# TEVA V. SANDOZ: THE SUPREME COURT REJECTS MILLENNIAL FEDERAL CIRCUIT'S "CLEARLY ERRONEOUS" REVIEW STANDARD

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In Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., the Supreme Court considered what standard the Federal Circuit should apply when reviewing patent claim construction decisions on appeal.¹ Specifically, the Court contemplated whether a district court's entire claim construction decision should continue to receive de novo review, or instead, if factual findings made during claim construction should be reviewed for clear error pursuant to Federal Rule of Civil Procedure 52.² Unsurprisingly, the Supreme Court decided to follow the "clear command" of the Rules for subsidiary factual matters,³ and held that reviewing claim construction decisions calls for a hybrid standard of review. The ultimate construction is a question of law reviewed de novo,⁴ while factual findings of extrinsic evidence must be reviewed for clear error.⁵

Teva is part of a long line of cases in which the Supreme Court has rejected the Federal Circuit's "idiosyncratic" patent jurisprudence. More and more lately, the Supreme Court has taken a heavy hand in reviewing patent decisions, indicating fundamental disapproval with how the Federal Circuit treated patent cases differently from other types of cases. Born in 1982, in an effort to provide uniformity and stability to a complicated area

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- 1. Teva Pharms. USA, Inc. v. Sandoz, Inc. (Teva IV), 135 S. Ct. 831, 835 (2015).
- 2. Id.
- 3. Id. at 836-37.
- 4. Id. at 837.
- 5. Id. at 837–38.
- 6. See Sorin G. Zaharia, Note, Burden of Proof in Medtronic: The Federal Circuit's Idiosyncratic Patent Jurisprudence Vetoed, Again, 30 BERKELEY TECH. L.J. 777, 790, 792 (2015) ("[T]he Court gives a strong message that it does not want the Federal Circuit to construct idiosyncratic rules for patent cases divorced from general jurisprudence.").
- 7. See Jason Rantanen, Teva, Nautilus and Change Without Change, 18 STAN. TECH. L. REV. 538, 539 (2015); Zaharia, supra note 6, at 792.

of law,<sup>8</sup> the millennial<sup>9</sup> Federal Circuit is arriving at that point in life when it should really have its "judicial house in order."<sup>10</sup>

During the Federal Circuit's formative "childhood" years through the early 1990s, the Supreme Court stood back and let the Federal Circuit figure out its way in the world. During the Federal Circuit's "high school" years of the mid to late 1990s, the Court stepped up its supervision, reviewing about one patent case a year. The Court kept a similar light hand during the early 2000s while the Federal Circuit was in "college." After "graduation," the Court was likely expecting the millennial Circuit to be a self-sufficient young adult, with little need for parental intervention. Instead, the Court increased not only the number of cases it reviewed from the Federal Circuit, but started severely criticizing and rejecting the Federal Circuit's jurisprudence. This increasing rate of

<sup>8.</sup> Robin Feldman, Coming of Age for the Federal Circuit, 18 GREEN BAG 2D 27, 28 (2014).

<sup>9.</sup> WILLIAM STRAUSS & NEIL HOWE, MILLENNIALS RISING: THE NEXT GREAT GENERATION 4 (2000) (stating the Millennial generation are those born on or after 1982).

<sup>10.</sup> See Feldman, supra note 8, at 35–36.

<sup>11.</sup> During its first fourteen years, the Supreme Court heard only five Federal Circuit cases. Dennison Mfg. Co. v. Panduit Corp., 475 U.S. 809 (1986); Christianson v. Colt Indus. Operating Corp., 486 U.S. 800 (1988); Eli Lilly & Co. v. Medtronic, Inc., 496 U.S. 661 (1990); Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83 (1993); Asgrow Seed Co. v. Winterboer, 513 U.S. 179 (1995).

<sup>12.</sup> Children typically attend high school from age fourteen to eighteen, corresponding to 1996 to 2000. Markman v. Westview Instruments, Inc. (*Markman II*), 517 U.S. 370 (1996); Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17 (1997); Pfaff v. Wells Elecs., Inc., 525 U.S. 55 (1998); Dickinson v. Zurko, 527 U.S. 150 (1999); Fla. Prepaid Postsecondary Ed. Expense Bd. v. College Savings Bank, 527 U.S. 627 (1999).

<sup>13.</sup> College typically lasts for four to five years, corresponding to 2001 to 2005. JEM Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124 (2001); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002); Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826 (2002); Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193 (2005).

<sup>14.</sup> See, e.g., eBay Inc. v. MercExchange, LLC, 547 U.S. 388, 390 (2006) (rejecting the Federal Circuit's injunction rule for patent cases); MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 137 (2007) (rejecting the Federal Circuit's rule about the meaning of "actual controversy" in a declaratory judgment action); Bilski v. Kappos, 561 U.S. 593, 604 (2010) (rejecting the Federal Circuit's sole use of the "machine or transformation test" for patentable subject matter); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012) (rejecting the Federal Circuit's application of Bilski); Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013) (rejecting the Federal Circuit's attempt to reconsider its decision regarding the patentability of genes); Alice Corp. Pty. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014) (rejecting the use of drafting efforts to get around the patentable subject matter requirements); Limelight Networks,

strict oversight<sup>15</sup> seems to reflect the Supreme Court's slight exasperation with the Federal Circuit's millennial antics. While the creation of the Federal Circuit may have elevated (and increased) patent litigation due to an increased likelihood of finding a patent valid, its "pro-patent" role<sup>16</sup> has appeared to lead it astray. Though the Federal Circuit's intentions in protecting and promoting strong patent rights may be commendable, as the old saying goes, the road to hell is paved with good intentions.

After the Supreme Court's decision in *Teva*, the Federal Circuit on remand continued to disregard expert testimony and findings of fact and stuck to its original decision on the indefiniteness of "molecular weight" despite a contrary finding made by the Supreme Court on the exact same term. Does this signal a continuation of the Federal Circuit's prior supremacy over claim construction, where the entire decision is reviewed de novo?

Part I lays the legal groundwork for understanding *Teva* by reviewing the history of claim construction, including the recent changes in indefiniteness, and standards of review used by appellate courts. Part II reviews the case history, tracing the dispute from the district court claim construction, to the Federal Circuit's reversal, then the Supreme Court's

Inc. v. Akamai Techs., Inc. 134 S. Ct. 2111, 2117 (2014) ("The Federal Circuit's analysis fundamentally misunderstands what it means to infringe a method patent."); Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2124 (2014) (rejecting the Federal Circuit's "insolubly ambiguous" standard for indefiniteness); Medtronic, Inc. v. Mirowski Family Ventures, LLC, 134 S. Ct. 843, 846 (2014) (rejecting the Federal Circuit's ruling that the burden of proof shifts to the licensee in a declaratory judgment action); Octane Fitness, LLC v. ICON Health & Fitness, Inc., 134 S. Ct. 1749 (2014) (rejecting the Federal Circuit's rigid framework for awarding attorney fees); Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc., 134 S. Ct. 1744 (2014) (rejecting the Federal Circuit's intrusive review of district court awards of attorney fees).

- 15. See Feldman, supra note 8, at 27–28.
- 16. See Matthew D. Henry & John L. Turner, The Court of Appeals for the Federal Circuit's Impact on Patent Litigation, 35 J. LEGAL STUDIES 85, 114–15 (2006) (finding increased chances of patent validity, and therefore more significance for infringement analysis, "enhanced the value of patents and have increased the incentives of patentees to sue for infringement.").
- 17. Teva Pharms. USA v. Sandoz, Inc. (*Teva V*), 789 F.3d 1335, 1345 (Fed. Cir. 2015) ("A skilled artisan, knowing a shift might occur, would still not be reasonably certain in light of the entire record as to which type of average was intended.").
- 18. Teva IV, 135 S. Ct. at 843 ("But the Federal Circuit did not accept Teva's expert's explanation as to how a skilled artisan would expect the peaks of the curves to shift. And it failed to accept that explanation without finding that the District Court's contrary determination was 'clearly erroneous.' The Federal Circuit should have accepted the District Court's finding unless it was 'clearly erroneous.' Our holding today makes clear that, in failing to do so, the Federal Circuit was wrong.") (internal citations omitted).

decision establishing a hybrid standard of review for claim construction, and finally the Federal Circuit's decision on remand. Part III discusses the aftermath of *Teva* by reviewing *Markman* decisions issued in its wake for trends or changes. Part III then addresses the question of whether the Federal Circuit must consider extrinsic evidence on appeal. Finally, Part III concludes with a review of three possible paths going forward.

#### I. LEGAL BACKGROUND OF TEVA V. SANDOZ

To understand the conflict at issue in *Teva v. Sandoz*, an understanding of patent claim construction and indefiniteness is required, as these issues were central to the appeals and the ultimate decision on remand. The different standards of review for legal and factual matters are explained below, along with examples of hybrid standards incorporating both.

# A. HISTORY OF PATENT CLAIM CONSTRUCTION

Patent claiming in the United States has evolved significantly over the last two hundred years.<sup>19</sup> The shift away from central claiming and towards peripheral claiming of the invention's metes and bounds led to claim construction becoming an essential step in patent infringement analysis.<sup>20</sup> Questions about who should construe the meaning of claims (juries versus judges), and whether claim construction was a matter of law, fact, or both, led to the Supreme Court's landmark decision in *Markman v. Westview Instruments, Inc.*<sup>21</sup>

## 1. Markman and the Beginning of Modern Claiming

In *Markman*, a unanimous Court held that "the construction of a patent, including terms of art within its claim, is exclusively within the province of the court." The question presented to the Court was whether patent claim interpretation was a matter of law reserved for the court, or

<sup>19.</sup> J. Jonas Anderson & Peter S. Menell, *Informal Deference: A Historical, Empirical, and Normative Analysis of Patent Claim Construction*, 108 NW. U. L. REV. 1, 8–21 (2014) [hereinafter *Informal Deference*] (providing in-depth description of pre-modern claiming and patent trials).

<sup>20.</sup> *Id.* at 16. Central claiming focused on the invention's central features, with courts determining the "edges," while peripheral claiming allows the claims to establish the boundaries and scope of the patent. Joshua D. Furman, Comment, *Patent Claim Construction Under* Teva v. Sandoz: *Deference at Last, or More of the Same?*, 97 J. PAT. & TRADEMARK OFF. SOC'Y 579, 582 (2015).

<sup>21. 517</sup> U.S. 370 (1996); Informal Deference, supra note 19, at 21–23.

