How to Improve Patent Claim Interpretations

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Introduction

In 2011, fifteen years after the Supreme Court ruled that judges rather than juries are to interpret the meaning of patent claims,\(^1\) the Court of Appeals for the Federal Circuit decided about seventy-five appeals that involved some aspect of patent claim interpretation (also called construction).\(^2\) The Federal Circuit finds errors in claim interpretations with notable frequency every year.\(^3\) This is not surprising: in 2006, Judge Rader explained that a trial court had followed a logical path in its claim construction yet had erred because its reasoning “place[d] too much emphasis on the ordinary meaning of [a term] without adequate grounding of that term within the context of the specification.”\(^4\) In a 2011 denial of a petition for Federal Circuit rehearing en banc, Judge Moore in a dissenting opinion joined by (now) Chief Judge Rader declared, “[d]espite the crucial role that claim construction plays in patent litigation, our rules are still ill-defined and inconsistently applied, even by us.”\(^5\)

This article suggests four ways that patent claim interpretations can be improved. These are: (1) using well-qualified masters, (2) using legal expert testimony when appropriate, (3) focusing on the different roles of the claims

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and the written description, and (4) deciding claim construction independently of the subsequent issues of infringement and validity.

I. The Background Problem

Differences between patent claim language and the written description of the patented invention lead adverse parties to disagree on the claim scope. Each patent must include a written specification compliant with 35 U.S.C. § 112 (Patent Act of 1952), the first paragraph of which requires the specification to include a written description of the invention that enables others to make and use the invention and discloses the best mode for carrying out the invention.

The second paragraph of section 112 requires the specification to conclude with “one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.”

The requirement for claims developed after the enactment of the first patent statutes. The Patent Acts of 1790 and 1793 did not call for the inventor to include “claims” per se, but they did require the written description to contain “full, clear and exact terms, as to distinguish the same from all other things before known.” A form of claiming in the written description itself developed fairly early, as noted by the Supreme Court in 1822. Fourteen years later, Congress formalized the practice of claiming in the Patent Act of 1836.

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Id. (emphasis added).

Act of Feb. 21, 1793, ch. 11, § 3, 1 Stat. 318, 321 (emphasis added).

Evans v. Eaton, 20 U.S. (7 Wheat.) 356, 428, 435 (1822). In Evans, the Court noted that in the specification of the patent-in-suit, the inventor, after describing his Hopperboy, its structure, and use, sums up his invention as follows:

“I claim as my invention, the peculiar properties or principles which this machine possesses, in the spreading, turning, and gathering the meal at one operation, and the rising and lowering of its arms by its motion, to accommodate itself to any quantity of meal it has to operate upon.”

Id. at 428. The Court ruled that a patent issued under the 1793 Patent Act required the inventor “to describe what his own improvement is, and to limit his patent to such improvement.” Id. at 435.


Thus, one of these two patent parts explains and the other one defines. Adverse parties often hold significantly different views on how to harmonize statements about the invention, its objects, or examples of the invention in the written description with the claim language. This leads to the disputes over claim meaning that courts must answer via claim interpretation, even when the terms are simple.

II. Use Patent Lawyers with Litigation Experience as Masters

District judges and others have recognized the benefits of specialized advisors to the court or specialized courts. There is no specialized, first-level patent claim interpretation court, but district courts can appoint seasoned patent lawyers as masters under Rule 53 of the Federal Rules of Civil Procedure to handle patent claim interpretation. The Federal Circuit has sustained this option. Indeed, in 2011, the Federal Circuit applauded the assistance that a master for patent claim interpretation can provide: “[a] primary purpose of appointing a special master is to narrow the issues before the district court judge to facilitate an efficient and timely resolution of complex or highly-

11 Id.
15 See id. A district court is obligated to construe language that is simple yet contested. Id. (“When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.”).
18 See, e.g., Sitrick v. Dreamworks, LLC, 516 F.3d 993, 996 (Fed. Cir. 2008).
technical issues, such as patent claim construction.”¹⁹ This way, a litigation-experienced patent lawyer who is able to comprehend the disputed subject matter and apply the law to it can prepare a report and recommendation on claim interpretation for district court review.²⁰

