> See McNeil-PPC, Inc. v. L. Perrigo Co., 337 F.3d 1362, 1368 (Fed. Cir. 2003).

<sup>&</sup>lt;sup>185</sup> *Phillips II*, 415 F.3d at 1334–35 (Mayer, J., dissenting).

# B. Beyond Phillips: Administrability and Predictability

The decision in *Phillips II* represents an important step in unifying claim construction methodologies within the Federal Circuit. The Federal Circuit was established in the early 1980s with the expressed purpose of bringing national uniformity to patent law. 186 The use of multiple claim construction methodologies by the Federal Circuit, the appellate court which has exclusive jurisdiction over patent appeals, has led to confusion among district courts as to the guidelines for evaluating claim term meaning. The decision in *Phillips II* quells some of the confusion by advocating a single, unitary method of claim construction, which allows district courts to focus on construing claim term meaning rather than attempting to guess the methodology that will be employed on appeal. Furthermore, litigants after *Phillips II* will have a somewhat clearer framework in which to evaluate the scope of their patent claims knowing that neither solely intrinsic evidence nor dictionaries will be used. A unitary Federal Circuit claim construction methodology will potentially promote settlement prior to litigation or reduce the number of appeals of claim construction questions to the Federal Circuit because there is less uncertainty as to the scope of patent exclusivity. The consistent usage of one approach to interpret claim meaning and scope within the Federal Circuit on appeal is fundamental in bringing consistency and predictability to claim construction decisions.

While the articulation of a unitary claim construction methodology in the Federal Circuit is fundamental to improving the certainty of claim construction, the question remains as to whether the Federal Circuit has provided a tenable framework for district courts to interpret claims. The Federal Circuit in *Phillips II* offers a rather amorphous framework in which to guide district courts during claim construction. The Federal Circuit advocates substantial reliance upon the specification during claim construction, stating that the specification "is the single best guide to the meaning of a disputed term." The Federal Circuit, however, goes on to say that the court is not "barred from considering any particular sources or required to analyze sources in any specific sequence." A district court may consider a whole gamut of sources: the claim, specification, prosecution history, dictionaries, treatises and expert witness testimony. What matters according to the Federal Circuit "is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies

<sup>&</sup>lt;sup>186</sup> *Markman*, 517 U.S. at 390.

<sup>&</sup>lt;sup>187</sup> *Phillips II*, 415 F.3d at 1315.

<sup>&</sup>lt;sup>188</sup> *Id.* at 1324.

that inform patent law."<sup>189</sup> The Federal Circuit espouses a claim construction methodology that is based on the totality of the evidence with weighted importance given to the claims and specification of the patent at issue.

While articulating some general and often vague principles to guide district courts in assigning weight to particular evidence, the Federal Circuit fails to establish a clear framework to guide district courts in the construction of patent claims. For example, the *Phillips II* court indicated that "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes."190 With regard to dictionaries, the court noted that "[d]ictionaries or comparable sources are often useful to assist in understanding the commonly understood meaning of words and have been used by our court and the Supreme Court in claim interpretation." The importance of the claims and specification is evident from the *Phillips II* opinion. The en banc court, however, failed to articulate whether more weight generally should be assigned to the prosecution history or to a dictionary definition or to clearly elucidate the circumstances in which the dictionary or the prosecution history should be given more weight. The district court is required to guess as to the weight the Federal Circuit will assign the particular evidence in evaluating claim meaning and scope. This creates an administrability problem regarding how to implement the Federal Circuit's claim construction methodology and decreases the predictability of claim construction generally. Furthermore, the failure of the Phillips II decision to provide a clear framework for district courts to follow when construing the meaning of claim terms and the scope of claims provides insufficient guidance to allow for efficient decisions of claim construction issues and reduces overall certainty and ability of parties prior to litigation to determine the scope of a patent's exclusivity.

The failure to articulate a clear claim construction framework increases the probability that a district court's decision will be reversed on appeal and reduces the importance of a district court's decisions in resolving litigation. Rather than the trial court being the main stage for a determination of claim construction and infringement analysis, a district court's opinion becomes merely the "opening bid," delaying certainty to all parties until the appeal is completed. For example, in *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 192

<sup>190</sup> *Id.* at 1317.

<sup>&</sup>lt;sup>189</sup> *Id*.

<sup>&</sup>lt;sup>191</sup> *Id.* at 1322.

<sup>&</sup>lt;sup>192</sup> 438 F.3d 1374 (Fed. Cir. 2006).

the trial court was required to interpret the meaning of the claim term "adjustable" relating to a system and method of recovering valuable products from the heavy residue oil that is a byproduct of the oil refining process. The Federal Circuit panel noted that "[t]he trial court's claim construction followed a logical path. The court first set forth the ordinary meaning of 'adjustable." The trial court then proceeded to determine "that a narrower construction of 'adjustable' would be inconsistent with other claims" 194 and finally that requiring "the presence of the adjustment mechanism disclosed in the '714 patent would be an impermissible narrowing of that claim term to the structure of the preferred embodiment." The Federal Circuit went on, however, to reverse the trial court's decision stating that "[w]hile logical, this chain of reasoning errs because it places too much emphasis on the ordinary meaning of 'adjustable' without adequate grounding of that term within the context of the specification of the '714 patent."196 During claim construction, the trial court gave more weight to the plain meaning (dictionary definition) of the word "adjustable" in the attempt to avoid importing a limitation from the preferred embodiment disclosed in the specification, which the Federal Circuit found "admirable[,] but misplaced." <sup>197</sup> This case, according to the panel, "does not evince a situation where a party is attempting to import a limitation from the specification into the claims." The Curtiss-Wright trial court relied on the proper types of evidence as articulated in Phillips II to make its decision—the specification, an apparent preferred embodiment in the specification, other independent claims and the plain meaning as evidenced by the dictionary definition. The Federal Circuit, however, found that "too much emphasis" was placed on some forms of evidence, such as the plain meaning as opposed to the apparent preferred embodiment. 199 Thus, the Federal Circuit reversed the trial court's claim construction.