<sup>22.</sup> Markman, 517 U.S. at 372.

was entitled to jury determination pursuant to the Seventh Amendment.<sup>23</sup> Justice Souter, writing for the majority, examined the origin of claim interpretation actions to determine whether this cause of action is at least analogous to a matter tried at law at the time of the founding of the United States. The opinion further considered whether this particular trial decision must belong to the jury "in order to preserve the substance of the common-law right as it existed in 1791."<sup>24</sup>

First, claim construction is a "mongrel practice," as it involves both a matter-of-fact review of evidence and then a matter-of-law construction of the term.<sup>25</sup> In the absence of an "exact antecedent," the best option is to find a comparable early cause of action "whose allocation to court or jury we do know."<sup>26</sup> Second, the modern practice of using claims to define the scope of the patent grant was not recognized until well after the founding of the country, so another analogy was needed.<sup>27</sup> In patent litigation, the closest match was the construction of specifications, which showed no established jury practice in the eighteenth century.<sup>28</sup> Similarly, terms within a land patent were left to the judge to interpret, not a jury.<sup>29</sup>

Next, the Court looked to whether judges or juries are better suited to interpret claims and the "statutory policies that ought to be furthered by the allocation." After reviewing patent treatises and precedent, the Court ultimately decided that judges are better suited to determine the meaning of patent terms. In assigning this role to the judge, the Court was careful to note that while it is normally the jury's "forte" to weigh testimony and determine credibility, within claim construction the judge is better suited to assess these "evidentiary underpinnings." In particular, the Court found that judges are better positioned to ensure that definitions proposed by experts fully comport with the patent's specification and that a patent's internal coherence is preserved.<sup>33</sup>

<sup>23.</sup> Id.

<sup>24.</sup> Id. at 376.

<sup>25.</sup> Id. at 378.

<sup>26.</sup> *Id*.

<sup>27.</sup> Id. at 378-79.

<sup>28.</sup> *Id.* at 379–80. The specification of a patent, also called the disclosure, is a written description of the invention.

<sup>29.</sup> *Id.* at 382–83. A land patent is a grant of a particular tract of land, made by a sovereign entity or government.

<sup>30.</sup> Id. at 384.

<sup>31.</sup> Id. at 388.

<sup>32.</sup> Id. at 389-90.

<sup>33.</sup> Id.

# 2. Federal Circuit Interpretations After Markman

In *Markman*, the Court did not explicitly set forth the appellate standard of review for claim construction,<sup>34</sup> leading to years of debate and confusion over the Federal Circuit's treatment of construction as a matter of law to be reviewed fully de novo.<sup>35</sup> From 1996 until 2015 when the Supreme Court decided *Teva v. Sandoz*, the Federal Circuit reviewed the issue in four key decisions: *Vitronics*,<sup>36</sup> *Cybor*,<sup>37</sup> *Phillips*,<sup>38</sup> and *Lighting Ballast*.<sup>39</sup>

In 1996, a few months after *Markman*, the Federal Circuit issued a decision in *Vitronics Corp. v. Conceptronic, Inc.*, finding that the district court erred in using contradictory expert testimony instead of the patent specification to construe "solder reflow temperature." The Federal Circuit established a hierarchical procedure for reviewing evidence in claim construction: first, "the words of the claims themselves;" second, it is "always necessary to review the specification;" and third, a court "may" consider the prosecution history. In most cases, the court directed, intrinsic evidence alone will resolve any claim ambiguity, and it would be improper to rely on extrinsic evidence. The trial court should only consider extrinsic evidence if there was a "genuine ambiguity" after reviewing all of the intrinsic evidence, or if the intrinsic evidence was insufficient to determine the term's meaning. 43

In 1998, an en banc Federal Circuit held in *Cybor Corp. v. FAS Technologies, Inc.* that claim construction was purely a matter of law to be reviewed de novo on appeal.<sup>44</sup> The court relied on the Supreme Court's unanimous affirmance of the decision below in *Markman*,<sup>45</sup> which held that claim construction was a purely legal matter.<sup>46</sup> Instead of relying on

<sup>34.</sup> Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc).

<sup>35.</sup> See Informal Deference, supra note 19, at 25–30.

<sup>36.</sup> Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1584 (Fed. Cir. 1996).

<sup>37.</sup> *Cybor*, 138 F.3d 1448.

<sup>38.</sup> Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

<sup>39.</sup> Lighting Ballast Control v. Philips Elecs. N. Am. Corp., 744 F.3d 1272, 1273 (Fed. Cir. 2014) (en banc).

<sup>40. 90</sup> F.3d 1576, 1584 (Fed. Cir. 1996).

<sup>41.</sup> Id. at 1582.

<sup>42.</sup> Id. at 1583.

<sup>43.</sup> Id. at 1584.

<sup>44. 138</sup> F.3d 1448, 1451 (Fed. Cir. 1998) (en banc).

<sup>45.</sup> Id.

<sup>46.</sup> Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc).

the Supreme Court's decision in *Markman*, which stated that claim construction was a "mongrel practice," the Federal Circuit repeatedly reviewed its own affirmed decision for guidance.<sup>47</sup> The Federal Circuit interpreted "exclusively within the province of the court," to mean that "the totality of claim construction is a legal question to be decided by the judge," and thus subject to de novo review. 49

Clearly a contentious issue, a deeply divided Federal Circuit wrote an additional five separate opinions in *Cybor*. Notably, Chief Judge Mayer argued that the majority misinterpreted *Markman*, and improperly relied on the Federal Circuit's earlier *Markman* opinion. Judge Rader pointed out the Supreme Court's repeated intimations that "claim construction was not a purely legal matter," and criticized the majority opinion for redefining claim construction as an inquiry of "how a lawyer or judge would interpret the term." Judge Newman voiced concerns that the Federal Circuit was discouraging extrinsic evidence in claim construction, and that "[s]uch evidence should be encouraged, not restrained, if summary disposition is at hand."

This court's categorical response that claim interpretation involves no factual assessments does not advance a functional analysis of trial and appellate roles in claim construction. As a matter of fact (so to speak), claim construction requires assessment of custom and usage in the relevant art, assessment of events during prosecution, assessment of the level of ordinary skill in the art, assessment of the understanding of skilled artisans at the time of invention—to name just a few factual components of the complex process of claim interpretation. A careful functional analysis counsels deference for district court claim interpretations.

<sup>47.</sup> Cybor, 138 F.3d at 1453-56; see also Vitronics, 90 F.3d at 1582 (citing the Federal Circuit's Markman decision).

<sup>48.</sup> Cybor, 138 F.3d at 1455 (citations omitted).

<sup>49.</sup> *Id.* at 1456.

<sup>50.</sup> Judge Plager noted that although the review standard would be de novo, informal deference would be present due to common sense. *See id.* at 1462 (Plager, J., concurring). Judge Bryson also acknowledged that district court judges would be better suited to make credibility judgments about competing experts. *See id.* at 1463 (Bryson, J., concurring).

<sup>51.</sup> See id. at 1463–64 (Mayer, J., concurring in the judgment). Where the majority interpreted the Supreme Court's silence on the issue of the standard of review as agreement, Chief Judge Mayer pointed out the lengthy Seventh Amendment discussion and policy considerations. See id. at 1464 (Mayer, J., concurring in the judgment).

<sup>52.</sup> See id. at 1474–75, 1478 (Rader, J., concurring in the judgment, dissenting in part). Judge Rader also criticized the court's opinion that claim interpretation involves no factual assessment:

*Id.* at 1478 (Rader, J., concurring in the judgment, dissenting in part).

<sup>53.</sup> See id. at 1480 (Newman, J., providing additional views).

Seven years later, in its en banc decision for *Phillips v. AWH Corporation*, the Federal Circuit offered a "clarification" of the appropriate roles for the patent claims, specification, and other evidence.<sup>54</sup> The court explained that claims should be read in view of the specification, as a fully integrated instrument,<sup>55</sup> and that it is "appropriate" for a court to rely on the written description to discern the meaning of claims.<sup>56</sup> The prosecution history may be helpful in providing evidence of how the inventor understood the patent, but is less useful than the specification.<sup>57</sup> Extrinsic evidence, such as dictionaries, treatises, and expert testimony, may be useful but is "unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence."<sup>58</sup> Although the court emphasized there was no particular order in which judges should review various sources, by valuing certain evidence (claims and the written description) over others (expert testimony),<sup>59</sup> a de facto ordering was made.

Similar to *Cybor*, the en banc hearing in *Phillips* produced two further opinions. Judge Lourie opined that although claim construction was a question of law, the Federal Circuit should treat it as a factual finding, and affirm in "the absence of a strong conviction of error." In a strongly worded dissent, previewing many of the same arguments adopted by the Supreme Court in *Teva v. Sandoz*, Judge Mayer decried "the futility, indeed the absurdity, of this court's persistence in adhering to the falsehood that claim construction is a matter of law devoid of any factual component." Judge Mayer pointed to Federal Rule of Civil Procedure 52(a), which required that findings of fact be set aside only if clearly erroneous. Judge Mayer argued that claims must be "interpreted both from the perspective of one of ordinary skill in the art and in view of the art at the time of invention," inherently factual questions. Additionally, the concept of a hybrid form of review was not an unknown concept:

<sup>54.</sup> Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

<sup>55.</sup> *Id.* at 1315.

<sup>56.</sup> Id. at 1317.

<sup>57.</sup> *Id*.

<sup>58.</sup> Id. at 1319.

<sup>59.</sup> Id. at 1324.

<sup>60.</sup> Id. at 1330 (Lourie, J., concurring in part and dissenting in part).

<sup>61.</sup> *Id.* (Mayer, J., dissenting).

<sup>62.</sup> *Id.* at 1331 (Mayer, J., dissenting).

<sup>63.</sup> Id. at 1332 (Mayer, J., dissenting).

obviousness was already treated as an ultimate question of law that depends on underlying factual inquiries.<sup>64</sup>

Nine years later, in the en banc decision for *Lighting Ballast Control LLC v. Philips Electronics Corp.*, the Federal Circuit raised the issue of whether to retain *Cybor*'s de novo standard of review, and decided to keep it under a stare decisis justification. <sup>65</sup> The Federal Circuit rejected the proposed hybrid approach, later endorsed by the Supreme Court, to review factual aspects of claim construction under the clearly erroneous standard, and the final construction as a matter of law. <sup>66</sup> Finally, the Federal Circuit repeated its disapproval of extrinsic evidence in claim construction, and emphasized the importance of the patent itself. <sup>67</sup>

# 3. Indefiniteness

Besides the formal construction of terms, *Markman* hearings often assess the closely related issue of whether or not a claim meets the definiteness requirement.<sup>68</sup> The Patent Act requires claims to "particularly point[] out and distinctly claim[] the subject matter" of the invention.<sup>69</sup>

The Federal Circuit interpreted this hurdle in Exxon Research & Engineering Co. v. United States to mean that if the claim meaning "is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree . . . the claim [is] sufficiently clear to avoid invalidity on indefiniteness grounds." This "insolubly ambiguous" standard benefited patent holders, as claims amenable to construction could not be indefinite. The district court in Teva relied on this standard when it found the contested claim term definite.