Legal training is necessary for claim interpretation. Without it, a technical expert will confront problems if asked to serve as a master for claim interpretation. Judge Pauline Newman of the Federal Circuit describes patent claim interpretation as “a fact-dependent, invention-oriented exercise in logic and law.”²¹ Technical experts without legal training generally are not competent to perform the legal analysis.²² Prevailing case law tells us that the understanding of the person ordinarily skilled in the art (“POSITA”) is only “an objective baseline from which to begin claim interpretation.”²³ The further aspects of claim interpretation apply the law to the evidence.²⁴ It is said that patents are not written for laymen, but for persons skilled in the art.²⁵ The people best able to understand what a patent document means should be patent writers themselves, who have technical training and, for the most part, also have law degrees. Because a patent needs to explain an invention to a POSITA, technical expert testimony as to the teachings can be received during claim construction for consideration in the entire calculus.²⁶

¹⁹ Absolute Software, Inc. v. Stealth Signal, Inc., 659 F.3d 1121, 1131 (Fed. Cir. 2011) (citing Fed. R. Civ. P. 53 advisory committee's note for 2003 amendments). The Advisory Committee noted in its 2003 Amendments that “[t]he court’s responsibility to interpret patent claims . . . may be greatly assisted by appointing a master who has expert knowledge of the field in which the patent operates” because “the advantages of initial determination by a master may make the process more effective and timely than disposition by the judge acting alone.” Id. (internal quotations omitted).

²⁰ See id. The master should be familiar with both patent litigation and USPTO practice. For example, during patent prosecution in the USPTO, claims receive the broadest reasonable interpretation for prosecution purposes. See Phillips v. AWH Corp., 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc). This is not the interpretation courts assign to claims for infringement or validity purposes in litigation. See id. at 1313, 1327.


²² See id. (legal training better prepares an evaluator for the required “fact-dependent . . . exercise of logic and law” in patent claim construction).

²³ Phillips, 415 F.3d at 1313 (emphasis added).

²⁴ See SmithKline Beecham Corp., 439 F.3d at 1322 (Newman, J., dissenting).

²⁵ Phillips, 415 F.3d at 1313 (“[P]atents are addressed to and intended to be read by others of skill in the pertinent art.”).

²⁶ Id. at 1318.
III. Legal Expert Witness Testimony is Proper on Selected Issues

Courts have contended with finding the proper role of extrinsic evidence in the past decade. For example, one form of extrinsic evidence—dictionaries—caused a schism in judicial thinking, which was finally addressed en banc in *Phillips v. AWH Corp.* *Phillips* clarified that the patent specification is the single best guide to the meaning of the claims. Nonetheless, judges can use dictionaries so long as the resulting claim interpretation is ultimately grounded in the specification.

Other extrinsic evidence—expert testimony—can be very helpful in claim interpretation. Like many other circuits, the Federal Circuit approves the use of technical experts to inform the trial court on the technology in the case.

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27 *Id.* at 1317–19.
28 *Id.* at 1332.
29 *Id.* at 1313. Courts start with the assumption that the plain and ordinary meaning of the claim language applies. *Id.* That meaning is the meaning that the intrinsic evidence would have to a person ordinarily skilled in the art. *Id.* In *Phillips*, the en banc court noted: [T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application. The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation. That starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art. *Id.* (citations omitted).

30 *Id.* at 1322–24. However, a dictionary cannot be used to contradict claim meaning that is unambiguous in light of the intrinsic evidence. *Id.* The claim construction must be grounded in the intrinsic evidence and not based on dictionary definitions in the abstract. See Mangosoft, Inc. v. Oracle Corp., 525 F.3d 1327, 1329 (Fed. Cir. 2008) (claim construction outcome consistent with dictionary definition offered by Oracle). *But cf.* Chamberlain Grp., Inc. v. Lear Corp., 516 F.3d 1331, 1337 (Fed. Cir. 2008) (dictionary use reversed where specification was clear); Helmsderfer v. Bobrick Washroom Equip., Inc., 527 F.3d 1379, 1382 (Fed. Cir. 2008) (intrinsic evidence was silent, dictionary used); Innogenetics, N.V. v. Abbott Labs., 512 F.3d 1363, 1371 (Fed. Cir. 2008) (rejected dictionary meaning of “while”); Symantec v. Computer Assocs. Int’l, Inc., 522 F.3d 1279, 1291 (Fed. Cir. 2008) (dictionary used).

