

TERM INTERPRETATION IN PATENTS AND TRADEMARKS:
REFINING THE VICARIOUS INQUIRY IN CLAIM CONSTRUCTION

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The doctrine of claim construction has remained unsettled since the Federal Circuit declared it a matter of law ten years ago. Despite recent evidentiary clarification in *Phillips*, courts still struggle to construe claims as a purely legal matter. Skilled artisans' interpretive contributions are crucial to accurate constructions, yet factual findings based on those contributions command no formal recognition in current doctrine. This Note proposes a limited role for skilled artisans' interpretive input in determining the patentee's intended meaning of a claim term. Specifically, skilled artisans' interpretation of terms in the specification would be a matter of fact, informing judges' construction of the claims as a matter of law overall. The new factual component would introduce evidentiary challenges, addressable by drawing on the evidentiary approach for determining trademark distinctiveness. The virtues of joint interpretation include accuracy and trial-level certainty, though its viability is questionable in light of the Supreme Court's insistence on jury-free construction in *Markman*.

INTRODUCTION

When construing claims in a patent, courts seek to determine “the meaning that the [claim] term would have to a person of ordinary skill in the art in question at the time of the invention.”¹ That determination is a matter of law, “purely a matter of law.”² Indeed, “there are

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¹ *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc), cert. denied, 2006 WL 386393 (U.S. Feb. 21, 2006).

² *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc).

no facts underlying claim interpretation” to consider for summary judgment.³ The pure legality of claim interpretation has been a constant in the Federal Circuit’s drifting doctrine since the seminal *Markman* decision.⁴ Yet this settled aspect of claim construction still fuels a fundamental controversy that has dogged the Court’s doctrine since *Markman*.

This controversy is the fact/law conundrum⁵: the vicarious nature of the court’s inquiry inherently requires factual findings that escape formal recognition in a purely legal determination. Without factual findings, the Federal Circuit reviews claim constructions *de novo*, freely disregarding facts so painstakingly clarified at the district court level. The high reversal rate of claim constructions⁶ and objections by scholars and certain judges on the Federal Circuit⁷ evince inadequate deference to district courts’ informal factual findings.

In addition, the fact/law conundrum confounds evidentiary matters. What evidence may a district court use to determine what claim terms mean to those skilled in the relevant art? The intuitive answer (testimony from skilled artisans and evidence of how those artisans use certain words in their fields) is not the right one. Except in rare cases, a judge may rely on two documents: the patent and its prosecution history (a record of the dialog between the applicant and the patent examiner before the patent issued). Direct evidence of how skilled artisans understand claim terms is usually taboo under Federal Circuit doctrine, precluding any factual findings on the matter. District courts have expressed frustration at this counterintuitive evidentiary approach.⁸

³ *Personalized Media Commc’ns v. Int’l Trade Comm’n*, No. 971532, 1999 WL 13384, at *2 (Fed. Cir. 1999) (“there are no facts underlying claim interpretation which must be viewed in the light most favorable to the non-moving party”); cf. *Becton Dickinson & Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 797 (Fed. Cir. 1990) (“A mere dispute concerning the meaning of a term does not itself create a genuine issue of material fact.”).

⁴ *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

⁵ *Phillips*, 415 F.3d at 1334 (Mayer & Newman, J.J., dissenting) (referring to the purely legal treatment of the inherently factual issue of claim construction as “the claim construction conundrum”).

⁶ Kimberly M. Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 Lewis & Clark L. Rev. 231, 236 (2005) (citing a 34.5% reversal rate for the period of 1996 (after *Markman* was decided) to 2003).

⁷ See 415 F.3d at 1330 (Mayer & Newman, J.J., dissenting); see also *id.* at 1330 (Lourie, J., concurring) (endorsing an intermediate standard of review requiring affirmance “in the absence of a strong conviction of error”); cf. *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1380-81 (Fed. Cir. 2005), *reh’g denied*, 405 F.3d 1338 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 488, 163 L. Ed. 2d 384 (U.S. 2005) (Rader, J., dissenting); M. Reed Staheli, *Deserved Deference: Reconsidering the De Novo Standard of Review for Claim Construction*, 3 Marq. Intell. Prop. L. Rev. 181 (1999).

⁸ Chief Judge Young of the United State District Court for the District of Massachusetts aptly captured the conundrum when he asked, “How does a Court decipher the plain and customary meaning of a term as understood by one skilled in the art without resorting to extrinsic evidence about how one skilled in the art would construe the term?” *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 339 F. Supp. 2d 202, 226 n.23 (D. Mass. 2004). See also *Forest Labs., Inc. v. Abbott Labs.*, No. 96-CV-159A, 1998 U.S. Dist LEXIS 23171, at *10 n.3 (W.D.N.Y. Aug. 3, 1998) (“the Federal Circuit has also made clear that when construing a claim, the trial court should rely on extrinsic evidence, including expert testimony from those skilled in the art, in only rare cases. It would seem that such a procedure leaves the trial judge in the difficult position of having to interpret sometimes complex scientific and technological claim elements in the same manner as one skilled in the art, but without any input from such individuals.”).

The fact/law conundrum is more puzzling still in light of the approach to distinctiveness determination (a form of term interpretation) in trademark cases. To determine whether a mark is distinctive enough for trademark protection, a court inquires what a term means to members of the relevant purchasing public. This vicarious inquiry is similar to the one underlying claim construction. Unlike claim construction, though, the court's answer is a question of fact, supported by formal factual findings of how relevant consumers perceive the term. Further, the court is not restricted to counterintuitive evidence but may rely on any competent evidence.

These two areas of intellectual property tackle vicarious term interpretation in radically different ways. Trademark law logically treats the inherently factual inquiry as a matter of fact and relies heavily on direct evidence of how the target audience (relevant consumers) perceives the term. Patent law treats the inquiry as a matter of law and restricts evidence to two documents that the target audience had no hand in authoring. On the surface, trademark law approaches the inquiry more logically and suffers from no fact/law conundrum. Perhaps the doctrine of trademark distinctiveness can help resolve the fact/law conundrum of claim construction.

This Note seeks to clarify the Federal Circuit's evidentiary approach to claim construction by drawing a parallel to the trademark approach to term interpretation. This Note further proposes a modified approach to claim construction with a confined and realistic role for the skilled artisan's perspective. Part I observes that the Federal Circuit construes claims not from the perspective of skilled artisans ("message receivers") but of the patentee ("message sender"). The perspective switch harmonizes with claim construction as a matter of law but fails to account for its factual component. To address this fact/law conundrum, the Court must define a limited, realistic interpretive role for skilled artisans. Part II notes the similarities between term interpretation in trademarks and patents, reflecting on trademark's evidentiary approach to determine what a trademark means to the relevant "message receivers." Part III proposes a limited role for skilled artisans in claim construction: their understanding of the language in the *specification* (not the claims) should be a factual determination, subsumed within claim construction as a matter of law. The approach draws on the evidentiary practices of trademark distinctiveness cases. The viability of a subsidiary factual question is considered in light of the Supreme Court's mandate of jury-free construction.