<sup>64.</sup> Id. at 1333 (Mayer, J., dissenting).

<sup>65. 744</sup> F.3d 1272, 1276-77 (Fed. Cir. 2014) (en banc).

<sup>66.</sup> Id. at 1278, 1286.

<sup>67.</sup> See id. at 1284 ("Claim construction is a legal statement of the scope of the patent right; it does not turn on witness credibility, but on the content of the patent documents.").

<sup>68.</sup> See, e.g., Teva Pharms. USA, Inc. v. Sandoz, Inc. (Teva I), 810 F. Supp. 2d 578, 590–93 (S.D.N.Y. 2011).

<sup>69. 35</sup> U.S.C. § 112, ¶ 2 (2006 ed.). See generally Norris Boothe, Note, Exercising a Duty of Clarity: Nautilus, Inc. v. Biosig Instruments, Inc., 30 BERKELEY TECH. L.J. 445, 447–51 (2015) (describing the origins of the definiteness requirement and its evolution).

<sup>70. 265</sup> F.3d 1371, 1375 (Fed. Cir. 2001), abrogated by Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120 (2014).

<sup>71.</sup> Boothe, *supra* note 69, at 452.

<sup>72.</sup> Teva I, 810 F. Supp. 2d at 596.

On June 2, 2014,<sup>73</sup> the Supreme Court decided *Nautilus, Inc. v. Biosig Instruments, Inc.*, rejecting the Federal Circuit's indefiniteness standard and setting its own, more stringent standard for claims.<sup>74</sup> The Court held that the "insolubly ambiguous" standard did not satisfy the statutory definiteness requirement, and instead, "a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention."<sup>75</sup>

#### B. STANDARD OF REVIEW

Two standards of review were at issue in *Teva v. Sandoz*: the de novo standard for reviewing matters of law and the clear error standard for factual findings. Additionally, the hybrid standard for claim construction is not new to patent law, and is used in other appellate matters.

# 1. Factual Versus Legal Matters

Legal questions decided by trial judges are reviewed independently on appeal to better serve the goals of "doctrinal coherence and economy of judicial administration." Appellate courts are better suited to the collaborative judicial process that "promotes decisional accuracy," and parties on appeal can provide more comprehensive analysis as the issues are narrowed. Significantly, the multi-judge panels of appellate courts permit more "reflective dialogue and collective judgment" than a single trial judge.

Findings of fact, however, are reviewed under the clear error standard, and only set aside if they are "clearly erroneous," with "due regard" given to the trial court's judgment of witness credibility.<sup>79</sup> The Supreme Court and the Rules Advisory Council have interpreted this Rule as a "clear command," with no exceptions or exclusions for certain types of factual findings, and applicable to subsidiary and ultimate facts.<sup>80</sup>

<sup>73.</sup> This occurred after the Federal Circuit issued its decision in *Teva v. Sandoz* (July 26, 2013), and before the Supreme Court heard oral arguments (Oct. 15, 2014).

<sup>74. 134</sup> S. Ct. 2120, 2124 (2014).

<sup>75.</sup> Id.

<sup>76.</sup> Salve Regina Coll. v. Russell, 499 U.S. 225, 231 (1991).

<sup>77.</sup> *Id.* at 232.

<sup>78.</sup> Id.

<sup>79.</sup> FED. R. CIV. P. 52(a)(6).

<sup>80.</sup> Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 836-37 (2015).

# 2. Hybrid Standards

Hybrid standards, which must review findings of fact and law, are neither new nor unusual, even in patent law. Like claim construction, obviousness is ultimately a question of law that depends on underlying factual inquiries. Similarly, enablement is a question of law reviewed de novo, based on "underlying factual inquiries that [are] review[ed] for clear error."

#### II. CASE SUMMARY

Teva Pharmaceuticals USA manufactures and markets the multiple sclerosis drug Copaxone, which contains the active ingredient glatiramer acetate, a composition of copolymer-1.<sup>83</sup> Sandoz, Inc. and Mylan Pharmaceuticals Inc. sought approval from the United States Food and Drug Administration to sell a generic version of Copaxone, prompting Teva to file patent infringement suits.<sup>84</sup>

#### A. DISTRICT COURT LITIGATION

On August 29, 2011, the district court issued its decision construing terms from the nine patents-in-suit. Expression to Sandoz's claim construction argument was that the "patent claims are indefinite because the patents fail to specify the type of molecular weight being claimed" for copolymer-1. There are three different interpretations for this term, all resulting in different averages. Weight average molecular weight ("M<sub>w</sub>") calculates the average of all of the molecules while giving a weight-related bonus; number average molecular weight ("M<sub>n</sub>") calculates the average by dividing the weight of each molecule by the total number of molecules; and peak average molecular weight ("M<sub>p</sub>") calculates the average using the weight of the most prevalent molecule in the mix. The district court found that the disputed term "average molecular weight" was not "insolubly ambiguous" but rather was amenable to construction, and thus not indefinite. Expression of the superior of the supe

<sup>81.</sup> *Phillips*, 415 F.3d at 1333 (Mayer, J., dissenting); Teva Pharms. USA v. Sandoz Inc. (*Teva III*), 723 F.3d 1363, 1372 (Fed. Cir. 2013).

<sup>82.</sup> Teva III, 723 F.3d at 1370.

<sup>83.</sup> Teva Pharms. USA, Inc. v. Sandoz, Inc. (*Teva I*), 810 F. Supp. 2d 578, 581 (S.D.N.Y. 2011).

<sup>84.</sup> *Id*.

<sup>85.</sup> Id.

<sup>86.</sup> *Id*.

<sup>87.</sup> Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 836 (2015).

<sup>88.</sup> Teva I, 810 F. Supp. 2d at 596.

To come to this conclusion, the court followed the order of hierarchy for interpretation as instructed by *Phillips v. AWH Corp.*:<sup>89</sup> first looking to the claims, then the rest of the specification, next the prosecution history, and finally to extrinsic evidence. The court credited the testimony of Teva's expert, Dr. Grant, to understand that the patent's drawings would be understood by a person with skill in the art as M<sub>p</sub>, and also consistent with the prosecution history.<sup>90</sup> Because the court was able to construe "average molecular weight," it denied Sandoz's indefiniteness motion for summary judgment.<sup>91</sup>

#### B. FEDERAL CIRCUIT DECISION

On appeal, the Federal Circuit reviewed all aspects of the claim construction de novo, and found "average molecular weight" indefinite. The Federal Circuit focused on contradictory statements made during prosecution for two of the patents, where Teva defined "average molecular weight" as  $M_p$  once and as  $M_w$  another time. Additionally, the expert's testimony at the *Markman* hearing did "not save [the] claims from indefiniteness," and the Federal Circuit disagreed with the district court's holding and the expert's testimony about one of the figures, coming to its own contrary holding.

In the very same decision, the Federal Circuit used a hybrid review standard for the issue of enablement, as a question of law reviewed de novo, "based on underlying factual inquiries that [are] review[ed] for clear error." The court did not find any clear error in the district court's factual

<sup>89. 415</sup> F.3d 1303, 1314 (Fed. Cir. 2005) (en banc).

<sup>90.</sup> Teva I, 810 F. Supp. 2d at 588–89 ("Thus, Teva (and Dr. Grant) conclude, Mp can be read from the chromatogram generated by SEC without any 'further calculation' and would be understood by a person of ordinary skill in the art to be the presumed meaning of AMW in the context of the patents-in-suit.... The Court credits and accepts all of Dr. Grant's opinions regarding SEC.").

<sup>91.</sup> *Id.* at 596. The district court issued another decision for the entire case on January 20, 2015, ruling on all issues. Teva Pharms. USA, Inc. v. Sandoz, Inc. (*Teva II*), 876 F. Supp. 2d 295 (S.D.N.Y. 2012). The claim construction was the focus of both the Federal Circuit appeal and the Supreme Court's decision, and the basis for this Note.

<sup>92.</sup> Teva Pharms. USA, Inc. v. Sandoz, Inc., 723 F.3d 1363, 1369 (Fed. Cir. 2013).

<sup>93.</sup> *Id*.

<sup>94.</sup> *Id.* The Federal Circuit reviewed the same graph that Dr. Grant interpreted and offered testimony on, and came to its own contrary conclusion. *Id.* ("Furthermore, as illustrated in the figure below, the peaks of the curves in Figure 1 do not correspond to the values denoted as 'average molecular weight' in the figure's legend (Appellants' additions in color). In fact, the 7.7 kDa value is closer to the *Mw* than to the *Mp* of the corresponding batch, which makes it difficult to conclude that *Mp* is the intended measure. Thus, we hold that Group I claims are indefinite." (internal citation omitted)).

<sup>95.</sup> Id. at 1370.

findings regarding the expert testimony, and therefore affirmed the district court's ruling on enablement.<sup>96</sup>

#### C. Supreme Court Decision

The Supreme Court granted Teva's petition for certiorari to review the Federal Circuit's standard of review for the "factual underpinnings" of claim construction. <sup>97</sup> In a 7-2 decision written by Justice Breyer, the Court discarded the Federal Circuit's interpretation of *Markman* and emphasized that factual findings must be reviewed under the Rule 52 clear error standard. <sup>98</sup>

# 1. Majority Opinion

The Court started its discussion by literally throwing the Rulebook at the Federal Circuit, citing FRCP 52(a)(6)'s "clear command" to not set aside a district court's findings of fact unless they are "clearly erroneous." There are no exceptions or carve outs to the rule, which applies to "both subsidiary and ultimate facts." The Court clarified that its decision in *Markman* did not create an exception to Rule 52(a)(6) for the underlying factual disputes. While the final claim construction was a question of law "within the province of the court," any factual determinations made in coming to this conclusion "must be reviewed for clear error." <sup>103</sup>

The Court analogized that construing a patent claim is similar to construing "other written instruments, such as deeds, contracts, or tariffs." The Court found that all of these written instruments present questions of law when the terms within are employed in their ordinary meaning. However, if technical words or phrases require interpretation, a factual dispute may require extrinsic evidence to "establish a usage of

<sup>96.</sup> Id. at 1371-72.