31 Key Pharms. v. Hercon Labs. Corp., 161 F.3d 709, 716 (Fed. Cir. 1998) (can rely on expert testimony on a claim construction question where intrinsic evidence does not supply the answer); Vitrionics Corp. v. Conception, Inc., 90 F.3d 1576, 1585 (Fed. Cir. 1996) (endorsed use of expert testimony and other extrinsic evidence solely to help understand underlying technology).
One canon of patent claim interpretation instructs that extrinsic evidence can be received by the court but extrinsic evidence cannot be used if intrinsic evidence alone is sufficient. 32 This may bear further discussion, as the judicial determination of what various descriptions mean to a POSITA could benefit from the actual testimony of such a person or from a technical expert. 33 Otherwise, judges have to decide in a vacuum what technical disclosures mean to a POSITA. One may question whether that is the best way to make such judgments. Further, expert testimony that contradicts the intrinsic evidence has been denied any weight. 34 Again, this may need to be reevaluated, as a judge’s view of what the intrinsic evidence means may be totally wrong. 35

The role of patent law experts in patent claim interpretation is usually cabined to describing USPTO procedures. The testimony is not on the law but instead on the nuances of patent claim drafting and prosecution before the USPTO. 36 For example, sometimes it is relevant to understand what the patent examiner was thinking when issuing an “office action” or allowing the application. Though their testimony would be helpful, patent examiners are not allowed to testify on their mental processes or various other issues. 37 A technical expert generally would not have a proper foundation to opine on what the patent examiner apparently thought. 38 That leaves only a patent

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32 Key Pharms., 161 F.3d at 716. Expert witness testimony on claim meaning may not be used if intrinsic evidence is sufficient because an expert cannot contradict the intrinsic evidence. See id.


34 See Vitronics, 90 F.3d at 1583. One may query how this precept applies in situations where the patent contradicts itself. Testimony one way or the other would necessarily contradict some portion of the patent, yet it seems to be material and probative evidence that a court should be permitted to rely upon to resolve contradictions.

35 The Federal Circuit has noted that “[t]he descriptions in patents are not addressed to the public generally, to lawyers or to judges, but, as section 112 says, to those skilled in the art to which the invention pertains or with which it is most nearly connected.” Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (quoting In re Nelson, 280 F.2d 172, 181 (C.C.P.A. 1960)).

36 See, e.g., Sundance, Inc. v. DeMonte Fabricating Ltd., 550 F.3d 1356, 1360 (Fed. Cir. 2008).


38 See Fed. R. Evid. 602 (“A witness may testify to a matter only if evidence is introduced sufficient to support a finding that the witness has personal knowledge of the matter.”).
expert to form an opinion on what the examiner probably had in mind. A similar analysis applies to explaining amendments during prosecution.

Therefore, while patent experts may be disfavored by courts for claim interpretation purposes, they should not be rejected wholesale. Their testimony can be helpful in illuminating the patent process. First, testifying experts must possess specialized knowledge. Second, their testimony is given under oath. Third, they are open to cross-examination and questioning by the court. In at least these ways, expert testimony offers improvement over attorney argument.

IV. Don’t Blur the Different Roles of Claims and the Written Description

Post-1836, patent lawyers in the U.S. have been trained that a patent’s written description does not replace the claims in defining the scope of the invention. They are deeply mindful that these two sections of a patent perform different functions, even though both concern the invention. According to the 1952 patent statute and the Supreme Court, the claims rather than the specification point out the metes and bounds of the subject matter to be protected as the invention. Members of the patent bar do not regard the mission of the “written description” as drawing lines between prior art and the claimed subject matter. That is what claims do.

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39 See Sundance, Inc., 550 F.3d at 1364 & n. 7, 1365 (“Allowing a patent law expert without any technical expertise to testify on the issues of infringement and validity amounts to nothing more than advocacy from the witness stand.”). A similar analysis applies to explaining amendments during prosecution. See id.

40 See Fed. R. Evid. 702.

41 See Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

42 See id. (claims, and not the written description part of the specification, define the right to exclude).


44 See Phillips, 415 F.3d at 1312.

45 See, e.g., United States v. Adams, 383 U.S. 39, 49 (1966) (“[I]t is fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention.”); Johnson & Johnston Assocs. Inc. v. R.E. Serv. Co., 285 F.3d 1046, 1052 (Fed. Cir. 2002) (en banc) (“Consistent with its scope definition and notice functions, the claim requirement presupposes that a patent applicant defines his invention in the claims, not in the specification. After all, the claims, not the specification, provide the measure of the patentee's right to exclude.”); SRI Int'l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1121 n.14 (Fed. Cir. 1985) (en banc) (“Specifications teach. Claims claim.”).
During examination, the USPTO does not reject the patent specification for failing to distinguish over prior art. Instead, it examines claims to see whether they distinguish over prior art. Why then should one look in the specification to define the invention? That has not been the job of the written description since the patent statute was amended in 1836 to remove the “distinguishing” requirement from the written description and call for claiming.