I. VICARIOUS CLAIM CONSTRUCTION FROM THE PERSPECTIVE OF ONE OF ORDINARY SKILL IN THE ART

A. *Message Senders, Message Receivers, and Standard of Review*

A patent functions to notify the public of the scope of an invention.⁹ Under 35 U.S.C. § 112, two statutory requirements accomplish the public notice function of patents. First, the patent must describe the invention so that "any person skilled in the art to which [the invention] pertains" can make and use it.¹⁰ Second, the patent must particularly point out and distinctly

⁹ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996).

¹⁰ 35 U.S.C. § 112, para. 1 (2000) reads:

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

claim the invention to establish its boundaries.¹¹ The patent apprises the public of what the invention under monopoly is, what the invention leaves the public domain, and how to practice the invention.

A patent communicates an invention from one skilled artisan in a particular field (the inventor) to others skilled in the same field.¹² The patentee is a “message sender,” communicating the scope of his invention via the patent document. His message is received by the public; that is, the people who find it worth their while to seek out and read the patent. A number of actors may qualify as message receivers: licensees, assignees, purchasers of the patent, competitors, investors, and courts.¹³ Section 112, however, formally recognizes only one message receiver: “any person skilled in the art” of the invention.¹⁴

As the formally-recognized message receiver, the artisan of ordinary skill is the focus of claim construction. The Federal Circuit has clarified in detail who he is: a *competitor*¹⁵ in the *specific*¹⁶ art of the invention, sporting mere *ordinary*¹⁷ (not expert) skill, though he is *no layman*¹⁸ either; and (most importantly) he has *read the patent documents*.¹⁹ Claims are to be

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.

¹¹ 35 U.S.C. § 112, para. 2 (2000) reads: “The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.”

¹² *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005), *cert. denied*, 2006 WL 386393 (U.S. Feb. 21, 2006) (The “starting point [for claim construction] 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.”).

¹³ Christopher A. Cotropia, *Patent Claim Interpretation and Information Costs*, 9 Lewis & Clark L. Rev. 57, 63 (identifying those actors who must understand the breadth of protection afforded a patented invention).

¹⁴ 35 U.S.C. § 112 (2000).

¹⁵ *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 952 n.15 (Fed. Cir. 1993) (explaining that the test for prosecution history estoppel is “measured from the vantage point of a reasonable competitor” because “the point” is to consider the “knowledge of one reasonably skilled in the art who views the question from the perspective of a competitor in the market place”).

¹⁶ *See, e.g., Merck & Co. v. Teva Pharms. USA, Inc.*, 347 F.3d 1367, 1371-72 (Fed. Cir. 2003) (ruling that the district court properly discounted testimony by an expert chemist because he was not skilled in the relevant art of pharmacology which was the subject of the invention).

¹⁷ *Dayco Prods., Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1324 (Fed. Cir. 2001) (“In approaching claim construction, we must always be conscious that our objective is to interpret the claims from the perspective of one of ordinary skill in the art, . . . not from the viewpoint of counsel or expert witnesses retained to offer creative arguments in infringement litigation.”).

¹⁸ *Searfoss v. Pioneer Consol. Corp.*, 374 F.3d 1142, 1149 (Fed. Cir. 2004) (“Claim terms must be construed as they would be understood by a person of ordinary skill in the art to which the invention pertains. What the claim terms would mean to laymen is irrelevant.”).

¹⁹ *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998) (“It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such person is deemed to read the words used in the patent documents with an understanding of the meaning in the field, and to have knowledge of any special meaning and usage in the field.”).

construed from his vantage point. His perspective on disputed claim terms governs claim interpretation in the courtroom and in intellectual property transactions. If “[t]he name of the game is the claim,”²⁰ then the ball is in the skilled artisan’s court.

Yet the evolving doctrine of claim construction casts doubt on the skilled artisan’s official role of message receiver. The Federal Circuit apparently struggles to find his proper place, evinced by the question the en banc Court posed before its final *Phillips* decision: “What role should . . . expert testimony by one of ordinary skill in the art play in determining the meaning of the disputed claim terms?”²¹

This section attempts to clarify the skilled artisan’s current role and its impact on the process and appellate review of claim interpretation. Specifically, the Federal Circuit has implicitly shifted the perspective of claim construction from skilled artisan to patentee. This shift dictates the evidence and tools courts use to construe claims, which in turn dictate the standard of appellate review.

1. Shifting the Interpretive Perspective from Message Receivers to Message Sender

The doctrine of claim construction has evolved to shift the court’s focus from message receivers (skilled artisans) to the message sender (patentee). Several rules of construction accomplish this shift. One such rule is the “own lexicographer” rule. If a patentee assigns a special definition to claim term, his lexicography governs, even if the term is used differently by those skilled in the art.²² In addition, the patentee may intentionally narrow the definition of a claim term (intentional disavowal), indicating a more limited meaning than one familiar to the skilled artisan.²³ Because the artisan/message-receiver has read the patent documents, he is presumed to have gleaned the patentee’s special or refined meanings.

Even absent an explicit definition or clear disavowal, the patentee’s perspective still dominates claim construction. When a patentee indirectly defines or refines the meaning of a claim term, courts scour the patent documents for every bit of meaning to patch together a definition. In *Nazomi Communications, Inc. v Arm Holdings, PLC*, the Federal Circuit described the painstaking method for extracting meaning from scattered references to construe a term defined “in an indirect manner.”²⁴ The resulting “gerrymandered” definition, stretched thinly

²⁰ Giles S. Rich, *Extent of Protection and Interpretation of Claims-- American Perspectives*, 21 Int’l Rev. Indus. Prop. & Copyright L. 497, 499 (1990).

²¹ *Phillips v. AWH Corp.*, 376 F.3d 1382, 1383 (Fed. Cir. 2004) (en banc), *reh’g en banc*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), *cert. denied*, 2006 WL 386393 (U.S. Feb. 21, 2006).

²² *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc), *cert. denied*, 2006 WL 386393 (U.S. Feb. 21, 2006).

²³ *Id.*

²⁴ *Nazomi Commc’ns, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1369-71 (Fed. Cir. 2005). The Court suggested a five-step analysis of the patent documents: (1) “account for” references to the claim term in the written description; (2) examine the prior art discussed during prosecution, since they may “enlighten the meaning” of the term; (3) consider the embodiments of the invention because they may “throw light on the meaning” of the term and the court’s ultimate definition must “accommodate all of these specified variations”; (4) consider the examiner’s reasons for allowance during prosecution, since the meaning of the term “must also be broad enough to encompass”

here and nipped abruptly there to cover all indirect references and disavowals, may bear little resemblance to skilled artisans' experienced understanding of the term. But no matter; whatever definition the judge patches together represents the patentee's intended meaning and is controlling for the purposes of construing claims.

A final perspective-shifting rule governs claim construction when artisans attribute multiple meanings to a term of art. Unless all artisans agree on a single meaning, a court will find that no ordinary and customary meaning exists. The court then turns to the intrinsic evidence to determine the patentee's "intended meaning."²⁵

These perspective-shifting rules of construction place the message sender in the spotlight and send message receivers into the shadows. The ordinary skilled artisan is a truly hypothetical message receiver, as the Federal Circuit recognizes.²⁶ The chances of finding a qualified group of artisans dwindles when courts require that they have read the patent, assimilated the patent-specific definitions of the claim terms, and readjusted their own knowledge of those terms in order to glean the patentee's message. Technical experts retained by the parties cannot speak with authority on the meaning of claim terms to their ordinarily-skilled brethren.²⁷ Moreover, a court can hardly expect an objective definition from the skilled artisan anyway, since the Court assumes he is a competitor.²⁸ The court is hard-pressed to find evidence of skilled artisans' message received, while evidence of the patentee's intended message is readily available.