<sup>97.</sup> Teva Pharms. USA, Inc. v. Sandoz, Inc. (Teva IV), 135 S. Ct. 831, 835 (2015).

<sup>98.</sup> Id.

<sup>99.</sup> Id. at 836 (quoting Anderson v. Bessemer City, 470 U.S. 564, 574 (1985)) (internal quotation marks omitted).

<sup>100.</sup> Îd. at 836 (quoting FED. R. CIV. P. 52(a)(6)) (internal quotation marks omitted).

<sup>101.</sup> Id. at 837 (citing Pullman-Standard v. Swint, 456 U.S. 273, 287 (1982)).

<sup>102.</sup> Id. (quoting Markman, 517 U.S. at 372) (internal quotation marks omitted).

<sup>103.</sup> Id. at 838.

<sup>104.</sup> Id. at 837.

<sup>105.</sup> Id. (citing Great N. R. Co. v. Merchants Elevator Co., 259 U.S. 285, 292 (1922)).

trade or locality."<sup>106</sup> This factual determination, preceding the final construction, "must be reviewed for clear error."<sup>107</sup>

The argument for a solely de novo standard of review to avoid the "difficult" task of separating factual and legal questions was also not persuasive. <sup>108</sup> First, Rule 52 is not optional, and factual findings must be reviewed by the clear error standard. <sup>109</sup> Second, appellate courts regularly have to separate factual and legal matters and apply the appropriate standard or standards. <sup>110</sup> Finally, the Court noted that "subsidiary factfinding is unlikely to loom large" in claim construction, so any difficulty associated with reviewing underlying facts differently would be minimal. <sup>111</sup>

The Court next explained how the Federal Circuit needed to apply this hybrid rule. The ultimate interpretation made by the district court of how the claim should be construed is a legal conclusion, reviewed de novo. If only intrinsic evidence is used (the patent's claims, specifications, and prosecution history), the judge's construction is solely a determination of law and should be reviewed by the appellate court de novo. If, however, the district court looks beyond the intrinsic evidence to consider extrinsic sources, the subsidiary factual findings made to resolve a factual dispute must be reviewed under the clear error standard.

Finally, the Court reviewed one of the factual findings that the Federal Circuit had reviewed de novo to illustrate how their current holding should be applied.<sup>115</sup> At trial, the district court heard testimony about the meaning of "molecular weight" from experts presented by both sides. Ultimately, the trial court credited Teva's expert, and rejected the explanation proffered by Sandoz.<sup>116</sup> This credibility finding, "about how a

<sup>106.</sup> *Id.* (quoting Great N. R. Co. v. Merchants Elevator Co., 259 U.S. 285, 292 (1922)) (internal quotation marks omitted).

<sup>107.</sup> *Id.* at 838.

<sup>108.</sup> Id. at 839.

<sup>109.</sup> See id.

<sup>110.</sup> *Id*.

<sup>111.</sup> See id. at 840.

<sup>112.</sup> Id. at 841.

<sup>113.</sup> *Id*.

<sup>114.</sup> *Id.* It appears that determinations based on intrinsic evidence would continue to be reviewed de novo on appeal, while the new difference is that extrinsic evidence is now "subject to the ordinary fact-finding rules of court and will be reviewed *with deference* on appeal." Dennis Crouch, Teva v. Sandoz: *Partial Deference in Claim Construction*, PATENTLY-O (Jan. 20, 2015), http://patentlyo.com/patent/2015/01/partial-deference-construction.html [https://perma.cc/NQV9-55UC].

<sup>115.</sup> Teva IV, 135 S. Ct. at 842.

<sup>116.</sup> Id. at 843.

skilled artisan would understand" that average molecular weight was being depicted in the graph, was factual. He Federal Circuit came to its own contrary determination, without finding that the district court's determination was "clearly erroneous," the Federal Circuit clearly erred. He

#### 2. Dissent

Justice Thomas, joined by Justice Alito, wrote the dissenting opinion. Believing claim construction did not involve findings of fact, Justice Thomas agreed with the Federal Circuit's use of a de novo standard of review for all determinations of claim construction. <sup>119</sup> Justice Thomas argued that the construction of a patent claim is more analogous to statutory construction, which does not involve subsidiary findings of fact, and less analogous to deeds or contracts as the majority held. <sup>120</sup> Because patents are "governmental dispositions" and bind the general public, Justice Thomas believed patent claims resemble statutes. <sup>121</sup>

# D. FEDERAL CIRCUIT REMAND

On remand, the Federal Circuit used the new standard of indefiniteness from *Nautilus* to find (again) that the term "molecular weight" was indefinite. <sup>122</sup> Carefully acknowledging the Supreme Court's holding in *Teva*, requiring a "clear error" standard of review for factual findings, the Federal Circuit made a point of finding no clear error with the district court's factfindings. <sup>123</sup> However, instead of granting these findings deference, the Federal Circuit ignored them and focused on the intrinsic record alone to determine that "molecular weight" was indefinite due to a lack of reasonable certainty. <sup>124</sup>

Dissenting from the majority, Judge Mayer argued the factual findings made by the district court were not "clearly erroneous," and thus the court should not feel "free to disregard or discount them" in reviewing the issue of definiteness. <sup>125</sup> Judge Mayer emphasized the Court's decision in *Teva*,

<sup>117.</sup> Id.

<sup>118.</sup> Id.

<sup>119.</sup> *Id.* at 844 (Thomas, J., dissenting).

<sup>120.</sup> Id. at 845.

<sup>121.</sup> Id. at 847.

<sup>122.</sup> Teva Pharms. USA, Inc. v. Sandoz, Inc., 789 F.3d 1335, 1338 (Fed. Cir. 2015).

<sup>123.</sup> Id. at 1341, 1342, 1345.

<sup>124.</sup> Id. at 1341-42, 1345.

<sup>125.</sup> *Id.* at 1345 (Mayer, J., dissenting).

noting that sometimes "a factual finding may be close to dispositive of the ultimate legal question of the proper meaning" of a patent claim term. 126

#### III. POST-TEVA DISCUSSION AND ANALYSIS

At first glance, with *Teva v. Sandoz* the Supreme Court settled a long-standing debate over the proper standard of review for claim construction decisions. The battle was fought in Federal Circuit decisions, dissents, amicus briefs, and scholarly articles since *Markman* started the modern era for claiming. But questions about the true effect of *Teva* remain. Will district courts be more willing to consider extrinsic evidence? How will the Federal Circuit operate under this new hybrid standard? Is the Federal Circuit required to consider the totality of the claim construction decision, and always factor in, absent clear error, factual findings based on extrinsic evidence? A year under the guidance of *Teva* has produced few upheavals, and appears to be business as usual at the Federal Circuit.<sup>127</sup>

This Part first discusses trends in district court *Markman* decisions in the year since *Teva* was issued. Next, some light is shed on one of the unanswered questions from *Teva*: whether the Federal Circuit is required to factor in a district court's factual findings when reviewing claim construction decisions. The last Section reviews three possible paths for district courts and stakeholders going forward.

#### A. DISTRICT COURT CLAIM CONSTRUCTION TRENDS

In the year since the Supreme Court decided *Teva v. Sandoz*, there have been over 350 *Markman* decisions issued by district courts. <sup>128</sup> In order to discern any noticeable changes or patterns in *Markman* decisions, this Note focused on the District of Delaware and the Eastern District of Texas, which had eighty-one and sixty-five decisions, respectively,

<sup>126.</sup> *Id.* at 1345 (quoting *Teva IV*, 135 S. Ct. at 841–42) (internal quotation marks omitted).

<sup>127.</sup> See Furman, supra note 20, at 581 (reviewing two Federal Circuit decisions after Teva IV where "[t]he court asserted that there were no underlying factual determinations made below, despite apparent fact finding at trial. As such, the Federal Circuit has maintained their preference for the de novo review of claim constructions where possible."); Rantanen, supra note 7, at 544, 550.

<sup>128.</sup> To retrieve all *Markman* decisions from Westlaw after *Teva IV*: browse to Cases, then narrow to Federal District Courts, and advance search for all decisions containing "Markman" issued after January 20, 2015. Within those results, which would also contain all regular decisions that cited to *Markman* or had a party named Markman, select the Topic on the left pertaining to Intellectual Property, Patents, Markman.

representing forty-two percent of the total decisions.<sup>129</sup> Two judges in each district were tracked, in order to review differences within a district, and overall.<sup>130</sup> *Markman* decisions from January 2014 until *Teva* was issued in January 2015 provided a similar time period comparison.<sup>131</sup>

Within these decisions, several features were reviewed. The macrostructure, including headings and sub-headings within the court's analysis were noted, along with whether and how the court cited *Teva* (if the case was post-*Teva*), whether "extrinsic" and "intrinsic" were used to differentiate evidence discussed, and whether expert, dictionary, or other extrinsic evidence was mentioned. Finally, any conspicuous factfindings made regarding factual underpinnings were noted.

# 1. How a Court Cites Teva Affects How Extrinsic Evidence Is Used

Whether and how a judge cites to the Supreme Court's decision in *Teva* appears to be linked with how he or she uses extrinsic evidence to construe claims in *Markman* decisions.

The balanced and complete approach, citing the core holding of *Teva*, <sup>133</sup> correlates with more willingness to examine and make factfindings regarding extrinsic evidence. One example, used by Judge Leonard P. Stark in the District of Delaware in the "Legal Standards" section of his *Markman* decisions is representative:

The ultimate question of the proper construction of a patent is a question of law. . . . In some cases, "the district court will need to

<sup>129.</sup> These numbers were obtained after completing the search to retrieve all *Markman* decisions after *Teva IV*, by expanding the Jurisdiction menu and identifying the relevant districts. This produced a fairly reliable set of decisions to review, although a few were removed from consideration due to being summary judgment and final district court decisions, rather than solely intermediate *Markman* decisions.

<sup>130.</sup> Patents cover a wide range of technologies, and are written across a spectrum of clarity and specificity. Inventors and corporations introduce additional variability, along with which claims and patents are litigated, and litigation strategies employed. Comparing a large number of decisions helps minimize selection bias, outlier distortions, and other data analysis issues that would arise when simply comparing one decision before and one decision after. Both decisions might be exceptional or unusual, and attributing a general trend to one or two outlier decisions would be a flawed approach.