As evidenced in *Curtiss-Wright*, the claim construction methodology articulated in *Phillips II*—relying on a weighted totality of circumstance to determine claim meaning—is difficult in practice to apply. Without further guidance to the trial courts and litigants regarding the weighting of evidence to be utilized in evaluating the meaning of claims, they will likely allocate disproportionate importance to evidence, such as plain meaning, prosecution history, or

<sup>&</sup>lt;sup>193</sup> *Id.* at 1378.

<sup>&</sup>lt;sup>194</sup> *Id*.

<sup>&</sup>lt;sup>195</sup> Id.

<sup>&</sup>lt;sup>196</sup> *Id*.

<sup>&</sup>lt;sup>197</sup> *Id.* at 1379.

<sup>&</sup>lt;sup>198</sup> Id.

<sup>&</sup>lt;sup>199</sup> *Id.* at 1378.

the importance of a preferred embodiment, during claim construction which can form the basis of reversal at the Federal Circuit. The failure to articulate a structured claim construction framework decreases predictability of the meaning of any claim term and increases the costs associated with patent protection. For example, the *Phillips II* court indicated that the prosecution history, as part of the intrinsic record, is important, but at the same time cautions that the prosecution history is a negotiation and is less useful than the specification. Based on the claim construction methodology articulated in *Phillips II*, the district court is provided mixed messages as to the importance of the prosecution history, which makes allocation of disproportionate importance to the prosecution history likely. *Ex ante* parties are insufficiently equipped to evaluate the scope of patent exclusivity. The lack of definitive claim construction guidelines for trial courts does not allow litigants an adequate framework to evaluate the possibility of success or failure on appeal.

For district court judges who have extensive experience handling patent cases and who are competent determining the meaning of claim terms, the Phillips II "weighted totality of the evidence" methodology may be the best manner in which to construe claim terms' meaning because the approach allows the judge to consider all the evidence. A lay judiciary with extensive experience in patent adjudication may be able to wade through the volumes of evidence—the claims, specification, prosecution history, dictionaries, treatises, publications, and expert testimony—and consistently between cases arrive at an understanding of what an inventor invented and claimed in a patent to determine the meaning of a claim term. Furthermore, trial court judges with general knowledge and experience in patent law, combined with the ability to directly "receiv[e] tutorials on technology from leading scientists," "formally questio[n]" experts, and request more evidence if they are not satisfied with the proof initially offer at trial, may reinforce the potentially superior position of the district court judge with extensive experience in patent adjudication.<sup>201</sup> The fully professionalized judiciary using the "weighted totality of the evidence" methodology would likely provide the fairest interpretation of claim meaning and scope of patent exclusivity because these jurists would not be limited by rigid guidelines and would be able to analyze all information relevant to understanding the meaning and appropriately weigh the information on the scales of justice. Error costs for these fully professionalized judges would be minimal, and litigation rates for these courts may be lower because the high quality of court decisions may result in lower incentives for litigants to raise spurious issues regarding claim interpre-

<sup>&</sup>lt;sup>200</sup> Phillips II, 415 F.3d at 1317.

<sup>&</sup>lt;sup>201</sup> *Cybor Corp.*, 138 F.3d at 1477 (Rader, J., dissenting).

tation.<sup>202</sup> For the ideal judges, the "weighted totality of the evidence" claim construction methodology offers the fairest framework to determine how one of ordinary skill in the art would understand the scope of what an inventor has claimed and the clearest adherence to the patent system quid pro quo bargain that patent exclusivity is granted in exchange for disclosure of the invention.

For those general jurists, however, who lack extensive experience in patent litigation, the "weighted totality of the evidence" methodology of claim construction will likely be difficult to implement. There is an insufficient framework articulated by the Federal Circuit to guide the determination of claim term meaning or the scope of patent exclusivity. The Federal Circuit indicated that the trial court should evaluate all the evidence and weigh the evidence according to the general principles that "certain types of evidence are more valuable than others."203 As Curtis-Wright illustrates, however, the general principles described in Phillips II for guiding claim construction are too general to guide inexperienced trial courts, thus allowing trial courts to risk allocating too much weight to any piece of evidence. As argued by some prior to the *Phillips* II decision, the totality of the evidence approach (also called the "holistic approach")<sup>204</sup> is an inadequate claim construction methodology because while providing the most flexibility, the methodology does not provide the court with guidance nor "any advance notice to the parties of what the court is likely to do."<sup>205</sup> The costs for the lay judiciary without extensive experience in patent adjudication to either ascertain the intentions of the patentee as set forth in the intrinsic evidence or make a best guess concerning the understanding of one of ordinary skill in the art might be prohibitive without further guidance from the Federal Circuit. As "the majority of cases (fifty-six percent) still go to inexperi-

This analysis is adapted from an argument in Richard A. Posner, *The Law and Economics of Contract Interpretation*, 83 Tex. L. Rev. 1581, 1592–93 (2005). Posner in the article argues that in the context of contract interpretation, the costs of using a judiciary that is incompetent "either to ascertain the parties' intentions or to make a best guess concerning the effective resolution of the interpretive question might be prohibitive." *Id.* at 1593. Posner continues by suggesting if "the judicial function is cut and dried," i.e. allowing a judge only to look at the written contract, the incompetent decisions "will easily be detected." *Id.* Thus, in the context of an incompetent judiciary, clearer and more rigid framework for evaluating contract meaning should be employed in order to minimize the cost of erroneous contract interpretations.

<sup>&</sup>lt;sup>203</sup> *Phillips II*, 415 F.3d at 1324.

See Wagner & Petherbridge, supra note 16, at 1134.