Under the shifted perspective from message receiver to message sender, the vicarious inquiry becomes: what did this claim term mean *to the patentee* at the time of prosecution? The Federal Circuit does not acknowledge the shifted perspective, though the Court has come close. In *Vitronics Corp. v. Conceptronic, Inc.*, the Court held that the "meaning indicated by the patentee [in the intrinsic evidence]" governed, "regardless of how those skilled in the art would

those reasons as well; and (5) ensure that the court's ultimate definition comports with the Federal Circuit's canons of constructions and conventions in the claim-drafting art.

²⁵ When parties present evidence that artisans do not agree on the meaning of a claim term, there is no ordinary and customary meaning. *See, e.g., Phillips Petroleum Co. v. Huntsman Polymers Corp.*, 157 F.3d 866, 871 (Fed. Cir. 1998) (concluding that the term "block copolymer" had no ordinary meaning because parties' experts disputed the meaning and resorting instead to the intrinsic evidence to determine the patentee's "intended meaning"); *On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1137-38 (Fed. Cir. 2004) (determining that the disputed claim term ("substantially spherical concave reflective surface . . . having a cylindrical component thereto") had "no precise and generally understood meaning in the art" since the nomenclature had two possible meanings when applied to reflective surfaces and therefore turning to the intrinsic evidence for the meaning of the term); *cf. ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1089-90 (Fed. Cir. 2003) (rejecting that the term "uniform resource locator" had a "common usage" when the parties presented documentation showing two different definitions and determining the meaning of the term based on the "plain language and surrounding context of the claims themselves").

²⁶ *Phillips*, 415 F.3d at 1318 (noting that "claims are construed as they would be understood by a *hypothetical* person of skill in the art") (emphasis added).

²⁷ *Markman*, 52 F.3d at 983 ("This testimony [by experts retained by the parties] about construction . . . amounts to no more than legal opinion – it is precisely the process of construction that the court must undertake.").

²⁸ *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 952 (Fed. Cir. 1993) ("knowledge of one reasonably skilled in the art who views the question from the perspective of a competitor in the market place").

interpret a term in other situations.”²⁹ Even more telling, in *Norian Corp. v. Stryker Corp.*, the Court rejected the definition of “a sodium phosphate solution” as one of ordinary skill in the art would understand it.³⁰ To the skilled artisan, it must mean multiple types of sodium phosphate, since sodium phosphate cannot exist in solution in a single form. But the Court reasoned, “[w]hile that may be so [that a skilled artisan would adopt that meaning], it does not change the clear effect of the prosecution history, the specification, and the claim language.”³¹ In effect, the Court favored the patentee-message-sender’s meaning over the only one having any realistic meaning to the artisan-message-receiver.

2. Evidence of Message Sent Favored Over Evidence of Message Received

The shifted perspective from skilled artisan to patentee explains the Federal Circuit’s sharp evidentiary preferences. As articulated in *Phillips*, the Court overwhelmingly favors intrinsic evidence over extrinsic evidence. Intrinsic evidence is specific to the patent and consists of the patent documents: the claims themselves, the specification, and the prosecution history. The specification assumes paramount importance in defining claim terms because it describes the invention in “full, clear, concise, and exact terms.”³² Further, the specification may reveal the patentee’s idiosyncratic or narrow definition of a term. The prosecution history may also inform the meaning of claim language when a patentee clearly disavows claim scope in his responses to the examiner (prosecution disavowal).³³

Intrinsic evidence is not an automatic or obvious choice for answering the vicarious inquiry. It is a proxy for skilled artisans’ understanding of the disputed term. Rather than reflecting the *message received* by skilled artisans, the patent documents reflect the patentee’s *message delivered*. When a patentee explicitly defines a claim term in the specification or clearly disavows claim scope, his message is clear to his message receivers. In these cases, the message delivered is undoubtedly the message received, and intrinsic evidence is a good proxy for evidence of skilled artisans’ understanding of a claim term.

On the other hand, when a patentee’s definition or disavowal is unclear, courts cannot be sure that the message delivered was the message received. These cases occur when a patentee implicitly defines a claim term³⁴ or refines the meaning of an existing term of art.³⁵ The

²⁹ *Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1585 (Fed. Cir. 1996) (“regardless of how those skilled in the art would interpret a term in other situations, where those of ordinary skill, on a reading of the patent documents, would conclude that the documents preclude [a certain] meaning . . . we must give it the meaning indicated by the patentee in the patent claim, specification and file history”).

³⁰ *Norian Corp. v. Stryker Corp.*, 432 F.3d 1356, 1362 (Fed. Cir. 2005).

³¹ *Id.*

³² *Phillips*, 415 F.3d at 1316, citing 35 U.S.C. § 112, para. 1.

³³ *Id.* at 1317.

³⁴ *Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (“The failure to define the term is, of course, not fatal, for if the meaning of the term is fairly inferable from the patent, an express definition is not necessary (although of course the inclusion of a definition would have avoided the need for this time-consuming and difficult inquiry into indefiniteness).”).

patentee's lexicography (unclear though it may be) controls and overrides common usage of the term in the art. In such a case, a court must choose between the patentee's intended meaning and skilled artisans' perceived meaning. Those meanings may not be the same, but only one is authoritative in construing the claims. By choosing to adopt the patentee's or skilled artisans' perspective, the court necessarily chooses a different type of evidence.

The Federal Circuit holds the patentee's intended meaning authoritative and accordingly "scrutinize[s] the intrinsic evidence in order to determine the most appropriate definition."³⁶ As the Court explains, the virtues of the intrinsic evidence are that they reflect the *patentee's* understanding of the claim term: "the inventor's *intention*, as expressed in the specification, is regarded as dispositive."³⁷ The correct interpretation can only be determined by understanding "what the investors actually invented and *intended* to envelop with the claim."³⁸

The most recent addition to the ranks of intrinsic evidence illustrates the Federal Circuit's preference for the patentee's intended meaning over artisans' perceived meaning. In *V-Formation, Inc. v. Benetton Group SPA*, the Court held that prior art cited on the face of the patent and in an Information Disclosure Statement qualified as intrinsic evidence, even when not discussed in the prosecution history.³⁹ Approving the district court's reliance on the prior art, the Federal Circuit quoted the district court's explanation: cited prior art "can have particular value as a guide to the proper construction of the term, because it may indicate not only the meaning of the term to persons skilled in the art, but also that *the patentee intended to adopt that meaning*."⁴⁰ If the patentee had not cited the art, it would have fallen into the forbidden extrinsic evidence category, rarely acceptable to support a court's construction. The crucial factor that allowed the court to rely on the prior art reference was that the patentee had considered it. The focus of claim construction is surely on the message sender here. The patentee's mere consideration of a term's definition in cited reference, without any commentary in the prosecution history, bears little on how skilled artisans perceive the term.