<sup>131.</sup> These cases were identified similar to the post-*Teva IV* set of cases, with the only difference here being the dates were between January 1, 2014 and January 20, 2015.

<sup>132.</sup> Because this Note compares how district courts differentiate between intrinsic and extrinsic evidence and analysis since *Teva IV*, decisions that did not consider extrinsic evidence at all were removed from review.

<sup>133.</sup> See Teva IV, 135 S. Ct. at 835 (holding that when reviewing a district court's resolution of subsidiary factual matters during patent construction, the Federal Circuit must apply the clear error standard).

look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." <sup>134</sup>

Judge Stark used this standard in twenty-one decisions, <sup>135</sup> and only four <sup>136</sup> (nineteen percent) did not mention or consider any extrinsic evidence. Within these decisions, Judge Stark issues factual findings resolving expert

134. Eisai Co., Ltd. v. Glenmark Pharms., Ltd., No. 13-1279-LPS, 2015 WL 1228958, at \*3-4 (D. Del. Mar. 17, 2015) (quoting *Teva IV*, 135 S. Ct. at 841).

135. Eisai Co., Ltd. v. Glenmark Pharms., Ltd., No. 13-1279-LPS, 2015 WL 1228958 (D. Del. Mar. 17, 2015); Greatbatch Ltd. v. AVX Corp., No. 13-723-LPS, 2015 WL 1383656 (D. Del. Mar. 20, 2015); Intellectual Ventures I LLC v. AT & T Mobility LLC, No. 12-193-LPS, No. 13-1631-LPS, No. 13-1632-LPS, No. 13-1633-LPS, No. 13-1634-LPS, No. 13-1635-LPS, No. 13-1636-LPS, No. 13-1637-LPS, 2015 WL 1393386 (D. Del. Mar. 24, 2015); Andover Healthcare, Inc. v. 3M Co., No. 13-843-LPS, 2015 WL 2227786 (D. Del. May 11, 2015); UCB, Inc. v. Accord Healthcare, Inc., No. 13-1206-LPS, 2015 WL 2345492 (D. Del. May 14, 2015); Cronos Techs., LLC v. Expedia, Inc., No. 13-1538-LPS, No. 13-1541-LPS, No. 13-1544-LPS, 2015 WL 3548744 (D. Del. June 8, 2015); CIMA Labs, Inc. v. Mylan Pharms., Inc., No. 10-625-LPS, 2015 WL 3826028 (D. Del. June 15, 2015); MAZ Encryption Techs., LLC v. Lenovo (United States), Inc., No. 13-303-LPS, No. 13-304-LPS, No. 13-305-LPS, 2015 WL 4035049 (D. Del. June 30, 2015); Copy Protection LLC v. Netflix, Inc., No. 14-365-LPS, 2015 WL 4639954 (D. Del. Aug. 5, 2015); Selene Commc'n Techs., LLC v. Fluke Elecs. Corp., No. 14-432-LPS, 2015 WL 4659211 (D. Del. Aug. 6, 2015); Cloud Farm Assocs., L.P. v. Volkswagen Grp. of Am., Inc., No. 10-502-LPS, 2015 WL 4730898 (D. Del. Aug. 10, 2015), appeal filed, Jan. 7, 2016; Custom Media Techs. LLC v. Comcast Cable Commc'ns, LLC, No. 13-1421-LPS, No. 13-1424-LPS, 2015 WL 4743671 (D. Del. Aug. 11, 2015); Globus Med., Inc. v. Depuy Synthes Prods., LLC, No. 13-854-LPS, 2015 WL 4886050 (D. Del. Aug. 14, 2015); Sarif Biomedical LLC v. Brainlab, Inc., No. 13-846-LPS, 2015 WL 5072085 (D. Del. Aug. 26, 2015); Pragmatus Mobile, LLC v. Amazon.com, Inc., No. 14-436-LPS, No. 14-440-LPS, 2015 WL 6348221 (D. Del. Oct. 16, 2015); Trusted Knight Corp. v. Int'l Bus. Machs. Corp., No. 14-1063-LPS-CJB, 2015 WL 7307134 (D. Del. Nov. 19, 2015), appeal filed, Jan. 21, 2016; Masimo Corp. v. Philips Elecs. N. Am. Corp., No. 09-80-LPS, No. 11-742-LPS, 2015 WL 7737308 (D. Del. Dec. 1, 2015); Idenix Pharms., Inc. v. Gilead Scis., Inc., No. 13-1987-LPS, No. 14-109-LPS, No. 14-846-LPS, 2015 WL 9048010 (D. Del. Dec. 16, 2015); Forest Labs., Inc. v. Teva Pharms. USA, Inc., No. 14-121-LPS, No. 14-200-LPS, No. 14-508-LPS, No. 14-686-LPS, No. 14-1058-LPS, No. 14-1271-LPS, 2016 WL 54910 (D. Del. Jan. 5, 2016); Yodlee, Inc. v. Plaid Techs., Inc., No. 14-1445-LPS, 2016 WL 204372 (D. Del. Jan. 15, 2016); TQ Beta LLC v. Dish Network Corp., 14-CV-848-LPS-CJB, 2016 WL 356024 (D. Del. Jan. 28,

136. CIMA Labs, Inc. v. Mylan Pharms., Inc., No. 10-625-LPS, 2015 WL 3826028 (D. Del. June 15, 2015); Cloud Farm Assocs., L.P. v. Volkswagen Grp. of Am., Inc., No. 10-502-LPS, 2015 WL 4730898 (D. Del. Aug. 10, 2015), appeal filed, Jan. 7, 2016; Globus Med., Inc. v. Depuy Synthes Prods., LLC, No. 13-854-LPS, 2015 WL 4886050 (D. Del. Aug. 14, 2015); TQ Beta LLC v. Dish Network Corp., 14-CV-848-LPS-CJB, 2016 WL 356024 (D. Del. Jan. 28, 2016).

disputes,<sup>137</sup> dismisses conclusory expert statements,<sup>138</sup> reviews other cases construing similar terms,<sup>139</sup> and generally provides detailed analysis and discussion of all the evidence presented for the hearing. Judge Stark's six *Markman* decisions in the year before *Teva* offer a compelling comparison: two (thirty-three percent) did not consider extrinsic evidence,<sup>140</sup> two (thirty-three percent) briefly mentioned extrinsic evidence but did not analyze it,<sup>141</sup> and two (thirty-three percent) discussed, evaluated and analyzed the extrinsic evidence.<sup>142</sup> Notably, the standard language from *Teva* was absent from Judge Stark's latest decision, and no extrinsic evidence was considered in construing the terms.<sup>143</sup> While this may be a one-time exception to Judge Stark's acceptance and consideration of extrinsic evidence, it may also indicate the start of a new approach. The format of the decision and the authority cited for claim construction in the beginning closely resemble the format used by Judge Stark's colleague Judge Sue L. Robinson in many of her decisions.<sup>144</sup>

Similarly, Magistrate Judge Roy S. Payne in the Eastern District of Texas used a comparable interpretation of *Teva* in some of his "Legal Principles" sections:

137. See, e.g., Eisai Co., Ltd. v. Glenmark Pharms., Ltd., No. 13-1279-LPS, 2015 WL 1228958, at \*8, \*10 (D. Del. Mar. 17, 2015); Custom Media Techs. LLC v. Comcast Cable Commc'ns, LLC, No. 13-1421-LPS, No. 13-1424-LPS, 2015 WL 4743671, at \*5 (D. Del. Aug. 11, 2015) ("Based largely on the expert testimony submitted, the Court finds . . . ."); Sarif Biomedical LLC v. Brainlab, Inc., No. 13-846-LPS, 2015 WL 5072085, at \*3 (D. Del. Aug. 26, 2015).

138. See, e.g., Intellectual Ventures I LLC v. AT & T Mobility LLC, No. 12-193-LPS, No. 13-1631-LPS, No. 13-1632-LPS, No. 13-1633-LPS, No. 13-1634-LPS, No. 13-1635-LPS, No. 13-1636-LPS, No. 13-1637-LPS, 2015 WL 1393386, at \*9-10 (D. Del. Mar. 24, 2015); Trusted Knight Corp. v. Int'l Bus. Machs. Corp., No. 14-1063-LPS-CJB, 2015 WL 7307134, at \*5 (D. Del. Nov. 19, 2015), appeal filed, Jan. 21, 2016.

139. See, e.g., Copy Protection LLC v. Netflix, Inc., No. 14-365-LPS, 2015 WL 4639954, at \*7 (D. Del. Aug. 5, 2015).

140. Pregis Innovative Packaging, Inc. v. Sealed Air Corp., No. 13-1084-LPS, 2014 WL 10293767 (D. Del. May 28, 2014); Tech. Innovations Assocs. v. Google, Inc., No. 13-0355-LPS, 2014 WL 3896121 (D. Del. Aug. 7, 2014).

141. Sunovion Pharms., Inc. v. Actavis, Inc., No. 12-993-LPS, 2014 WL 1678013 (D. Del. Mar. 21, 2014); SecureBuy, LLC v. CardinalCommerce Corp., No. 13-1792-LPS, 2014 WL 2726933 (D. Del. June 16, 2014).

142. Graphics Props. Holdings, Inc. v. ASUS Computer Int'l, Inc., No. 12-cv-210-LPS, No. 12-cv-213-LPS, No. 12-cv-214-LPS, No. 12-cv-1394-LPS, No. 12-cv-1395-LPS, No. 12-cv-1397-LPS, No. 13-cv-864-LPS, 2014 WL 4929340 (D. Del. Sep. 29, 2014); FlatWorld Interactives LLC v. Samsung Elecs. Co., Ltd., No. 12-804-LPS, No. 12-964-LPS, 2014 WL 7464143 (D. Del. Dec. 31, 2014).

143. Orthophoenix LLC v. Dfine Inc., No. 13-1003-LPS, No. 13-1007-LPS, No. 13-1628-LPS, 2016 WL 402491 (D. Del. Feb. 2, 2016).