See Kaiser, supra note 7, at 1031; see also Timothy R. Holbrook, Substantive Versus Process-Based Formalism in Claim Construction, 9 Lewis & Clark L. Rev. 123, 150 (2005) (a claim construction methodology where all the relevant evidence as a whole is considered may be criticized "as far too vague and thus insufficiently promoting certainty.")

enced courts[,]" this represents a significant problem.<sup>206</sup> For an inexperienced court, a clearer framework for evaluating claim scope should be employed in order to minimize the cost of erroneous claim constructions and to improve the overall predictability of claim construction. The "weighted totality of the evidence" methodology offers insufficient guidance for these courts to construe claim term meaning and to provide certainty to potential litigants.

Even in tribunals more actively involved in claim interpretation, there will be significant difficulty and judicial costs associated with understanding the different technologies presented during litigation and determining the appropriate weight to assign evidence of claim meaning, without further guidance from the Federal Circuit. As noted in the Harvard Law Review, very few patents today display a full, clear, and concise written description that can easily be understood by one of ordinary skill in the art. Most engineers actually find reading patents "an uncomfortable experience, [where] the document seems to be unreasonably repetitive and in parts almost incomprehensible."207 The patent interpretation rules incentivize patent applicants to "draft their disclosures opaquely" to prevent courts from narrowing the scope of the patent. 208 To put the patent in the context of the understanding of one of ordinary skill in the art requires the trial court to wade through often ambiguous disclosure and litigant hand-picked expert testimony, articles, and dictionaries to establish claim term meaning. This may be a difficult task for the lay judiciary to perform without a scientific background, even with experience in patent adjudication. The cost for even the experienced trial judge to ascertain the scope of patent exclusivity based upon the totality of the evidence without a further framework to guide the construction may be extensive. A claim construction methodology is needed that recognizes the inherent flexibility necessary in construing claim scope based on differing technologies and different disclosures, while recognizing the need for trial court guidance and some uniformity in claim construction neces-

Arti K. Rai, Engaging Facts and Policy: A Multi-Institutional Approach to Patent System Reform, 103 COLUM. L. REV. 1035, 1097 (2003). There is some question as to whether extensive experience in patent litigation alone is sufficient to create a fully professionalized judiciary capable of fairer or more predictable claim construction results. The ten district courts, which hear the largest number of patent cases, have about forty-four percent of all patent cases. Id. However, empirical data from Christian Chu indicates that there is no statistically significant difference in the reversal rates between the "more active" patent courts and "less active" ones. Id. at 1097–98. A district court was considered to be experienced if more than ten cases during the study period (beginning of 1998 to April 2000) were reviewed by the Federal Circuit. See Chu, supra note 66, at 1122.

Note, The Disclosure Function of the Patent System (Or Lack Thereof), 118 HARV. L. REV. 2007, 2025 (2005).

<sup>&</sup>lt;sup>208</sup> *Id.* at 2026.

sary to create predictability. The claim construction methodology articulated in *Phillips II* offers courts considerable flexibility in determining the scope of patent exclusivity but fails to offer sufficient guidance to the court to promote uniformity and predictability.

The claim construction methodology articulated in *Phillips II*—relying on the "weighted totality of the evidence"—would be better implemented by a specialized patent trial court judiciary or by referring to the *Markman* hearing claim construction to an administrative agency, such as the PTO, rather than the current system of having general purpose district courts construe claims. The Phillips II claim construction methodology offers incredible flexibility in interpreting the meaning of claim, which potentially increases the fairness of the adjudication process. By allowing the trial court to utilize all forms of evidence to determine the understanding of one of ordinary skill in the art, the court is not limited in the type of sources the court relies upon to elucidate the meaning of a claim term to one of ordinary skill in the art, thereby increasing the fairness of the adjudication process. As argued *supra*, the problem with the *Phillips II* methodology is the general lack of guidance in construing claims and the costs associated with a judiciary lacking technology and patent adjudication experience. The idea of utilizing the PTO or creating a specialized patent trial court is not new.<sup>209</sup> Congress likely has the authority to establish a claim construction regime that would rely on the PTO or a specialized patent trial court. 210 Both suggestions have obvious advantages that could provide both technology and claim construction expertise that the general judiciary lacks. An argument against the formation of a specialized patent court and deferral of claim construction to the PTO is that the excessive specialization will result in decisions lacking "judicial vision" and courts and agencies that are biased and "captured' by part of its constituency."211

This concern of excessive specialization, however, should not deter future proposals that advocate for these regimes to carry out claim construction, particularly in light of legislative precedent in creating specialized courts in

See generally John F. Duffy, Part I: Administrative Law Issues: On Improving the Legal Process of Claim Interpretation: Administrative Alternatives, 2 WASH. U. J.L. & POL'Y 109 (2000) (regarding the PTO); see also Gregory J. Wallace, Toward Certainty and Uniformity in Patent Infringement Cases After Festo and Markman: A Proposal for a Specialized Patent Trial Court with a Rule Of Greater Deference, 77 S. CAL. L. REV. 1383 (2004) (regarding specialized patent trial courts).

<sup>&</sup>lt;sup>210</sup> See generally Duffy, supra note 209; see also Wallace, supra note 209.

<sup>&</sup>lt;sup>211</sup> Wallace, *supra* note 209, at 1412.

other areas of law, such as the U.S. Tax Court and Bankruptcy courts.<sup>212</sup> Congress, which would be required to act to establish these claim construction regimes, thus far has refused. The reality in evaluating the current claim construction methodology articulated by the Federal Circuit is that claim construction regimes, such as referring claim construction issues to the PTO or creating a specialized patent trial courts, do not currently exist. As a result, while such a claim construction regime may alleviate the concerns raised as to the administrability and ultimate predictability of claim construction under *Phillips II*, these concerns still exist under the current claim construction regime where district court judges are responsible for addressing questions of claim construction.