Extrinsic evidence, on the other hand, directly reflects how skilled artisans perceive a term. Experts testify to their understanding of a term as of the time of filing, representing the views of skilled artisans in their fields. Documentary evidence provides examples of customary word usage, illustrating how skilled artisans consistently use and understand a term.

The Federal Circuit condemns extrinsic evidence as "less reliable than [the patent documents] in determining how to read claim terms."⁴¹ By "less reliable," the Court means in part that extrinsic evidence may not faithfully represent the patentee's intended meaning: it

³⁵ *Sorensen v. Int'l Trade Comm'n*, 427 F.3d 1375, 1379 (Fed. Cir. 2005).

³⁶ *Free Motion Fitness, Inc. v. Cybex Int'l, Inc.*, 423 F.3d 1343, 1349 (Fed. Cir. 2005).

³⁷ *Phillips*, 415 F.3d at 1316.

³⁸ *Renishaw PLC v. Marpass Societa per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998), *quoted in Phillips*, 415 F.3d at 1316.

³⁹ *V-Formation, Inc. v. Benetton Group SpA*, 401 F.3d 1307, 1311 (Fed. Cir. 2005).

⁴⁰ *Id.*

⁴¹ *Phillips*, 415 F.3d at 1318.

“lacks the virtue of being created . . . for the purpose of explaining the patent’s scope and meaning,” and “undue reliance on extrinsic evidence” therefore risks changing the patentee’s intended meaning, as reflected in the patent documents.⁴²

To summarize, intrinsic evidence deserves a lofty position in the hierarchy because it is evidence of the patentee’s message sent, the Court’s implicit objective in claim construction. While intrinsic evidence may be the “single best guide”⁴³ to the patentee’s intended meaning, it may fail to reflect the term’s meaning to skilled artisans. Especially when a patentee implicitly defines or refines a definition, extrinsic evidence more accurately reflects artisans’ perceived meanings. However, extrinsic evidence sinks to the forbidden rungs in the evidentiary hierarchy because the Federal Circuit implicitly seeks to construe claims from the perspective of the patentee/message-sender.

3. The Connection Between Perspective and Standard of Review

The choice of perspective for the vicarious inquiry profoundly affects the process of claim construction. Ultimately, the choice renders the inquiry more or less factual, which directly influences the standard of review. By focusing on the message sender or receiver, the court consults a certain type of evidence. Evaluation of that evidence dictates the court’s task in construing claims. The nature of the task dictates the standard of review.

To illustrate, consider two extreme approaches to claim construction, dubbed here pure message-receiver and pure message-sender approaches. In the pure message-receiver approach, a court would seek to determine what claim terms mean to message receivers, regardless of what meaning the patentee intended to convey. The court would make numerous subsidiary factual determinations about those message receivers, including the relevant art, the state of the art at the time of the invention, the ordinary level of skill in that art, who qualifies as one of ordinary skill in the art, etc.⁴⁴ After identifying artisans with the appropriate level of skill and knowledge, the

⁴² Lack of faithfulness to the patentee’s intended meaning seems to underlie two of the five reliability concerns: “First, extrinsic evidence . . . does not have the specification’s virtue of being created . . . for the purpose of explaining the patent’s scope and meaning. . . . Finally, undue reliance on extrinsic evidence poses the risk that it will be used to change the meaning of claims in derogation of the ‘indisputable public records consisting of the claims, the specification and the prosecution history,’ thereby undermining the public notice function of patents.” *Id.* at 1318-19 (citations omitted). The Court also cited traditional reliability concerns that district courts deal with regularly while fact-finding in other areas of patent or more general law: biased testimony (“extrinsic evidence consisting of expert reports and testimony . . . can suffer from bias”), selection of relevant evidence (“extrinsic publications may not be written by or skilled artisans and therefore may not reflect the understanding of a skilled artisan in the field of the patent” and “a virtually unbounded universe of potential extrinsic evidence of some marginal relevance that could be brought to bear on any claim construction question”). *Id.*

⁴³ *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996), *quoted in Phillips*, 415 F.3d at 1315.

⁴⁴ *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1332 (Fed. Cir. 2005), *cert. denied*, 2006 WL 386393 (U.S. Feb. 21, 2006) (Mayer & Newman, J.J., dissenting) (listing the factual components of claim interpretation: “who qualifies as one of ordinary skill in the art; the meaning of patent terms to that person; the state of the art at the time of the invention; contradictory dictionary definitions and which would be consulted by the skilled artisan; the scope of specialized terms; the problem a patent was solving; what is related or pertinent art; whether a construction was disallowed during prosecution; how one of skill in the art would understand statements during prosecution; and on and on”).

court would determine how those artisans understood the terms in the context of the patent, either by asking them directly or consulting an expert on their customary usage. The court would then find as a matter of fact what those words mean to artisans of ordinary skill in the art who read the patent.⁴⁵ Thus, the pure message-receiver approach would render claim construction a purely factual matter, reviewed for clear error.⁴⁶

In the pure message-sender approach, a court would seek to determine what claim terms meant to the patentee/message-sender when he wrote them, regardless of how message receivers perceive them. The court would turn exclusively to the patent and the prosecution history to examine how the patentee used those terms. Because the claim construction inquiry is objective (rather than a quest for the patentee's subjective intent),⁴⁷ the court confines its analysis to the patent documents without relying on testimony from the patentee. The court's sole task would be to interpret the patent under principles of statutory construction.⁴⁸ Construction of written documents and statutes are traditionally legal matters,⁴⁹ and the court's interpretation is properly subject to *de novo* review. Thus, the pure message-sender approach would render claim construction a purely legal matter, reviewed *de novo*.

The nominal inquiry behind claim construction recognizes only the message receiver's perspective, implying a pure message-receiver approach. In practice, though, the long-standing own-lexicographer and disclaimer rules require courts to consider the message sender's perspective as well. As such, courts draw on a mix of intrinsic and extrinsic evidence (albeit the latter informally), engaging in statutory-like construction and trial-like evidentiary practices. The mixed nature of the evidence demands legal and factual analyses, making claim construction seem much more like a "mongrel practice" of law and fact.⁵⁰ Thus, claim construction cannot properly be classified as purely factual or purely legal unless one of those perspectives drops out of the inquiry.

Currently, the Federal Circuit tends extremely toward the message-sender end of the "perspective spectrum," replacing a prior, more moderate stance. Historically, the own-

⁴⁵ See Arti Rai, *Engaging Facts and Policy: A Multi-Institutional Approach to Patent System Reform*, 103 Colum. L. Rev. 1035, 1045-46 (2003) (reasoning that the temporal and technological aspects of claim construction are properly a matter of fact); see also *Phillips*, 415 F.3d at 1332 (Mayer & Newman, J.J., dissenting) (describing those questions in claim construction answered by testimony and documentary evidence (not by case law) as "inherently factual").

⁴⁶ Fed. R. Civ. P. 52(a).

⁴⁷ See *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116-17 (Fed. Cir. 2004) ("Because the inquiry into the meaning of claim terms is an objective one, a patentee who notifies the public that claim terms are to be limited beyond their ordinary meaning to one of skill in the art will be bound by that notification, even where it may have been unintended.").