144. See discussion of Judge Robinson's decisions, infra.

In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. . . . In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the "evidentiary underpinnings" of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal. <sup>145</sup>

Although not consistently cited over the last year, this instruction from *Teva* was used in six *Markman* decisions, <sup>146</sup> and reflects a general receptiveness to considering extrinsic evidence. All six of these decisions reviewed and analyzed extrinsic evidence, and twenty-six of the remaining twenty-eight post-*Teva* decisions (ninety-three percent) did as well. <sup>147</sup>

If a judge takes a narrower view of *Teva*, or quotes something that does not represent the core holding, the court is less likely to analyze extrinsic evidence. For example, Judge Sue L. Robinson in the District of Delaware issued very sparse *Markman* decisions and used a general statement that she construed claims "consistent with the tenets of claim construction set forth by the United States Court of Appeals for the Federal Circuit in *Phillips v. AWH Corp.*" Judge Robinson included the

<sup>145.</sup> Promethean Insulation Tech. LLC v. Sealed Air Corp., No. 2:13-CV-1113-JRG-RSP, 2015 WL 1738028, at \*4 (E.D. Tex. Apr. 6, 2015) (quoting *Teva IV*, 135 S. Ct. at 841).

<sup>146.</sup> Promethean Insulation Tech. LLC v. Sealed Air Corp., No. 2:13-CV-1113-JRG-RSP, 2015 WL 1738028 (E.D. Tex. Apr. 6, 2015); Effective Exploration, LLC v. Classic Operating Co., LLC, No. 2:14-cv-00869-JRG-RSP, 2015 WL 5012139 (E.D. Tex. Aug. 21, 2015); Gonzalez v. Infostream Grp., Inc., No. 2:14-cv-906-JRG-RSP, 2015 WL 5604448 (E.D. Tex. Sep. 21, 2015); Hitachi Maxell, Ltd. v. Top Victory Elecs. (Taiwan) Co. Ltd., No. 2:14-cv-01121-JRG-RSP, 2015 WL 7007745 (E.D. Tex. Nov. 10, 2015); Promethean Insulation Tech. LLC v. Reflectix, Inc., No. 2:15-cv-00028-JRG-RSP, 2015 WL 9093824 (E.D. Tex. Dec. 16, 2015); Syncpoint Imaging, LLC v. Nintendo of Am. Inc., No. 2:15-cv-00247-JRG-RSP, 2016 WL 55118 (E.D. Tex. Jan. 5, 2016).

<sup>147.</sup> See, e.g., Solocron Media, LLC v. Verizon Commc'ns Inc., No. 2:13-CV-1059-JRG-RSP, 2015 WL 1011310 (E.D. Tex. Mar. 5, 2015); E-Watch Inc. v. Apple, Inc., No. 2:13-CV-1061-JRG-RSP, 2015 WL 1387947 (E.D. Tex. Mar. 25, 2015); Parthenon Unified Memory Architecture LLC v. Samsung Elecs. Co., No. 2:14-cv-0902-JRG-RSP, No. 2:14- cv-0687-JRG-RSP, No. 2:14-cv-0689-JRG-RSP, 2016 WL 324981 (E.D. Tex. Jan. 25, 2016). One explanation for the interspersed decisions is that different clerks wrote up these decisions and used their own individual "Legal Principles" sections

<sup>148.</sup> Intellectual Ventures I, LLC v. Canon, Inc., No. 13-473-SLR, 2015 WL 1458035, at \*1 (D. Del. Mar. 27, 2015).

following reference to *Teva* in a footnote in four decisions: "Unless otherwise specified, the court relies solely on intrinsic evidence in reaching its claim construction." <sup>149</sup>

This narrow interpretation of *Teva* is reflected throughout most of Judge Robinson's thirteen *Markman* decisions, as she does not consider extrinsic evidence in five decisions (thirty-eight percent),<sup>150</sup> or only briefly mentions that some extrinsic evidence was offered, without weighing it or issuing findings of fact.<sup>151</sup> These results are similar to Judge Robinson's eight pre-*Teva Markman* decisions, where two decisions (twenty-five percent) considered no extrinsic evidence<sup>152</sup> and five decisions (sixty-three percent) briefly mention but do not analyze the extrinsic evidence presented.<sup>153</sup> These results indicate that a narrow interpretation of *Teva* leads to no significant change in a judge's approach to *Markman* hearings and decisions.

<sup>149.</sup> Intellectual Ventures I, LLC v. Canon Inc., No. 13-473-SLR, 2015 WL 1458035, at \*14 n.2 (D. Del. Mar. 27, 2015); SRI Int'l, Inc. v. Dell Inc., No. 13-737-SLR, No. 13-1534-SLR, 2015 WL 2265756 (D. Del. May 14, 2015); Takeda Pharms. USA, Inc. v. Par Pharm. Cos., Inc., No. 13-1524-SLR, No. 13-1729-SLR, No. 14-268-SLR, 2015 WL 3464071 (D. Del. June 1, 2015); Poly-Am., L.P. v. API Indus., Inc., No. 14-599-SLR, 2015 WL 4608135 (D. Del. July 31, 2015), appeal filed, Nov. 10, 2015

<sup>150.</sup> Intellectual Ventures I, LLC v. Canon, Inc., No. 13-473-SLR, 2015 WL 307868 (D. Del. Jan. 23, 2015); Takeda Pharms. USA, Inc. v. Par Pharm. Cos., Inc., No. 13-1524-SLR, No. 13-1729-SLR, No. 14-268-SLR, 2015 WL 3464071 (D. Del. June 1, 2015); Merck Sharp & Dohme Corp. v. Teva Pharms. USA, Inc., No. 14-874-SLR, 2015 WL 5163036 (D. Del. Sep. 3, 2015); Duchesnay, Inc. v. Actavis Labs. FL, Inc., No. 14-912-SLR, 2015 WL 7295438 (D. Del. Nov. 18, 2015); Courtesy Prods., L.L.C. v. Hamilton Beach Brands, Inc., No. 13-2012-SLR, 2015 WL 7295436 (D. Del. Nov. 18, 2015).

<sup>151.</sup> See, e.g., Intellectual Ventures I, LLC v. Nikon Corp., No. 11-1025-SLR, 2015 WL 1062185 (D. Del. Mar. 10, 2015); Sri Int'l, Inc. v. Dell, Inc., No. 13-737-SLR, No. 13-1534-SLR, 2015 WL 2265756 (D. Del. May 14, 2015); Orexo AB v. Actavis Elizabeth LLC, No. 14-829-SLR, 2015 WL 5842513 (D. Del. Oct. 6, 2015).

<sup>152.</sup> Carrier Corp. v. Goodman Global, Inc., No. 12-930-SLR, 2014 WL 3976461 (D. Del. Aug. 14, 2014); Cot'n Wash, Inc. v. Henkel Corp., No. 12-650-SLR, No. 12-651-SLR, 2014 WL 4246425 (D. Del. Aug. 26, 2014).

<sup>153.</sup> CyberFone Sys., LLC v. ZTE (USA), Inc., No. 11-827-SLR, No. 11-830-SLR, No. 11-833-SLR, No. 11-834-SLR, 2014 WL 490586 (D. Del. Feb. 4, 2014); Pi-Net Int'l, Inc. v. JPMorgan Chase & Co., No. 12-282-SLR, 2014 WL 1997039 (D. Del. May 14, 2014); Joao Bock Transaction Sys., LLC v. Jack Henry & Assocs., Inc., No. 12-1138-SLR, 2014 WL 2960363 (D. Del. June 30, 2014); Motivation Innovations LLC v. Ulta Salon Cosmetics & Fragrance, Inc., No. 11-615-SLR, 2014 WL 3704001 (D. Del. July 22, 2014); YYZ, LLC v. Hewlett-Packard Co., No. 13-136-SLR, No. 13-579-SLR, No. 13-581-SLR, 2014 WL 7147160 (D. Del. Dec. 12, 2014).

2. Courts Provide More Details on What Kind of Evidence (Intrinsic Versus Extrinsic) Is Being Considered in Each Claim Construction

Another trend post-*Teva* is that the judges reviewed for this Note generally spent more time distinguishing between intrinsic and extrinsic evidence, and clarifying what the judge considered in construing a term. However, while providing more clarity about what is influencing claim construction is admirable, simply concluding that extrinsic evidence was considered, but not issuing factfindings or fully engaging in analysis of the evidence, would not result in a holding entitled to deference on appeal.<sup>154</sup>

One common practice is to include the language "in light of the intrinsic and extrinsic evidence," before concluding with the court's construction of a term. <sup>155</sup> While this language was used before *Teva*, it was infrequent and sporadic. <sup>156</sup> Another practice is to identify which form of evidence is consistent with the construction, such as that the court is "adopt[ing] Plaintiff's proposal, which is based on the specification." <sup>157</sup>

Separate headers and sections to divide intrinsic and extrinsic evidence were utilized in some isolated examples, 158 however no decision made

<sup>154.</sup> See FED. R. CIV. P. 52(a)(6) ("Findings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, and the reviewing court must give due regard to the trial court's opportunity to judge the witnesses' credibility.") (emphasis added).

<sup>155.</sup> Syneron Med. Ltd. v. Viora Ltd., No. 2:14-CV-639, 2015 WL 1952360, at \*22 (E.D. Tex. Apr. 10, 2015); *see also* Smith v. Honeywell Int'l, Inc., No. 2:14-CV-665, 2015 WL 3826652 (E.D. Tex. June 19, 2015); E-Watch, Inc. v. Apple, Inc., No. 2:13-CV-1061-JRG-RSP, 2015 WL 1387947 (E.D. Tex. Mar. 25, 2015).

<sup>156.</sup> Two of Judge Rodney Gilstrap's six pre-*Teva IV Markman* decisions used this language. Thomas Swan & Co. Ltd. v. Finisar Corp., No. 2:13-cv-00178-JRG, 2014 WL 28852962 (E.D. Tex. June 25, 2014); Nichia Corp. v. Everlight Elecs. Co., Ltd., No. 2:13-CV-702-JRG, 2014 WL 7149169 (E.D. Tex. Dec. 12, 2014), *appeal filed*, Feb. 24, 2016.