A practical reason for reading the specification is that almost no one understands an invention simply from reading a patent claim. Claims are esoteric and written by trained patent professionals to convey technical information to other patent professionals or patent examiners for a specific legal purpose. Patent claims are not written (or required) to explain an invention but rather to define its inventive aspects succinctly. Because patent claims are required by the USPTO to be in the form of a single sentence, their syntax is sometimes strained.

The job of the claims is to define precisely what the inventor claims as the invention. An informed claim interpretation calls for reading the entire patent document, including the description of how to make and use the invention. In light of this background information, patent claims fulfill their intended function of particularly pointing out the subject matter intended to be protected as the patented invention. After reading the specification, the

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46 See Johnson & Johnston Assocs., 285 F.3d at 1052 (explaining “the claim requirement presupposes that a patent applicant defines his invention in the claims, not in the specification”).

47 See id.

48 See id. § 608.01(i)(a).

49 See id. § 608.01(i) (U.S. Patent & Trademark Office 2010) (codified at 37 C.F.R. § 1.75).


51 See id. § 608.01(m) (“While there is no set statutory form for claims, the present Office practice is to insist that each claim must be the object of a sentence [and] . . . [p]eriods may not be used elsewhere in the claims except for abbreviations.”).

52 See id. § 608.01(i)(a).


The statute makes provision for specification separately from the claims and requires that the latter “shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery.” It would accomplish little to require that claims be separately written if they are not to be separately read. . . . We have frequently held that it is the claim which measures the grant to the patentee. While the cases more often have dealt with efforts to resort to specifications to expand claims, it is clear that the latter fail equally to perform their function as a measure of the grant when they overclaim the invention. When they do so to the point of invalidity and
claim interpreter must then return to the actual claim language to see which aspects of the subject matter described in the written description are actually being “claimed.” This can lead to an uncertainty that is not often discussed. In particular, it can be difficult to determine whether the broad language of the claims is an effort to define the invention more broadly than the written description states or, on the other hand, is an imperfect effort to define what was described. That is, the question is whether the claims reflect the inventor’s actual invention or something broader crafted by a lawyer.

Per Markman v. Westview Instruments, Inc., judges rather than juries resolve questions of patent claim meaning. The proper role of the district court in claim construction is not to redefine claim features but to give meaning to what is actually contained in them. As the Federal Circuit explained in 2011:

> It is well settled that the role of a district court in construing claims is not to redefine claim recitations or to read limitations into the claims to obviate factual questions of infringement and validity but rather to give meaning to the limitations actually contained in the claims, informed by the written description, the prosecution history if in evidence, and any relevant extrinsic evidence.

Therefore, when interpreting patent claims, one must be vigilant not to blur the distinction between the operative parts of the patent document because each serves a function different from the other. Importing subject matter from the specification into the claims to sustain validity has been rebuffed by the Supreme Court:

> It is suggested, however, that this feature may be read into the claims for the purpose of sustaining the patent. While this may be done with a view of showing the connection in which a device is used, and proving that it is an operative device, we know of no principle of law which would authorize us to read into a claim an element which is not present, for the purpose of making out a case of novelty or infringement. The difficulty is that if we once begin to include elements not mentioned in the claim in order to limit such claim and avoid a defence of anticipation, we should never know where to stop. If, for example, a prior device were produced exhibiting the combination of these claims plus the springs, the patentee might insist upon reading some other

are free from ambiguity which might justify resort to the specifications, we agree with the District Court that they are not to be saved because the latter are less inclusive.

Id. (citations omitted).

54 Manual of Patent Examining Procedure § 608.01(k).
56 Id. at 372, 388.
58 Id.; see also Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1580 (“[T]he construction of claims is simply a way of elaborating the normally terse claim language: in order to understand and explain, but not to change, the scope of the claims.”), overruled in part by Abbott Labs. v. Sandoz, Inc., 566 F.3d 1281 (Fed. Cir. 2009).
element into the claims, such for instance as the side frames and all the other operative portions of the mechanism constituting the car truck, to prove that the prior device was not an anticipation. It might also require us to read into the fourth claim the flanges and pillars described in the third. This doctrine is too obviously untenable to require argument.59

Reading subject matter into claims to sustain validity over a best mode, written description, or lack of enablement defense should be treated with the same derision, as all of these defenses speak to the validity of the patent claims.