⁴⁸ *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 987 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

⁴⁹ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388 (1996) ("[J]udges, not juries are the better suited to find the acquired meaning of patent terms. The construction of written instruments is one of those things that judges often do and are likely to do better than jurors unburdened by training in exegesis.").

⁵⁰ *Markman*, 517 U.S. at 378 (describing claim construction as a "mongrel practice" of mixed law and fact).

lexicographer rule was intended to allow the patentee to coin new terms or use uncommon terms if he was not familiar with art-specific jargon.⁵¹ The patentee could exercise that right successfully only if he provided an explicit definition. These days, definitions need not be explicit, only set forth “in some manner,” or “by implication,” so long as the meaning “may be ascertained” or is “fairly inferable.”⁵² The natural effect of the expanded own-lexicographer rule is a heightened focus on the message sender’s perspective and a reduced focus on the message receiver’s perspective; hence, the grand importance of the patentee’s *intended* meaning in several recent cases.⁵³ Unsurprisingly, the Court now rejects extrinsic evidence that it once permitted, and sees only law where it once saw facts.⁵⁴ Facts and extrinsic evidence are simply irrelevant in the message-sender approach. At this extreme end of the perspective spectrum, intrinsic evidence and the purely legal exercise of statutory construction dominate, calling for *de novo* review.

While the Court’s message-sender approach is unorthodox, it harmonizes recent changes to the Court’s claim construction doctrine. When the Court declared claim construction a matter of law in 1995,⁵⁵ district courts were routinely relying on a mixture of intrinsic and extrinsic evidence. The combination of extrinsic evidence and the purely-legal directive was awkward. Now that courts formally rely almost entirely on statutory-like construction of the patent documents, claim construction really does seem more like a purely legal matter.

B. *Artisans of Ordinary Skill: An Unlikely Target Audience for the Claims*

Despite the ordinary artisan’s singular position in claim construction doctrine, he is an unlikely addressee for the claims. The patent statute does not require that the person of ordinary skill in the art be the target audience for claims, nor has any court other than the Federal Circuit

⁵¹ See *Lear Siegler, Inc. v. Aeroquip*, 733 F.2d 881, 889 (Fed. Cir. 1984) (clarifying that the patentee was granted the right to act as his own lexicographer “in order to hold open the possibility of obtaining a patent where an inventor is not schooled in the terminology of the technical art to which his invention pertains or where there is a need to coin new expressions with which to communicate that invention”).

⁵² See, e.g., *Intellical, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992) (“Where an inventor chooses to be his own lexicographer and to give terms uncommon meanings, he must set out his uncommon definition *in some manner* within the patent disclosure . . .”) (emphasis added); *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1269 (Fed. Cir. 2001) (rejecting rigid formalism in the patentee’s method of disclosing a definition and permitting definition “by implication,” so long as the meaning may be “ascertained”); *Bancorp Servs., L.L.C. v. Hartford Life Ins., Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (“The failure to define the term is, of course, not fatal, for if the meaning of the term is fairly inferable from the patent, an express definition is not necessary . . .”).

⁵³ See discussion *supra*, notes 35-38 and accompanying text.

⁵⁴ See *Laitram Corp. v. NEC Corp.*, 952 F.2d 1357, 1363-64 (Fed. Cir. 1991) (finding summary judgment improper because of a factual dispute regarding claim construction); *Tillotson, Ltd. v. Walbro Corp.*, 831 F.2d 1033, 1037 (Fed. Cir. 1987) (permitting expert testimony and recognizing facts); *Palumbo v. Don-Joy Co.*, 762 F.2d 969, 974 (Fed. Cir. 1985) (recognizing facts such that claim construction was for the jury); see also Rai, *supra* note 45, at 1057-58 (discussing the evolution the Federal Circuit’s claim construction doctrine from fact-oriented to law-oriented).

⁵⁵ *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

so indicated. Not until fairly recently did the Federal Circuit craft a central place for him in its claim construction doctrine.

Section 112 paragraph 1 requires that the specification address one skilled in the art for a limited purpose: to provide sufficient description of the invention so as to enable one skilled in the art to make and use it, and to set forth the best mode for doing so.⁵⁶ Those minimal criteria require only that the humble artisan figure out enough to muddle through a procedure to make the inventor's widget. That's all. The artisan does not need to know if the widget can have curved as well as sharp corners, or must be red as opposed to any other color. Those issues pertain to the limits of an invention, not its general nature.

The other paragraphs in Section 112 that pertain to claims do not mention one of ordinary skill in the art.⁵⁷ Those paragraphs instead detail claim drafting techniques, such as dependent claiming, claim differentiation, and means-plus-function claims, all unrelated to an artisan's technical skills. No mention is made of a target audience. The only person named is the applicant (the message sender), who must particularly point out and distinctly claim the subject matter that *he* regards as his invention, not that his ordinarily skilled colleagues would perceive.⁵⁸

The humble artisan of ordinary skill made a back-door appearance in Federal Circuit doctrine shortly after the circuit formed. *Fromson v. Advance Offset Plate, Inc.* was the first case to state outright that “[c]laims are normally construed as they would be by those of ordinary skill in the art.”⁵⁹ *Fromson* relied on *Schenck v. Nortron Corp.* for that proposition, where the Federal Circuit had found no error in the district court's reading of the claims “as would one skilled in the art.”⁶⁰ *Schenck* cited *Autogiro Co. of Am. v. United States*, an old Court of Claims case, which did not endorse claim interpretation from one of ordinary skill in the art. Rather, the *Autogiro* court echoed the language of Section 112, paragraph 1 (i.e., the *specification* must describe the invention so that any person skilled in the art can make and use it) and observed that “the specification aids in ascertaining the scope and meaning of the language employed in the claims.”⁶¹ Those two statements do not thrust the ordinary artisan into the spotlight for claim construction. The court's summation implies only that the specification has two separate functions: (1) to provide an adequate, enabling description for the skilled artisan, and (2) to explain the claims.

The Supreme Court's guidance on the matter is less than clear. The Court addressed the matter in 1871 in *Mowry v. Whitney*, where it declared that the specification “is to be addressed

⁵⁶ 35 U.S.C. § 112, para. 1 (2000).

⁵⁷ 35 U.S.C. § 112, para. 2-6 (2000).

⁵⁸ 35 U.S.C. § 112, para. 2 (2000).

⁵⁹ *Fromson v. Advance Offset Plate, Inc.*, 720 F.2d 1565, 1571 (Fed. Cir. 1983).

⁶⁰ *Schenck v. Nortron Corp.*, 713 F.2d 782, 787 (Fed. Cir. 1983) (affirming judgment of no infringement and finding that the district court “properly read the claims as would one skilled in the art”), citing *Autogiro Co. of Am. v. United States*, 384 F.2d 391 (Ct. Cl. 1967) (no pincite provided).

⁶¹ *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 397 (Ct. Cl. 1967).

to those skilled in the art, and is to be comprehensible by them.”⁶² However, the Court may have used “specification” to refer only to the written description (as done in the 1836 Amendment to the Patent Act) or to the claims as well.⁶³ Similarly, the issues in *Mowry* did not clarify the Court’s meaning of “specification.” The issues on appeal in *Mowry* were novelty and utility, but the Court conducted analyses resembling enablement (implicating the written description) and definiteness (implicating the claims) to determine “what [Plaintiff’s] alleged invention was.”⁶⁴ Whether the *Mowry* Court contemplated the skilled artisan as the addressee of the claims in addition to the written description or the claims is debatable.