<sup>157.</sup> Cronos Techs., LLC v. Expedia, Inc., No. 13-1538-LPS, No. 13-1541-LPS, No. 13-1544-LPS, 2015 WL 3548744, at \*10 (D. Del. June 8, 2015); see, e.g., Yodlee, Inc. v. Plaid Techs., Inc., No. 14-1445-LPS, 2016 WL 204372, at \*13 (D. Del. Jan. 15, 2016) ("Thus, the combination of the claims and specification indicates that 'including,' as used in the claims, means 'including at least."); Contentguard Holdings, Inc. v. Amazon.com, Inc., No. 2:13-CV-1112-JRG, No. 2:14-CV-61-JRG, 2015 WL 8073722, at \*18 (E.D. Tex. Dec. 04, 2015) ("Defendants' proposal of permanent attachment, however, lacks sufficient support in the intrinsic evidence. Instead, for example, the specification contemplates . . . ."); Intellectual Ventures I, LLC v. Nikon Corp., No. 11-1025-SLR, 2015 WL 1062185, at \*5 (D. Del. Mar. 10, 2015) (construing "kernel" as "module," noting that Plaintiff's expert explained that "a person having ordinary skill in the art would understand that 'kernel' is akin to 'module."").

<sup>158.</sup> Oddly, Judges Gilstrap and Payne in the Eastern District of Texas each have one example of using separate headers for extrinsic evidence pre-*Teva IV*, but none after. Thomas Swan & Co. Ltd. v. Finisar Corp., No. 2:13-cv-00178-JRG, 2014 WL

explicit "findings of fact" sections as might have been expected after *Teva*. Judge Robinson in Delaware used separate headers for intrinsic and extrinsic evidence for some of the constructions for two post-*Teva* decisions. <sup>159</sup> One notable example, from Judge John A. Kronstadt in the Central District of California, used explicit headings for each evidence type considered for each construction (e.g., The Language of the Claim, The Specification, The Prosecution History, The Extrinsic Evidence), and discussions of extrinsic evidence—when such evidence was considered—ended with conclusions and findings of fact. <sup>160</sup>

## B. MUST THE FEDERAL CIRCUIT CONSIDER FACTUAL FINDINGS?

The Supreme Court provided two different options for reviewing claim construction decisions: if only intrinsic evidence is reviewed, the "judge's determination will amount solely to a determination of law, and the Court of Appeals will review that construction *de novo*," but in cases where subsidiary facts are disputed, the court's "subsidiary factfinding must be reviewed for clear error on appeal." <sup>161</sup>

Whether the Federal Circuit *must* consider a district court's subsidiary factfinding, and accord it with deference in the absence of clear error, or whether the Federal Circuit may make an ultimate construction without the use of those subsidiary facts, was left unanswered. Early Federal Circuit and District Court cases have interpreted the Supreme Court's decision to allow the Federal Circuit to ignore factfinding based on extrinsic evidence completely, and continue reviewing claim construction decisions de novo, based solely on the intrinsic record.

<sup>28852962 (</sup>E.D. Tex. June 25, 2014); Kroy IP Holdings, LLC v. Safeway, Inc., No. 2:12-cv-00800-JRG-RSP, No. 2:13-cv-00141-JRG-RSP, 2014 WL 2528645 (E.D. Tex. June 4, 2014), appeal filed, July 1, 2015.

Tex. June 4, 2014), appeal filed, July 1, 2015.
159. Intellectual Ventures I, LLC v. Canon, Inc., No. 13-473-SLR, 2015 WL 1458035 (D. Del. Mar. 27, 2015); Intellectual Ventures I LLC v. Toshiba Corp., No. 13-453-SLR, 2015 WL 9239745 (D. Del. Dec. 17, 2015).

<sup>160.</sup> Signal IP v. Am. Honda Motor Co., Inc., No. LA CV14-02454 JAK (JEMx), No. LA CV14-02457 JAK (JEMx), No. LA CV14-02962 JAK (JEMx), No. LA CV14-02963 JAK (JEMx), No. LA CV14-03108 JAK (JEMx), No. LA CV14-03109 JAK (JEMx), No. LA CV14-03111 JAK (JEMx), No. LA CV14-03113 JAK (JEMx), No. LA CV14-03114 JAK (JEMx), No. SA CV14-00491 JAK (JEMx), No. SA CV14-00497 JAK (JEMx), 2015 WL 5768344 (C.D. Cal. Apr. 17, 2015). There were no pre-Teva IV decisions to compare this Markman decision to.

<sup>161.</sup> Teva IV, 135 S. Ct. at 841.

#### 1. Federal Circuit Decisions Find Extrinsic Record Unnecessary

In March 2015, the Federal Circuit decided *Eidos Display*, *LLC v. AU Optronics Corp.*, reversing and remanding the district court's grant of summary judgment of invalidity due to indefiniteness. <sup>162</sup> The Federal Circuit emphasized that the claim, "when read in light of the specification and prosecution history" satisfied the "reasonable certainty" definiteness requirement. <sup>163</sup> Although the district court had considered extrinsic evidence, the Federal Circuit sidestepped the requirement that such evidence be reviewed for clear error by claiming the extrinsic evidence was "ultimately immaterial to the outcome because the intrinsic record is clear," and relied on the Federal Circuit's own decision in *Phillips v. AWH Corp.* as authority. <sup>164</sup>

The same sidestep occurred later in June 2015, when the Federal Circuit decided *Microsoft Corp. v. Proxyconn*, *Inc.*, which reviewed an *inter partes* review order from the Patent and Trademark Office. <sup>165</sup> Although this matter did not involve a district court's claim construction order, the Federal Circuit applied the holding from *Teva*, reviewing the "Board's ultimate claim constructions de novo and its underlying factual determinations involving extrinsic evidence for substantial evidence." <sup>166</sup> Next, the Federal Circuit echoed its reasoning from *Eidos Display*, finding the intrinsic record sufficient to determine the proper construction, and no need to review any extrinsic evidence considered by the Board in construing the claims. <sup>167</sup>

Finally, in the remand of *Teva v. Sandoz* from the Supreme Court, the Federal Circuit continued the trend by deciding the intrinsic record was sufficient on its own to find "molecular weight" as indefinite, again. 168 Significantly, this was contrary to the Supreme Court's explicit reversal and language stating that the district court's findings of fact based on the expert testimony must be given deference absent clear error. 169 In a

<sup>162. 779</sup> F.3d 1360, 1361 (Fed. Cir. 2015).

<sup>163.</sup> Id.

<sup>164.</sup> See id. at 1365.

<sup>165. 789</sup> F.3d 1292, 1292 (Fed. Cir. 2015).

<sup>166.</sup> Id. at 1297.

<sup>167.</sup> *Id*.

<sup>168.</sup> See supra Section II.D.

<sup>169.</sup> See Teva IV, 135 S. Ct. at 843 ("When the Federal Circuit reviewed the District Court's decision, it recognized that the peak of the curve did not match the 7.7 kilodaltons listed in the legend of figure 1. But the Federal Circuit did not accept Teva's expert's explanation as to how a skilled artisan would expect the peaks of the curves to shift. And it failed to accept that explanation without finding that the District Court's

strongly worded dissent, Judge Mayer disagreed with the majority's decision and argued that the Federal Circuit was being "once again led astray by its failure to afford sufficient deference to the trial court's findings of fact." <sup>170</sup>

# 2. District Court Echoes the Interpretation that Teva Does Not Mandate Inclusion of "Immaterial or Improper" Findings of Fact

Following the Federal Circuit's lead in *Eidos Display*, in *Smith & Nephew*, *Inc. v. Arthrex*, *Inc.*, the District of Oregon denied a motion to reopen a judgment in light of the Supreme Court's holding in *Teva*. <sup>171</sup> Relying on the rule from *Vitronics*, the court reasoned that "[w]here a claim term is capable of being construed based on the intrinsic evidence alone, it is actually improper for a court to rely on extrinsic evidence." <sup>172</sup> And because the Federal Circuit had decided the present case back in 2013 based solely on the intrinsic evidence, without considering the factfinding done by the district court, pursuant to *Eidos Display*, there were no grounds for reopening the decision. <sup>173</sup> Further, the judge found that "[n]othing in *Teva* suggests that the Federal Circuit must review immaterial or improper fact-finding under a clear error standard. Rather it appears rather clearly that such fact-finding is to be disregarded and a *de novo* standard applied." <sup>174</sup>

#### C. Going Forward

There appear to be three options for district courts and parties in light of the Federal Circuit's interpretation of *Teva v. Sandoz*. Because there have been only a few Federal Circuit decisions after *Teva*, *Markman* hearings and decisions appear to be in a state of flux. The first option is to steer into the skid, embrace the Federal Circuit's dominant position in claim construction, and streamline district court *Markman* hearings to focus only on the intrinsic record, where decisions are little more than conclusory findings. The second option would be to keep calm and carry on as before *Teva*, with judges disparately continuing to review extrinsic evidence, with no uniformity and no emphasis on factual findings. The

contrary determination was 'clearly erroneous.' The Federal Circuit should have accepted the District Court's finding unless it was 'clearly erroneous.' Our holding today makes clear that, in failing to do so, the Federal Circuit was wrong.") (internal citations omitted).

<sup>170.</sup> See Teva V, 789 F.3d at 1345–46 (Mayer, J., dissenting).

<sup>171.</sup> No. 3:04-cv-00029-MO, 2015 WL 3423024, at \*1-2 (D. Or. May 19, 2015).

<sup>172.</sup> *Id.* at \*1 (citing *Vitronics*, 90 F.3d at 1583).

<sup>173.</sup> Id. at \*2.

<sup>174.</sup> Id. at \*2.

last, and more difficult, option is to lean in, make serious changes to how claim construction decisions are written, and have judges "show their work" with clear reasoning and factual findings.

# 1. Steer into the Skid and Embrace the Federal Circuit's Dominance Over Claim Construction

Even after having its interpretations and jurisprudence for claim construction dismissed, the Federal Circuit has held the line on "exert[ing] control over the entire claim construction process." A year of the Federal Circuit ignoring extrinsic evidence as unnecessary and reviewing only the intrinsic evidence de novo indicates that nothing has changed. Understand parties may decide to acquiesce and follow this surrender to its inevitable conclusion, where extrinsic evidence is virtually eliminated and *Markman* decisions become little more than a list of terms and their constructions. Some post-*Teva* decisions exemplify this option, consisting of a list of claim terms, their adopted construction, and a brief paragraph providing some context.

Markman hearings would likely be more efficient and streamlined, without the need to present expert testimony or anything outside of the patent. However, uncertainty about the finality of decisions would increase, as the District Court's decision would just be a preliminary proposal, forcing parties to wait until the Federal Circuit issued the final decision on construction.<sup>179</sup> This would also thwart the Supreme Court's

<sup>175.</sup> See Katherine E. White, Post-Teva: When Will the Federal Circuit Embrace the Deferential Standard of Review for Patent Claim Construction?, 25 FED. CIR. B.J. 191, 192, 199 (2015).