Admittedly, the Phillips II claim construction methodology may develop over time into a coherent framework to guide claim construction in general district courts. Federal Circuit case law may develop to provide greater predictability by clarifying the appropriate weight to be given to given to different types of evidence, such as the prosecution history, dictionaries, or expert testimony. While case law subsequent to the *Phillips II* decision may emerge to develop a coherent claim construction methodology, the Federal Circuit should be cautious and deliberate in its opinions clarifying the Philips II claim construction approach. The Federal Circuit must not forget the primary reason that the rehearing en banc was granted in the *Phillips I* case—the emergence of two competing claim construction methodologies within Federal Circuit jurisprudence.<sup>213</sup> The Federal Circuit must be careful that a consistent claim construction methodology develops post-Phillips II, or Phillips II itself will have been for naught. The "weighted totality of the evidence" methodology is particularly susceptible to multiple interpretations because of its ambiguity. To be sure, the importance of the specification and claims is clear; however, there is ambiguity in regards to the relative importance of other evidence in respect to each other and also to the extent to which the specification is used to limit claims.<sup>214</sup> Although a nearly unanimous court decided *Phillips II*, prior rulings indicated a sharp division among Federal Circuit judges regarding their view on the impor-

For comments on the benefits and problems with the creation of specialized Article I and Article III courts, see, e.g., James E. Pfander, Article I Tribunals, Article III Courts, and the Judicial Power of the United States, 118 HARV. L. REV. 643 (2004) and David A. Case, Article I Courts, Substantive Rights, and Remedies for Government Misconduct, 26 N. ILL. U. L. REV. 101 (2005).

<sup>&</sup>lt;sup>213</sup> See Phillips v. AWH Corp., 376 F.3d 1382, 1382–83 (Fed. Cir. 2004).

The *Phillips II* court noted that "the claims themselves provide substantial guidance as to the meaning of particular claim terms" and can be "highly instructive." *Phillips II*, 415 F.3d at 1314. Further, "the specification is always highly relevant to the claim construction analysis" and "[u]sually, it is dispositive." *Id.* at 1315 (internal quotes omitted).

tance among different types of evidence.<sup>215</sup> Case law subsequent to *Phillips II* may develop a more coherent framework for claim construction that will remedy many of the concerns expressed in this paper regarding guidance to trial courts and initial predictability and consistency among claim construction decisions; however, there exists a real risk that the *Phillips II* decision may ultimately fail to unify Federal Circuit claim construction jurisprudence.

## C. The Need for Claim Construction Reform—de novo review

In the previous section, I argued that the claim construction method articulated in the *Phillips II* decision fails to provide adequate guidance to trial courts to construe claims and fails to allow parties, prior to litigation, to definitively determine the scope of patent exclusivity. The failure to articulate a coherent methodology in the *Phillips II* decision is not fatal—an efficient, consistent, and effective claim construction framework may develop over time through case law if the Federal Circuit acts cautiously and deliberately. A clearer claim construction methodology will reduce the cost of uncertainty regarding patent scope prior to litigation and the cost of erroneous constructions by an inexperienced judiciary in patent litigation. A clearer claim construction methodology, however, may not completely alleviate the unpredictability and inefficiency associated with high reversal rate of the patent claim interpretation process. As patent cases tend to be fact specific, there will likely be issues regarding the underlying factual questions, regardless of methodology. Particularly with the "weighted totality of the evidence" claim construction methodology, which allows the court to consider a wide array of factual evidence, the Federal Circuit, in order to establish genuine predictability, needs to reconsider the standard of review regarding trial courts' claim constructions.

The standard of de novo review was affirmatively established as the Federal Circuit's standard of review of district courts' claim construction findings in the en banc decision of *Cybor Corp. v. FAS Technologies, Inc.*<sup>216</sup> Prior to *Cybor Corp.*, the Supreme Court in *Markman* held that claim construction "is an issue for the judge, not the jury."<sup>217</sup> In the *Markman* decision, the Court indicated that claim construction is a question of law but stopped short of naming the standard of review that the appellate court should utilize in evaluating district court claim construction decisions.<sup>218</sup> In *Cybor Corp.*, the Federal Circuit

See Wagner & Petherbridge, supra note 16, at 1111–12.

<sup>&</sup>lt;sup>216</sup> 138 F.3d 1448 (Fed. Cir. 1998).

<sup>&</sup>lt;sup>217</sup> Markman, 517 U.S. at 391.

<sup>&</sup>lt;sup>218</sup> See Cybor Corp., 138 F.3d at 1464 (Mayer, J., concurring).

judges were confronted with a seemingly diametric choice in the standard of review that would either further nationally uniform claim construction or would be less costly and more efficient. National uniformity resulting from the ability of the Federal Circuit to alter unclear or incorrect factual determinations of issues of law in claim construction was balanced with the value of reducing costs and increasing efficiency, due to early predictability and reliance on the decision of the trial court.<sup>219</sup> The judges in *Cybor Corp*. chose national uniformity, despite the expense by adopting a standard of de novo review of district court claim construction decisions.<sup>220</sup> Now, eight years after the *Cybor Corp*. decision, the Federal Circuit has appeared to achieve neither objective.

The de novo standard of review has led to substantial unpredictability and uncertainty regarding interpretation of the scope of patent exclusivity. "[T]he trial court's early claim interpretation provides no early certainty at all, but only opens the bidding. The meaning of a claim is not certain (and the parties are not prepared to settle) until nearly the last step in the process—decision by . . . the Federal Circuit."<sup>221</sup> The Federal Circuit, prior to the *Phillips II* decision, altered district court claim construction decisions between 28% and 51% of the time.<sup>222</sup> The rate of change in the district court constructions of claim meaning will likely always be relatively high, even post-Phillips II, if the Federal Circuit continues its practice of de novo review of trial courts' claim construction decisions. The clearest example of this proposition is the *Phillips II* case itself. The majority panel decision in *Phillips I* relied primarily on the intrinsic evidence, including in particular the disclosure in the specification and upheld the district court's claim construction that "baffle" is limited to angles other than 90°. 223 The en banc Federal Circuit, reviewing the same factual evidence and using a very similar claim construction methodology, conversely determined that the district court and the Federal Circuit panel misconstrued the term "baffle" and held that the term was not limited to any particular angle.<sup>224</sup> Circuit Judge Lourie, concurring in part and dissenting in part, opined that there was no reason to reverse and remand the district judge and panel, as the Federal

<sup>&</sup>lt;sup>219</sup> *Id.* at 1455.