More recently, the Supreme Court’s rationale in *Markman* suggests properly limiting the skilled artisan’s perspective to the written description. The Court declared claim construction a matter for the judge and not jurors because they lack “special training and practice” in patent construction; and because patent claims are “highly technical . . . as the result of special doctrines . . . developed by the courts and the Patent Office.”⁶⁵ There is no reason to believe that an ordinary artisan skilled in a particular technological field would have a more sophisticated understanding of claim construction than the average juror. Scientific knowledge does not make one adept at interpreting case law or Patent Office rules. *Markman*’s rationale indicates that the Supreme Court sees the claims as addressed to legal specialists, not technological artisans.

Somehow under the Federal Circuit’s watch, the humble artisan stumbled from the straightforward language of the specification into the abstract legal jargon in the back of the patent. There is good reason to confine him to the portions of the specification that describe tangible embodiments of the invention. Patents convey two types of information: a qualitative description of the invention and an abstract rendition of the invention’s boundaries.⁶⁶ The technical artisan will comprehend the descriptions and tangible embodiments of the invention, as laypeople comprehend property as tangible things.⁶⁷ Legal specialists, however, are adept at interpreting descriptions of inventions as abstract concepts instead of as things. The claims are the domain of legal specialists (patent agents and attorneys, patent examiners, and judges), not technical artisans. We can count on ordinary technical artisans to follow the patentee’s “recipe” for making the invention, but not much more.

The Federal Circuit’s designation of the technical artisan as the nominal interpreter of claims is ironic. Since the Court’s inception in 1982, its doctrine has exacerbated the legal fiction that artisans read claims and that inventors write them. The Court has relentlessly built

⁶² *Mowry v. Whitney*, 81 U.S. 620, 644 (1871) (“The specification, then, is to be addressed to those skilled in the art, and is to be comprehensible by them.”).

⁶³ See *In re Dossel*, 115 F.3d 942, 944-45 (Fed. Cir. 1997) (discussing the evolution of the meaning of “specification” since the Patent Act of 1790 and its subsequent amendments).

⁶⁴ *Mowry*, 81 U.S. at 641.

⁶⁵ *Markman v. Westview Instruments, Inc.*, 517 US 370, 388-89 (1996), quoting William R. Woodward, *Definiteness and Particularity in Patent Claims*, 46 Mich. L. Rev. 755, 765 (1948).

⁶⁶ Clarisa Long, *Information Costs in Patent and Copyright*, 90 Va. L. Rev. 465, 468 and 499 (2004).

⁶⁷ *Id.* at 472 (distinguishing between mere layfolk’s conception of property as objective things and legal and economic specialists’ intersubjective conception of property that “eliminate[s] any necessary connection between property rights and things”).

up a patent law lexicon that requires claim interpreters to keep up with the very latest cases to define claim terms. This court has construed over a hundred connecting, descriptive, and limiting terms, such as “a,” “about,” “or,” “to,” “uniform,” “including,” “characterized by,” that courts now routinely construe as a matter of law.⁶⁸ The Court’s suggestion that the ordinary artisan would look up “containing” in the Manual of Patent Examining Procedure stretches the imagination.⁶⁹ And until very recently, the Court would have automatically subjected the ordinary artisan to treble damages for willful infringement if he tried to interpret the claims on his own.⁷⁰ Even now, he runs the serious risk of treble damages if he relies on his own technical expertise without the advice of legal counsel.⁷¹ The Court’s doctrine requires that legal specialists translate claims for technical artisans. If anything, the Court’s doctrine discourages the unnecessary and unrealistic presumption that one of ordinary skill in the art reads claims.

C. *Defining the Proper Role for the Skilled Artisan in Claim Construction*

The recent focus on the patentee/message-sender minimizes the role of the skilled artisan in claim construction. His interpretive input is less prominent than it once was, and far less important than the nominal inquiry of claim construction implies. To some degree, the limited role is appropriate. Technical artisans of ordinary skill should not be called upon to interpret claims, in practice or in theory. The legal fiction is too strained and cannot be reconciled with claim interpretation as a matter of law. Further, designating the skilled artisan as claim construer while restricting courts to intrinsic evidence mandates a nonsensical evidentiary approach. The combination forces courts to rely on evidence that cannot directly answer their questions. The message sender approach, while a break from settled doctrine, quite rightly dethrones the skilled

⁶⁸ See Robert A. Matthews, Jr., Annotated Patent Digest, §§ 4:59 – 4:149 (2005) for a list of approximately a hundred such terms. Courts construe these terms as a matter of law unless something in the specification indicates a special meaning. See *Playtex Prods., Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 907 (Fed. Cir. 2005) (noting that “generally” and “substantially” are descriptive terms commonly used in patent claims “to avoid a strict numerical boundary in the specified parameter”; also noting “plain-language interpretation”); *PIN/NIP, Inc. v. Platte Chem. Co.*, 304 F.3d 1235, 1244 (Fed. Cir. 2002) (following construction of the term “composition” in another patent from another case and explaining that “the basic definition of the term ‘composition’ is well-established, was well-expressed in *Exxon*, and is applicable to this case”).

⁶⁹ *Mars, Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1375-77 (Fed. Cir. 2004) (vacating summary judgment of noninfringement after finding that the district court erred in construing “containing” as a closed-ended term when case law recognized it as an open-ended term and it was defined as an open term in the Manual of Patent Examining Procedure).

⁷⁰ *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1343-44 (Fed. Cir. 2004) (en banc) (holding that notwithstanding precedent to the contrary, “[t]he adverse inference that an opinion was or would have been unfavorable, flowing from the infringer’s failure to obtain or produce an exculpatory opinion of counsel, is no longer warranted”).

⁷¹ Cf. *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1339 (Fed. Cir. 2004) (holding that the district court did not err in finding willful infringement, based mainly on the defendant’s failure to take any action after receiving a cease and desist letter). But cf. *Biotec Biologische Naturverpackungen GmbH v. Biocorp, Inc.*, 249 F.3d 1341, 1355-56 (Fed. Cir. 2001) (sustaining a jury verdict of no willful infringement when defendants relied solely on the technologic expertise and reputation of their “world-renowned expert in the art” and failed to obtain an opinion of counsel).

artisan as claim construer. Any improvements to claim construction doctrine should preserve this change.

But removing the skilled artisan's perspective from claim construction only solves half the problem. The other half requires removing the legal specialist's perspective from interpretation of the specification. Just as technical artisans cannot reliably interpret claims without the aid of legal specialists, neither can legal specialists reliably interpret the specification without the aid of technical artisans. The official addressees of the specification are skilled artisans, not legal specialists. In the words of the Supreme Court, "[t]he specification of the patent is not addressed to lawyers, or even the public generally, but to the manufacturers of [the inventive product]."⁷² When legal specialists (judges included) rely on the specification to define claim terms, they usurp language meant to describe the invention for their own interpretive purposes. To arrive at a reliable construction, legal specialists must consult skilled artisans for their understanding of the patentee's message delivered in the specification. Claim construction that relies on the specification, therefore, involves a joint effort by two audiences receiving their respective messages.⁷³ Each of these audiences should confine its interpretive efforts to that portion of the patent addressed to it.