<sup>176.</sup> However, it may take more time for district court *Markman* decisions made under the authority of *Teva IV* to make it to the Federal Circuit on appeal to definitively know whether things have changed.

<sup>177.</sup> See J. Jonas Anderson & Peter S. Menell, Restoring the Fact/Law Distinction in Patent Claim Construction, 109 Nw. U. L. REV. 187, 188 (2015) (explaining that the Federal Circuit's adherence to a de novo review of claim construction after Markman dissuaded judges from "holding evidentiary hearings or explaining the reasoning behind their claim constructions"); White, supra note 175, at 209–10 (explaining that after Markman I, claim construction hearings were "devoid of the kind of findings of fact Rule 52(a) envisioned being reviewed for clear error" because "judges had little motivation to provide rationale for how the claims were construed").

<sup>178.</sup> See, e.g., Orthophoenix LLC v. Dfine, Inc., No. 13-1003-LPS, No. 13-1007-LPS, No. 13-1628-LPS, 2016 WL 402491 (D. Del. Feb. 2, 2016); Forest Labs. LLC v. Sigmapharm Labs. LLC, No. 14-1119-SLR-SRF, 2016 WL 369236 (D. Del. Jan. 29, 2016).

<sup>179.</sup> See Christopher A. Cotropia, Patent Claim Interpretation Review: Deference or Correction Driven?, 2014 BYU L. REV. 1095, 1097 (2015) ("Litigants cannot predict the

reasoning that for "practical considerations" the trial judge has the best opportunity to become familiar with the "specific scientific problems and principles not usually contained in the general storehouse of knowledge and experience."<sup>180</sup>

# 2. Keep Calm and Carry On, as Before Teva

Another option is to keep things as they are, and hope that in another twenty years or so the Supreme Court steps in to straighten out the new mess unfolding. Sometimes may keep reviewing extrinsic evidence for full *Markman* hearings, sometimes making factual findings, but often not. Most of the post-*Teva Markman* decisions reviewed in this Note appear to be following this path, still engaging and considering both intrinsic and extrinsic evidence, but not making explicit findings of fact, and not explaining fully what the construed term is based on. The Federal Circuit may continue deciding that the intrinsic record is sufficiently clear and ignore any extrinsic evidence presented. Some straightenance of the sufficiently clear and ignore any extrinsic evidence presented.

From an efficiency standpoint, this would be worse than the first option. Parties would spend time and resources presenting experts and providing complete information for judges to construe terms, and the uncertainty about the term's final construction would remain until the Federal Circuit makes its own decision. However, inertia is a powerful force, and patterns of behavior, once established, are difficult to change. Absent a strong effort to make substantial changes, as described in the next Section, this inertia-driven option will be the default choice.

controlling claim construction in a case until the Federal Circuit makes its independent determination on appeal.").

<sup>180.</sup> See Teva IV, 135 S. Ct. at 838; Anderson & Menell, supra note 177, at 197 ("[D]istrict judges can use their distinctive vantage point and evidentiary tools to ferret out factual underpinnings while the Federal Circuit can operate as a check on fidelity to the patent instrument.").

<sup>181.</sup> The prospect of the Court fixing the decision immediately after *Teva V* is also likely moot. The Federal Circuit's decision on remand was issued in June 2015, and it appears no petition for certiorari was filed within ninety days as required by the Supreme Court.

<sup>182.</sup> See, e.g., BMC Software, Inc. v. ServiceNow, Inc., No. 2:14-CV-903-JRG, 2015 WL 4776970 (E.D. Tex. Aug. 13, 2015); Masimo Corp. v. Philips Elecs. N. Am. Corp., No. 09-80-LPS, No. 11-742-LPS, 2015 WL 7737308 (D. Del. Dec. 1, 2015).

<sup>183.</sup> *See* White, *supra* note 175, at 210–13 (reviewing several decisions made by the Federal Circuit post-*Teva IV*).

# 3. Lean In: Start Making More Rigorous Findings of Fact for Extrinsic Evidence

The last option would require more effort, and more uniformity amongst judges in writing *Markman* decisions. Judges would need to make explicit distinctions between implicit and explicit evidence, and make factual findings regarding extrinsic evidence when it factors into the construction of a term. Clear headers and formatting throughout the districts, possibly through local Patent Rules, would go a long way to standardizing this practice. One example of this option was Judge Kronstadt's *Markman* decision, breaking down the reasoning for each construction into separate sections, including a section just for extrinsic evidence. Conclusory decisions would only assist the Federal Circuit in entrenching its position, because they provide no reasoning or factual findings to give deference to. However, by making substantial changes to *Markman* decisions and including explicit findings of facts, courts and scholars documenting and arguing against the Federal Circuit's current practice would make it hard to disregard factual findings.

Considering the Supreme Court's language emphasizing the factual underpinnings of claim construction and the necessity of extrinsic evidence in certain circumstances, <sup>187</sup> review of a term's construction should proceed as follows: (1) if there are any, review and factor in *all* of the factual findings regarding extrinsic evidence, unless clearly erroneous, <sup>188</sup> and then

184. See Anderson & Menell, supra note 177, at 197–98 (noting that ultimately "district judges have the ability to achieve the goal of effective, transparent, and well-reasoned patent claim constructions"); White, supra note 175, at 214–15.

<sup>185.</sup> Signal IP v. Am. Honda Motor Co., Inc., No. LA CV14-02454 JAK (JEMx), No. LA CV14-02457 JAK (JEMx), No. LA CV14-02962 JAK (JEMx), No. LA CV14-02963 JAK (JEMx), No. LA CV14-03108 JAK (JEMx), No. LA CV14-03109 JAK (JEMx), No. LA CV14-03111 JAK (JEMx), No. LA CV14-03113 JAK (JEMx), No. LA CV14-03114 JAK (JEMx), No. SA CV14-00491 JAK (JEMx), No. SA CV14-00497 JAK (JEMx), 2015 WL 5768344 (C.D. Cal. Apr. 17, 2015).

<sup>186.</sup> See Anderson & Menell, supra note 177, at 200-01 (noting that Teva IV's "efficacy . . . depends critically upon district judges earning deference for the right reasons").

<sup>187.</sup> See, e.g., Teva IV, 135 S. Ct. at 837 ("[E]xtrinsic evidence may help to 'establish a usage of trade or locality."); id. at 838 ("[I]n patent construction, subsidiary factfinding is sometimes necessary."); id. at 841 ("In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence."); id. at 841–42 ("[I]n some instances, a factual finding may be close to dispositive of the ultimate legal question of the proper meaning of the term in the context of the patent.").

<sup>188.</sup> See id. at 838 ("This factual determination, like all other factual determinations, must be reviewed for clear error."); id. (invoking early Second Circuit precedent that requires "[I]n claim construction, the subsidiary question . . . of how the art understood

(2) review the ultimate construction de novo in light of these findings, <sup>189</sup> as well as the intrinsic evidence considered by the district court judge de novo. <sup>190</sup> As the Supreme Court noted, extrinsic evidence may be unnecessary in many cases, <sup>191</sup> but when it is necessary to the trial judge and factual findings are made to support the claim's construction, those findings should be given deference absent clear error.

Significantly, this procedure was used in *Teva* to show how to review factual findings underlying an ultimate question of law. One of the examples the Court gave related to an appellate court reviewing a trial judge's decision of whether a defendant confessed voluntarily: "An appellate court will review the trial judge's factual determination about the alleged intimidation deferentially (though, *after reviewing the factual findings, it will review a judge's ultimate determination of voluntariness de novo*)." Applying this procedure to the present matter, the Court went on to hold that "[a]n appellate court similarly should review for clear error those factual findings that underlie a district court's claim construction." 193

Even after leaning in and making significant changes, like the other two options, the Supreme Court may need to step in again to explain step by step how the Federal Circuit must do its job. The Court may need to close a significant loophole in *Teva* that the Federal Circuit has been exploiting by requiring the Federal Circuit to consider and include factual findings made below when it makes its de novo ultimate construction. Currently, when a trial judge is construing a term, if she decides the intrinsic record is insufficient, she can consider extrinsic evidence and make appropriate factual findings explaining her ultimate conclusion. On appeal, the Federal Circuit today can review the same term, decide that the intrinsic evidence *is* sufficient to construe the term, and thus disregard the trial judge's factual findings. Extrinsic evidence should play a greater role in determining the meaning of claim terms, even if only to determine

the term ... was plainly a question of fact; and unless the [district court's] finding was clearly erroneous, we are to take it as controlling." (internal quotations omitted)).

<sup>189.</sup> See id. at 837 ("[T]he ultimate question of the proper construction of the patent as a question of law in the way that we treat document construction as a question of law."); id. at 841 ("This ultimate interpretation is a legal conclusion.").

<sup>190.</sup> See id. at 841 ("[W]hen the district court reviews only evidence intrinsic to the patent (the patent claims and specifications, along with the patent's prosecution history), the judge's determination will amount solely to a determination of law, and the Court of Appeals will review that construction de novo.").

<sup>191.</sup> See id. at 840.

<sup>192.</sup> *Id.* at 841 (emphasis added); *see also* Rantanen, *supra* note 7, at 555 (emphasizing the significance of the same part of *Teva IV*).

<sup>193.</sup> Teva IV, 135 S. Ct. at 841.

the appropriate lens with which to view the patent: from the perspective of a person of skill in the art, and not from the judge's own perspective.<sup>194</sup>

#### IV. CONCLUSION

With no petition for certiorari filed after the Federal Circuit's remand decision in *Teva*, it could be many years before the Supreme Court uses a space in its limited docket to readdress claim construction review standards. In the meantime, unless concerted changes are made at the district court level to force the Federal Circuit's hand, the path of least resistance will prevail and maintain the new status quo of de novo review and disregard of the extrinsic record and any subsidiary factual findings from the district court. Trends in the *Markman* decisions for the past year show slight improvements and distinctions made between extrinsic and intrinsic evidence, but more work must be done, and clear factual findings are necessary in order to expect deference. Reviewing the entire district court's construction record, instead of cherry picking only the intrinsic evidence, will also send much-needed encouragement to trial judges to spend time developing a complete record in *Markman* hearings.

However, like the millennial it is, the Federal Circuit may just acquiesce and start giving clear error deference to factual findings if faced with criticism from scholars and commentators and conspicuous factual findings in well-reasoned district court decisions. The Federal Circuit may reconsider its prior course of conduct and become the responsible young adult the Supreme Court, and all interested stakeholders, hope for.