<sup>&</sup>lt;sup>220</sup> *Id.* at 1466.

Id. at 1476 (Radar, J., dissenting from the pronouncement on claim interpretation in the en banc opinion, concurring in the judgment, and joining part IV of the en banc opinion).

See Moore, supra note 66 at 11 (finding district court claim constructions to be incorrect 28% of the time); Chu, supra note 66 at 1112 (showing that the Federal Circuit has changed the lower court's claim construction in 51% of summary judgment decisions).

<sup>&</sup>lt;sup>223</sup> *Phillips I*, 363 F.3d at 1213.

<sup>&</sup>lt;sup>224</sup> *Phillips II*, 415 F.3d at 1327–28.

Circuit panel decision "implicitly decided the case based on the priorities that the en banc court" reaffirmed in *Phillips II*.<sup>225</sup> The term "baffle" was susceptible to multiple interpretations, as evidenced by *Phillips II*, even among judges that have some technology background and extensive experience in patent adjudication.<sup>226</sup> The current de novo standard of review of claim construction increases unpredictability and uncertainty that even a fully professional judiciary, as illustrated in *Phillips II*, utilizing the same claim construction methodology, cannot resolve.

The de novo standard of review is also economically costly. The Federal Circuit often ends up acting as "a second trial court—and third fact finder, after the PTO and the trial court."227 The cost of interpreting the term "baffle" in Phillips II was extensive. The case was initially filed in 1997, 228 and the Phillips II decision was not decided until July 2005. The cost of interpretation included proceeding before the Patent Office to initially construe the term during prosecution, district court proceedings, a Federal Circuit panel decision, and an en banc Federal Circuit decision.<sup>230</sup> Fortunately, in terms of cost, the *Phillips II* case initially was resolved at the district court level at the summary judgment stage for noninfringement; otherwise, another district court trial to relitigate the question of infringement based on the new claim construction could also have been included in the long line of proceedings. During this time, the parties and the field of technology, here vandalism resistant wall panels, were impeded. The parties incurred substantial litigation expenses, and the litigation likely distracted the parties from focusing on their business and research operations. Similarly, the field of technology generally was affected because of the inability to determine the scope of exclusivity, and innovation and patent disclosure was likely deterred by discouraging innovation or business by deciding to keep innovations trade secrets rather than risk uncertain patent protection.<sup>231</sup> The extensive costs of litigating the term "baffle" could likely have been resolved by a

<sup>&</sup>lt;sup>225</sup> *Id.* at 1329.

Four Federal Circuit judges had some sort of scientific background (Gajarsa, J., Linn, J., Lourie, J., and Newman, J.). *See* Moore, *supra* note 98, at 245.

<sup>&</sup>lt;sup>227</sup> See Rai, supra note 206, at 1088.

<sup>&</sup>lt;sup>228</sup> See Phillips II, 415 F.3d at 1309.

<sup>&</sup>lt;sup>229</sup> *Id.* at 1303.

Please note that the interpretation of claims at the PTO is different than during court proceedings. The PTO construes claims to grant the broadest reasonable interpretation consistent with the specification. See MPEP § 904.01 (8th ed., rev. 4 Oct. 2005) (citing *In re Morris*, 127 F.3d 1048, 1053 (Fed. Cir. 1997)).

See Mark A. Lemley, What's Different About Intellectual Property, 83 TEX. L. REV. 1097, 1100–01 (2005).

standard that is more deferential to the findings of the trial court regarding claim construction. The delay in certainty regarding patent rights following a district court claim construction is not unique to the *Phillips II* case. Every summary judgment decision based on a trial court's claim construction, or decision of infringement following jury trial, is susceptible to being overturned upon de novo review by the Federal Circuit. In the context of an infringement decision, reversal of a district court's claim construction is particularly inefficient, as the reversal of claim construction will have a "domino effect" requiring another full trial to re-determine infringement based on the revised claim construction.<sup>232</sup> The failure to grant a more deferential standard of review to a trial court's claim construction determination is economically costly and inefficient.<sup>233</sup>

Not only has the de novo standard of review of claim construction proved costly and unpredictable, but it has also failed to lead to substantial national uniformity in claim construction prior to *Phillips II*. As previously discussed, the *Phillips II* decision was prompted, at least in part, by a split within Federal Circuit jurisprudence.<sup>234</sup> The utilization of two different claim construction methodologies, a dictionary-driven and intrinsic evidence-driven methodology, depending on the membership of the Federal Circuit panel deciding the case prior to *Phillips II*, did not promote national uniformity, as the choice of claim construction methodology could impact the final decision in the patent case. As an example of how the choice of claim construction methodology could impact the final claim construction, consider the *Nystrom* case discussed *supra*.<sup>235</sup> Prior to the *Phillips II* decision, the Federal Circuit, utilizing the dictionary-driven methodology, construed "board" to encompass any rigid material, including both sawed lumber and man-made materials.<sup>236</sup> Following the *Phillips II* decision, however, utilizing the "weighted totality of the evidence"

See Rai, supra note 206, at 1089. The Federal Circuit could entertain interlocutory appeals on claim construction to avoid the domino effect associated with a reversal in claim construction. 28 U.S.C. § 1292(c)(2) grants limited opportunity for interlocutory appeals when the patent case is final but for an accounting and is thus only available late in the proceedings. For a discussion of the benefits and limitations of interlocutory appeals, see, e.g., V. Ajay Singh, Interlocutory Appeals in Patent Cases Under 28 U.S.C. § 1292(c)(2): Are They Still Justified and Are They Implemented Correctly?, 55 DUKE L.J. 179 (2005). The Federal Circuit appears reluctant to entertain interlocutory appeals on claim construction. See MIT v. Abacus Software, 462 F.3d 1344, 1350 (Fed. Cir. 2006) (indicating that they would "not consider claim construction issues decided in favor of the patent holder that the accused infringers contend were incorrect....").