Aside from questions of prosecution disclaimer, supplementing the claim interpretation with features from the written description deprives the inventor of the scope of the claims that he actually defended before the USPTO as patentable over the prior art.60

There are times when claim scope should be limited based on statements in the specification or file history. First, if the claim links to the specification via some language, then looking there may be justifiable (or necessary).61 Second, it seems fair and equitable to hold an inventor to what he admitted clearly in a specification as not the invention.62 This prevents the inventor from making concessions in the specification and ignoring them in the claims. One way to consider such statements, which are in the nature of forfeitures, is to use the rule that equity abhors forfeitures,63 and such statements are not to be recognized as disclaimers or disavowals unless they are clear and unambiguous.64 Another way of evaluating such statements is to consider them part of the inventor’s written description of his invention. Third, a limitation from the specification is proper when an inventor or patent drafter includes lexicography in the written description. The lexicography can be explicit or implicit.65

60 See generally Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc).
62 See id.
64 The test for a specification disavowal is whether the language is clear enough to show reasonable clarity and deliberateness, and so unmistakable as to be unambiguous evidence. See Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1322 (Fed. Cir. 2012); see also Laryngeal Mask Co. v. AMBU A/S, Ambu Inc., 618 F.3d 1367, 1373 (Fed. Cir. 2010) (clear & unambiguous); Vizio, Inc. v. Int’l Trade Comm’n, 605 F.3d 1330, 1338 (Fed. Cir. 2010) (same). Prosecution disclaimer does not apply to an ambiguous disavowal, and prosecution disclaimer does not apply if an applicant simply describes features of the prior art and fails to distinguish the claimed invention based on those features. Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1375 (Fed. Cir. 2008).
Thus, a proper patent claim interpretation has to respect the differing roles of the written description and the claims by interpreting the claim language with great care in light of the specification, rather than as a shortcut to the details of the specification. As the Supreme Court explained in 1886, a claim is not a “nose of wax” to be changed merely by referring to the specification to make it include something more than or different from what its words express.

V. Don’t Use the Wrong Tool for the Job, and Keep It Short and Simple

Common issues in patent litigation include: (1) whether there is an infringement, and (2) whether the patent is invalid (a) over prior art, (b) for failing to have a written description commensurate with the full breadth of the claim, or (c) for failing to enable the full scope of the claim. Claim interpretation is implicated in all of these issues, as one cannot decide whether there is infringement or invalidity without deciding first what the scope of the claim is.

Unfortunately, the “canons” of patent claim interpretation sometimes “fire” at cross purposes. For example, the Federal Circuit holds that a claim cannot be interpreted more broadly than the subject matter actually invented. This is another way of asking whether the breadth of the claim

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66 White v. Dunbar, 119 U.S. 47, 51–52 (1886). The Court stated:

Some persons seem to suppose that a claim in a patent is like a nose of wax, which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express. The context may, undoubtedly, be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it, and making it different from what it is. The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.

Id.


68 Though “canons” are not “cannons,” the author begs the reader’s indulgence for the sake of the point.

69 Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc., 450 F.3d 1350, 1355 (Fed. Cir. 2006) (“Although claims need not be limited to the preferred embodiment when the inven-
is justified by the written description and invites courts to narrow the claim scope to match the evidence. But another canon says that courts must not import subject matter from the written description into the claim.70 If courts were routinely to narrow claim scope during claim interpretation to match the written description, then how would claims ever be invalid for lack of a written description, as in *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.?*71 Obviously these canons stand in tension with one other.

The Federal Circuit’s *en banc* decision in *Phillips* tells a court to first understand what was invented and then interpret the claims in that light:

> Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The 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.72

This method should not be a license to rewrite patent claims in accordance with whatever a court thinks the invention is. Instead, the judge needs to understand the invention, determine what the inventor intended to cover with the claim language, and reach an interpretation that is true to the claim language while still aligned with the patent description—assuming that is possible.73

Claim interpretation is not a substitute for filing and prosecuting a reissue patent application that focuses more specifically on the invention’s details. Nor is claim interpretation a shortcut to saving a patent claim from defenses of invalidity. Using claim construction for these purposes is simply using the wrong tool. To obtain more precise claim coverage, one must either look to narrower claims that are in the patent already or seek a narrowing reissue.

Claim interpretation could be simplified by focusing on interpreting the language of the claims and letting the question of whether that claim’s breadth is justified—i.e. “supported”—to be decided via the traditional defenses rather than as a question of claim interpretation. The court’s role in claim
interpretation is to resolve disputes between the parties as to claim meaning, not to preempt the ultimate issues.

**Conclusion**

When handling claim construction, courts should consider using well-qualified masters. In addition to using technical experts to explain technology, courts should also consider whether legal expert testimony has an appropriate role in the specifics of the case at bar. Third, all parties should remember and preserve the different roles of the claims and the written description. Finally, courts should decide claim construction independently of the subsequent issues of infringement and validity.