Two pitfalls await legal specialists or judges who interpret terms in the specification unassisted. First, legal specialists do not see all that skilled artisans see when they read the specification of a patent; they see *less*. They face interpretive gaps that skilled artisans fill with information "common and well known . . . as if it were written out in the patent."⁷⁴ Such interpretive gaps are tolerated, even anticipated, by the enablement doctrine, which permits patentees to rely on skilled artisans' knowledge when providing an enabling description of the invention.⁷⁵ Because legal specialists may only have, say, 75% of the required knowledge to interpret a term and may also be unaware that a 25% interpretive gap exists, they risk interpreting a term in the specification inaccurately. And since the specification serves as the "single best guide" to defining claim terms, flawed interpretation of a term in the specification infects claim construction as well.

In addition to this inherent interpretive gap, legal specialists face interpretive quandaries created by patentees' ambiguous use of claim terms in the specification. Such interpretive quandaries are inevitable, given the Federal Circuit's tolerance for implicit definitions and the incentives behind patent drafting. By intentionally referring to terms in a non-limiting or inconsistent way, drafters invite courts to discern limiting definitions. The gamble often pays off with judicially-derived broad definitions, while the penalty for ill-defined terms is remote.⁷⁶ The

⁷² *Carnegie Steel Co. v. Cambria Iron Co.*, 185 U.S. 403, 437 (holding that claims for an improved process for making steel were sufficiently definite and upholding their validity).

⁷³ Nard notes that outside the litigation setting, legal specialists seek the advice of skilled artisans when construing claims when writing noninfringement opinions. See Craig Allen Nard, *A Theory of Claim Interpretation*, 14 Harv. J.L. Tech. 1, 42 ("the opinion is frequently a joint product of the attorney and artisan").

⁷⁴ *Carnegie Steel*, 185 U.S. at 437.

⁷⁵ See *S3, Inc. v. NVIDIA Corp.*, 259 F.3d 1364, 1371 (Fed. Cir. 2001).

⁷⁶ *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001) (declaring that a claim term will not be held invalid for indefiniteness "even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree"; rather, a claim term is indefinite only if it is "insolubly ambiguous, and no narrowing construction can properly be adopted").

Federal Circuit's new implicit-own-lexicographer rule tolerates, even encourages, vague references that throw courts into interpretive quandaries. In addition, the economics of patent prosecution discourage voluminous efforts to define every claim term that could possibly surface in litigation. Such efforts would be prohibitively costly,⁷⁷ and might not even resolve unanticipated issues that surface in subsequent litigation. Given the incentives behind patent drafting, judges will face interpretive quandaries when relying on the specification to construe claims.

Judges and legal specialists lack the technical background necessary to make sensible judgments about resolving ambiguous or inconsistent references. They are at the mercy of patentees' interpretive quandaries. But skilled artisans are not. They confront ambiguous terms by considering the range of possible meanings, based on knowledge of technological limitations, manufacturing tolerances, and art-specific word usages. From those, they select the patentee's intended meaning, based on other clues in the specification. On the other hand, legal specialists left to their own interpretive devices may cast the "possible meanings" net too widely or narrowly. And in selecting from among those possible meanings, a judge may overlook a patentee's bona fide textual clues or fixate on irrelevant ones. Without input from skilled artisans on disputed terms in the specification, judges risk making claim construction "rulings [that] resemble reality, if at all, only by chance."⁷⁸

The interpretive quandaries created by patentees know no limit. Courts must make sense of such cryptic claiming techniques as: inconsistent use of technical terms in the specification⁷⁹; failure to specify which definition of those commonly used in the art applies⁸⁰; no reference to a technical term at all in the specification⁸¹; and use of non-technical terms whose literal

⁷⁷ Cf. *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999) ("The specification would be of enormous and unnecessary length if one had to literally reinvent and describe the wheel.").

⁷⁸ See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1330 (Fed. Cir. 2005) (en banc), cert. denied, 2006 WL 386393 (U.S. Feb. 21, 2006) (Mayer & Newman, J.J., dissenting) (arguing that the appellate court's construction of claims without regard for "subsidiary or underlying questions of fact," enveloped in "the expertise or effort of the district court" result in rulings that "resemble reality, if at all, only by chance.").

⁷⁹ See, e.g., *Pfizer, Inc. v. Teva Pharms. USA, Inc.*, 429 F.3d 1364, 1373-74 (Fed. Cir. 2005) ("saccharides" defined narrowly as sugars in one part of the specification ("i.e., sugars") but more broadly to include non-sugars or sugar derivatives elsewhere in the patent); *Fisher-Price, Inc. v. Graco Children's Prods., Inc.*, 154 Fed. Appx. 903, 909 (2005) (nonprecedential) (reversing district court finding that the disputed claim term was indefinite, since "[e]ven if it could be said that a conflict exists within the specification, it is resolved by the unambiguous claim language").

⁸⁰ See, e.g., *Phillips Petroleum Co. v. Huntsman Polymers Corp.*, 157 F.3d 866, 871 (Fed. Cir. 1998) (meaning of "block copolymer" disputed for 30 years in the polymer art); *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088-90 (Fed. Cir. 2003) (two meanings of "URL" ("uniform resource locator") disputed in the art at the time of filing).

⁸¹ See, e.g., *Fisher-Price, Inc. v. Graco Children's Prods., Inc.*, 154 Fed. Appx. 903, 907 (2005) (nonprecedential) (reversing district court's determination that the limitation "upper seating surface" in a patent for an infant swing was indefinite, since the technology was simple and the term could be "construed without great difficulty, even if . . . it is not mentioned in the specification); cf. *Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 1996) (no express definition provided for "surrender value protected investment credit").

definitions do not comport with technological realities.⁸² These puzzling references will always outpace courts' ability to resolve each as a matter of law. The endless variety stems from patent drafters' Darwinian evasion of words held to be limiting, new phrases engendered by novel technology, and the sheer richness of our language. The only practical way to tackle these textual conundrums is patent by patent, considering such facts as technological limits, manufacturing tolerances, and word usages to help solve gaps and quandaries.

In practice, many district court judges find facts to confront interpretive gaps and quandaries. Many use extrinsic evidence to some extent⁸³ because, in the words of one district court judge, "there is no place to go but the extrinsic evidence because the patent won't necessarily tell you [a disputed term's meaning]."⁸⁴ We cannot call their efforts factfinding when their conclusions are purely legal, so instead we call it judicial self-education. Apparently, self-education requires substantial factual development, since most judges do not rule on claim constructions until after discovery or later, and may refine their initial constructions during trial.⁸⁵

While the Federal Circuit formally denies the role of facts, the Court sometimes struggles to maintain the purely legal façade. In *Nazomi*, the Court *remanded* the case "for further claim construction," explaining that it could not perform its "*de novo*" review without "sufficient findings and reasoning to permit meaningful appellate scrutiny."⁸⁶ That explanation defies established principles of appellate review. An appellate court is superiorly situated to evaluate matters of law while a trial court is superiorly situated to evaluate matters of fact. The *Nazomi*

⁸² See, e.g., *Playtex Prods., Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 904 (Fed. Cir. 2005) (claim term "substantially flattened surfaces" where no plastic surface could literally be flat); *Senmed, Inc. v. Richard-Allan Med. Indus.*, 888 F.2d 815, 819-21 (Fed. Cir. 1989) ("on" in claim term skin "staple on said anvil surface" read literally meant the staple was in physical contact with the surface, though manufacturing tolerances required some gap between the staple and surface, causing the Court to declare, "Manufacturing tolerances are immaterial to the interpretation of claim language.").