<sup>&</sup>lt;sup>233</sup> See Rai, supra note 206, at 1089–90.

<sup>&</sup>lt;sup>234</sup> See Phillips II, 415 F.3d at 1319.

<sup>&</sup>lt;sup>235</sup> Nystrom, 374 F.3d 1105.

<sup>&</sup>lt;sup>236</sup> See id. at 1111–13.

methodology, "board" in the same patent was interpreted to be limited to a "board" composed of "a piece of sawed lumber."<sup>237</sup> The change in construction of the term "board" was the result of the change in claim construction methodology implemented by the panels.<sup>238</sup> This is but one example of how claim construction methodology ultimately can affect the final construction of a claim term. As illustrated by *Nystrom*, the split in the Federal Circuit regarding claim construction prior to *Phillips II* likely undermined the attempt at national uniformity in claim construction, as the result may have been due to a particular panel utilizing a particular claim construction methodology.

The reduction of early certainty and the increased judicial costs associated with the de novo standard of review are particularly relevant following the Phillips II decision. The claim construction framework articulated by the Federal Circuit in *Phillips II* is extremely flexible as to the evidence and factors to be considered in evaluating claim term meanings, which tends to create many issues susceptible to appeal to the Federal Circuit. This reduces any certainty as to the binding effects of the initial trial court's claim construction. The court specifically decided not to adopt a strict framework, allowing judges to consult various sources of evidence in any sequence of steps as long as the appropriate weight is assigned to the sources.<sup>239</sup> This grant of incredible flexibility acknowledges that the construction of claim terms in patent cases is often very fact specific and case specific. The combination of flexibility in claim construction with de novo review of the trial court diminishes early certainty and reliance on the district courts, because courts can weigh evidence differentially based on the specific facts of a case in order to reach an interpretation of claim meaning. The Federal Circuit has given little instruction on how to do this. One could argue that certainty does exist under the *Phillips II* claim construction methodology but only at the stage of appellate review. Certainty is eventually achieved by the Federal Circuit reviewing all appealed claim construction decisions and deciding claim constructions. Thus, as Circuit Judge Mayer indicated in the dissent, maybe the best solution, if this type of national uniformity is desired under a de novo standard of review, is to require all patent claims to be filed directly in the Federal Circuit.<sup>240</sup> This is unlikely the type of certainty required for national uniformity that the judges in Cybor Corp. envisioned, where uniformity requires a direct decision of each claim construction issue, rather than the Federal Circuit

<sup>&</sup>lt;sup>237</sup> Nystrom v. Trex Co., 424 F.3d 1136, 1145–46 (Fed. Cir. 2005).

<sup>&</sup>lt;sup>238</sup> See id. at 1144–45.

<sup>&</sup>lt;sup>239</sup> *Phillips II*, 415 F.3d at 1324.

<sup>&</sup>lt;sup>240</sup> *Id.* at 1334 (Mayer, J., dissenting).

articulating a generally uniform claim construction methodology, with the Federal Circuit serving as a check on the district courts.

The *Phillips II* claim construction methodology will not produce early certainty under a de novo standard review in the sense that interpretation of the meaning of a claim term will vary based on the evidence even among the most professional jurists and among the Federal Circuit judges. As mentioned supra, the en banc Federal Circuit and the Federal Circuit panel, in evaluating *Phillips* II, utilized almost the exact same methodology to evaluate the scope of patent exclusivity and came up with different answers as to the scope of the term "baffle." Circuit Judge Lourie opined, "I see no reason for the court, having reaffirmed the principle on which the district judge and the panel originally decided the case, to send it back for further review."241 Judge Lourie continued by noting that employing the same claim construction methodology, "[r]easonable people can differ" as to the meaning of a term. 242 Differing opinions among reasonable jurists is not evidence of national uniformity requiring a de novo standard of review; rather, the opposing claim constructions indicate that, with difficult claim construction questions, different results in claim interpretation will inevitably exist even among members of a fully professionalized judiciary. In a sense, national uniformity as to both questions of law and fact regarding claim construction can never be achieved unless one individual is evaluating all the claims. The en banc Cybor Corp. court likely did not envision such a strong adherence to national uniformity to whole-heartedly sacrifice efficiency and judicial resources.

The de novo standard of review should be revised to grant more deference to the decisions of the trial court. Granting deference to the trial court could take the form of informal deference. Circuit Judge Bryson indicated in a concurring opinion in *Cybor Corp*. that the "adoption of the rule... [of a de novo standard of review] does not mean that [the Federal Circuit] intend[s] to disregard the work done by district courts in claim construction or that [the Federal Circuit] will give no weight to a district court's conclusion as to claim construction."<sup>243</sup> However, no clear definition of informal deference or mechanism to implement informal deference has crystallized. Since the *Cybor Corp*. decision, there has been no indication, as evidenced in the *Phillips II* decision, that the Federal Circuit has granted any informal deference to district court or panel claim interpretations. While the call to informal deference was not adopted by the majority of the en banc *Cybor Corp*. panel, the implementation of an infor-

<sup>&</sup>lt;sup>241</sup> *Id.* at 1329 (Lourie, J., dissenting).

<sup>242</sup> Id

<sup>&</sup>lt;sup>243</sup> *Cybor Corp.*, 138 F.3d at 1463.

mal standard of deference may be difficult to monitor or slowly forgotten in Federal Circuit jurisprudence over time. If the Federal Circuit never utilizes informal deference, the change in the standard of review informally will not promote early predictability, efficiency, and conservation of judiciary resources because parties cannot rely upon deference being granted to trial court decisions. Informal deference to the claim construction decisions of trial courts is inadequate to address the short-comings of the de novo standard of review.

The Federal Circuit should adopt a standard of review of trial court claim construction decisions similar to the standard of review utilized when evaluating obviousness determinations decided by district courts. Obviousness "is a legal conclusion that is reviewed de novo; however, it is based in turn on underlying factual determinations which are reviewed for clear error."<sup>244</sup> Granting some deference to the trial court's fact findings underlying claim construction would allow some national uniformity, significantly improve efficiency and predictability, and conserve judicial resources. To grant deference to the trial court's claim construction decision, the Federal Circuit would have to recognize that claim construction is not purely an issue of law.

The majority in the Federal Circuit en banc *Cyber Corp*. opinion held that claim construction is "a purely legal question." In *Markman*, which preceded *Cyber Corp*., the Supreme Court used inconsistent language as to whether claim construction is a pure question of law. The Supreme Court characterized construing claim terms as a "mongrel practice" and an issue that "falls somewhere between a pristine legal standard and a simple historical fact." In another section of *Markman*, however, the Supreme Court stated that treating interpretive claim construction issues "as purely legal will promote . . . intrajurisdictional certainty." It can be argued, as it was by the majority and dissenting opinions in *Cyber Corp*., that the Supreme Court in *Markman* supported either that claim construction is a pure question of law or a question of law with factual underpinnings.

Particularly after the decision in *Phillips II*, factual determinations should be recognized to form a basis of claim construction decisions, and the Federal Circuit should utilize a standard of review similar to the standard of review for questions of obviousness that grants deference to the trial court's factual determinations. The underlying factual determinations may include: (1)

<sup>&</sup>lt;sup>244</sup> Medichem v. Rolabo, 437 F.3d 1157, 1164 (Fed. Cir. 2006).

<sup>&</sup>lt;sup>245</sup> Cybor Corp., 138 F.3d at 1456.

<sup>&</sup>lt;sup>246</sup> Markman, 517 U.S. at 378.

<sup>&</sup>lt;sup>247</sup> *Id.* at 388.

<sup>&</sup>lt;sup>248</sup> *Id.* at 391.

the state of the art at the time of invention; (2) the level of ordinary skill in the art; (3) the scope and content of the specification; (4) whether a construction was disavowed during prosecution; and (5) the plain meaning of the term according to one skilled in the art at the time of invention.<sup>249</sup> For example, claim construction requires the judge to determine the claim scope based on the understanding of one of ordinary skill in the art at the time of invention.<sup>250</sup> The *Phil*lips II case establishes a claim construction methodology where all evidence relevant to the construction of a claim term (including expert witness testimony) may be relied upon to reach a determination as to the understanding of a skilled artisan.<sup>251</sup> During *Markman* hearings where patent claims are interpreted, parties present testimony from experts and documentary evidence

> to provide background on the technology at issue, to explain how an invention works, to ensure that the court's understanding of the . . . patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.<sup>252</sup>

These questions are inherently factual. The trial judge is in a better position to make factual determinations as to the credibility of witnesses, as the trial judge actually sees the witness testifying and is not forced merely to rely upon a sterile dictation of the words spoken. Further, "[t]he trial judge's major role is the determination of fact, and with experience in fulfilling that role comes expertise."253 Claim construction under the Phillips II methodology clearly involves factual determinations made by the district court. The Federal Circuit should defer to the trial judge's subsidiary factual determinations.

Claim construction deemed ultimately to be a question of law subject to de novo review, with the underlying factual determination upon which the decision is based reviewed for clear error, would significantly promote efficiency, certainty, and cost-effectiveness, while preserving some level of national uniformity. Primarily, granting deference to the trial judge's factual determinations as to claim construction would result in greater reliance upon a district court's decisions, encourage litigants to engage in settlement, and disincentivize parties from appealing every claim construction decision. The trial court would be the

Something analogous to the Graham factors for the obviousness context could be articulated by the Federal Circuit as underlying factual determinations during claim construction. See Graham v. John Deere Co., 383 U.S. 1, 17 (1966).

See Phillips II, 415 F.3d at 1313.

Id. at 1317.

Id. at 1318.

Id. at 1334 (Mayer, J., dissenting) (quoting Anderson v. Bessemer City, 470 U.S. 564, 574 (1985)).

main forum for determination of the scope of patent exclusivity rather than "merely a 'tryout on the road.'"<sup>254</sup> While an increase in efficiency and certainty is fairly likely to occur, as previously discussed in this section, the central question is the extent to which this standard of reviewing factual determinations for clear error will reduce national uniformity.

Commentators in the past have raised three arguments against granting deference to the claim construction decisions of district courts: (1) deference "simply [would] be turning 'a blind eye' to the errors of the district court judges;" (2) the loss of national uniformity in claim construction; and (3) forumshopping by litigants to choose the most favorable jurisdiction for review of claim term meaning.<sup>255</sup> While these arguments present potential drawbacks to the use of a deferential standard of review factual questions, they fail to provide a sufficient basis for the Federal Circuit's current de novo review standard. Holding that claim construction is an issue of law subject to de novo review, while reviewing for clear error the underlying district court's factual determinations, would not hinder the Federal Circuit from correcting inaccuracies at the district court level. If there was a clear error in regard to factual determinations, the Federal Circuit could still correct such erroneous claim constructions under a clear error standard of review. Most claim construction cases are very fact specific; thus, generally a district court's factual determinations will not undermine national uniformity because each case is factually distinct and will likely "bear very little, if at all, on the resolution of subsequent cases."256 There will be some situations where a patent is relitigated against different defendants in multiple suits where there is the potential that a district court's factual claim construction will affect national uniformity. These are infrequent cases, and relitigation of claim terms and potential collateral estoppel effects are problematic at both the district court and Federal Circuit levels.<sup>257</sup> Furthermore, the Federal Circuit could still promote national uniformity under the obviousness-type standard of review by reviewing de novo the non-factual determinations to ensure that district courts utilize a claim construction methodology consistent with the *Phillips* 

<sup>&</sup>lt;sup>254</sup> See id. (quoting Wainwright v. Sykes, 433 U.S. 72, 90 (1977)).

<sup>&</sup>lt;sup>255</sup> Wallace, *supra* note 209, at 1401–02.

<sup>&</sup>lt;sup>256</sup> Phillips II, 415 F.3d at 1332 (Mayer, J., dissenting).

Collateral estoppel applied to the construction of disputed claim terms in different adjudications involving different defendant is problematic because parties in different litigations may not argue the same issue regarding claim meaning or have different incentives regarding the scope of claim construction. *See* Masco Corp. v. U.S., 303 F.3d 1316, 1329–30 (Fed. Cir. 2002) (discussing requirements for application of issue preclusion).

II case.<sup>258</sup> Therefore, granting deference to a trial court's factual determinations will not have the far-reaching effects of completely undermining national uniformity as to claim construction methodology. Articulating a standard of review where claim construction is a question of law subject to de novo review based on factual determinations subject to review for clear error will not destroy national uniformity.

Finally, there will always be forum shopping by litigants to find the most favorable jurisdiction for reviewing a claim. Different district court judges following the same claim construction methodology may interpret the scope of the patent differently. The current de novo standard of review would allow the Federal Circuit to reverse a decision it finds reasonable but contradictory to the Federal Circuit judges' opinion. The proposed standard of review with a showing of clear error would not necessarily allow the Federal Circuit to alter a district court's claim construction. Opponents may argue this allows for forum shopping. The fact that even fully professional judges, as in the *Phillips II* case, reach different conclusions does not necessarily mean that there is no national uniformity or that forum shopping will occur. Requiring that all courts decide a case exactly the same could only be achieved if one court decided the issue. To the extent that forum shopping will occur, the Federal Circuit could curb the effects by reversing decisions where the factual determinations are clearly erroneous and reviewing legal aspects of claim construction de novo.

Claim construction should be a legal decision that is reviewed de novo; however, the factual determinations upon which it is based should be reviewed for clear error. There is a strong prima facie case that the costs of the de novo standard of review outweigh the marginal increase in potential benefits from national uniformity associated with de novo review of both legal and factual questions compared to granting some deference to the trial court. There is significant evidence, as discussed in this section, that the de novo standard of review of claim construction results in reduced early certainty, reduced reliance on district court decisions, reduced efficiency, and increased judicial administrative costs. The primary cost of granting deference to a trial court's factual determinations is a reduction in national uniformity by potentially binding the Federal Circuit to unclear or inconsistent district court factual determinations, which could alter the ultimate claim construction. As discussed, in an individual case, Federal Circuit review of factual determination under a clear error

As noted in Part III, *supra*, I would advocate additionally for more guidance from the Federal Circuit to the district courts regarding the legal determination of the *Phillips II* claim construction methodology in order to advance the causes of predictability and national uniformity.

standard would still allow correction of inaccurate claim constructions in appealed cases based on erroneous factual determinations. Additionally, as patents are generally factually distinct, deference to factual determinations would have minor bearing on most subsequent claim construction decisions, and only in cases where a patent is relitigated will national uniformity be potentially undermined. Because patents are infrequently relitigated and appealed, faulty district court factual determinations will have limited effect on national uniformity. Thus, while cases resulting in a cost to national uniformity arise less frequently, and this cost can be minimized, the costs related to inefficiency, reduction in reliance on trial court decisions, and delaying certainty until patent cases reach the appellate level as a result of the de novo standard of review may arise in every district court claim construction decision. This creates a strong prima facie case that the cost associated with the de novo standard of review is extremely high and is not outweighed by the limited benefit of national uniformity.

Furthermore, the recognition of claim construction as an issue of law with underlying factual questions represents a compromise between the promotion of national uniformity and judicial efficiency. The obviousness-type review of claim construction would recognize that the district court is making factual determinations that form the basis of the claim construction decision. Furthermore, the proposed standard of review promotes judicial efficiency, settlement negotiation, and predictability, and reduces litigation costs by granting some deference to a district court's factual determinations because parties can place greater reliance on the district court's claim construction decision. The deference given to the district court, however, would not be absolute. The Federal Circuit, by retaining the ability to review factual determinations for clear error and legal determinations under a de novo standard of review, would act to maintain national uniformity. As a compromise between the need to promote national uniformity versus judicial efficiency, the Federal Circuit should adopt the proposed standard of review.

#### III. CONCLUSION

The Federal Circuit has struggled over the past decade to articulate a coherent and uniform methodology in which to interpret the meaning of claim terms during claim construction. The Federal Circuit in *Phillips II* attempted to settle case law regarding claim construction to quell confusion among district courts and the divide within the Federal Circuit itself. The claim construction methodology articulated in *Phillips II*, relying on a weighted, totality of the evi-

<sup>&</sup>lt;sup>259</sup> See Cybor Corp., 138 F.3d at 1479 (Newman, J., additional views).

dence approach to claim construction, while providing extensive flexibility for the adjudicator to determine property rights by accessing the essence of what the patentee actually invented, may fail to provide a workable framework for district courts and the parties prior to an infringement action to evaluate the meaning of claims and the scope of patent protection. As a result of the lack of clear claim construction guidance by the Federal Circuit, predictability, consistency, and the costs of interpreting the meaning of terms will likely not improve. Over time, a coherent framework may develop from the Federal Circuit to guide district courts and parties in construing claims. A clearer claim construction methodology, nevertheless, will not sufficiently alleviate the problems of the predictability, efficiency, and high reversal rate associated with the determination of the scope of patent exclusivity. The Federal Circuit, in order to establish early predictability by providing reasonable and timely resolution of legal issues, needs to reconsider the standard of review regarding trial courts' claim constructions and grant greater deference to the claim interpretation decisions of trial courts. If the Federal Circuit fails to articulate a clearer framework for district courts to follow during claim interpretation, or fails to revisit the question of standard of review for claim construction used by the Federal Circuit, the promises of Markman and Phillips II for national uniformity, efficiency, and predictability may remain illusory.