⁸³ According to a 2002 American Bar Association survey of district courts (16 responding), 50% of the sixteen district courts responding admitted live testimony, and 33.3% admitted prior patents or publications. See Committee No. 601-Federal Trial Practice and Procedure, ABA Intellectual Prop. Law Section, 2002-2003 Annual Report, at 4, available at <http://www.abanet.org/intelprop/annualreport04/content/02-03/COMMITTEE%20NO%20601.pdf> (last visited Feb. 4, 2006) [hereinafter Committee Report].

⁸⁴ *Patents/Claim Construction: Judges Debate Legacy of Phillips: Landmark Ruling or "Nothing New?"* 70 Pat. Trademark & Copyright J. (BNA) 413 (Aug. 5, 2005) [hereinafter Seminar Report].

⁸⁵ See Committee Report, *supra* note 83 at 4-5 (Question 4 of the survey revealing that 78% of claim construction hearings occur after discovery but before trial; 6% occur during trial and 10% occur after closing arguments). See also Edward V. Filardi & Douglas R. Nemeck, *The Effect of Markman on Patent Litigation: Practical Considerations*, in *How to Prepare and Conduct Markman Hearings 2002*, at 225, 253 (PLI Intellectual Property Court, Handbook Series No. G-714, 2002) ("District court judges have shown an overwhelming willingness to revisit claim construction rulings."); Symposium, *A Panel Discussion: Claim Construction from the Perspective of the District Judge*, 54 Case W. Res. L. Rev. 671, 688 (2004) (Judge Ronald H. Whyte of the United States District Court for the Northern District of California, commenting that "if you do claim construction earlier, you do two constructions – the initial claim construction and then your final construction").

⁸⁶ *Nazomi Commc'ns, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1369-71 (Fed. Cir. 2005) (emphasis added and citations omitted). The Court similarly remanded to the district court for claim construction in *Bayer AG v. Biovail Corp.*, 279 F.3d 1340, 1349 (Fed. Cir. 2005) (refusing to construe claims before the district court provided a "complete record," explaining that "it would be premature for this court to engage in its own claim construction without, for instance, evidence of the meaning of the terms to one of skill in the art at the time of invention").

remand to the trial court “for further findings” is hardly a plea for help on a purely legal matter. Rather, it is an admission that facts underlie claim construction. Neither district courts nor the Federal Circuit can do their job without factual findings from extrinsic evidence.

A plausible argument in favor of the status quo is that the informal “self-education” approach ensures that sufficient facts will find their way into claim construction to ensure acceptable accuracy. Whether we call it self-education or factfinding, then, should not make a difference. However, that argument fails on several counts. First, the factual background learned by district court judges is not preserved on appeal. The Federal Circuit reverses approximately one-third of claim constructions, and we cannot be sure that it respects factual aspects in doing so.⁸⁷ Second, the informal approach encourages district courts to make evidentiary decisions not based on claim accuracy; rather, district courts tailor their evidentiary decisions to Federal Circuit preferences.⁸⁸ Some judges shun extrinsic evidence in *all Markman* hearings, simply because claim construction bears a matter-of-law label.⁸⁹ Still other judges admit extrinsic evidence though they find it unhelpful in construing claims, just to provide a full record for the Federal Circuit, anticipating a *Nazomi*-type remand for further “findings.”⁹⁰ Without formal doctrinal recognition of trial-level factual analyses, the accuracy of claim construction suffers, either through the Federal Circuit’s frequent reversals, or through district courts’ self-policing practices in anticipation of reversal or remand.

To summarize the problem, courts struggle to objectively determine a patentee’s intended meaning while facing inevitable interpretive gaps. Some district court judges handle these gaps by informally consulting extrinsic evidence and construing claims consistent with input from skilled artisans. Unfortunately, this crucial consultation of evidence is optional and not preserved on appeal because claim construction is purely a matter of law. When courts do not consider skilled artisans’ input, they risk reaching claim constructions that do not make sense to any skilled artisan, the patentee included. The problem calls for a formal role for skilled artisans’ input in claim construction, establishing a mandatory factual issue before district courts that would survive on appeal. At the same time, the appropriate role for the skilled artisans should be limited, leaving the ultimate question of claim construction to legal specialists.

Introducing a factual component to claim construction would require modifying the evidentiary approach to claim construction. This approach would rely on extrinsic evidence to a far greater extent than current practice, calling for a more principled evidentiary approach. For this, we can turn to trademark law, where courts have refined evidentiary methods in a similar form of term interpretation: trademark distinctiveness.

⁸⁷ Moore, *supra* note 6, at 236.

⁸⁸ Seminar Report, *supra* note 84, at 3 (commenting that district courts will rely more on intrinsic evidence after *Phillips* because “[o]therwise, we’ll be reversed”).

⁸⁹ Seminar Report, *supra* note 84, at 4 (Judge Young of the United States District Court for the District of Massachusetts, explaining that he does not accept expert testimony evidence in *Markman* hearings at all because “claim construction is a matter of law”).

⁹⁰ See Seminar Report, *supra* note 84, at 3 (Judge Susan G. Braden of the U.S. Court of Federal Claims, commenting that she would not exclude any evidence in order to avoid a remand: “The evidence is in the record, whether or not it was relied on. Let it all in.”).

II. TERM INTERPRETATION IN TRADEMARK DISPUTES

Term interpretation occurs in trademark law, subsumed within the distinctiveness doctrine. In a trademark dispute, the court begins its inquiry by asking whether a term is distinctive enough to serve as a trademark.⁹¹ The court answers by classifying the term on a distinctiveness spectrum.⁹² If the term falls within the “generic” or “merely descriptive” categories, then it cannot serve as a trademark. If it falls within a category of inherent distinctiveness or has acquired secondary meaning, then the term functions as a trademark by indicating the source of the product.⁹³ Distinctiveness determination inherently inquires what the mark means to certain observers. Like the claim construction inquiry, it involves vicarious term interpretation.

Several features distinguish vicarious term interpretation in trademark and patent law. First, distinctiveness is a question of fact.⁹⁴ Second, no perspective shift complicates the court’s interpretive inquiry; what message receivers (consumers) perceive is dispositive. Finally, in contrast to the restrictive evidentiary rules in claim construction, “any competent source” can be used to show distinctiveness.⁹⁵ Direct evidence of what message receivers perceive (akin to extrinsic evidence) is highly valuable. These particulars distinguish the inquiry from claim construction, which presents a purely legal question, features an implicit perspective shift, and shuns direct (or extrinsic) evidence of skilled artisans’ interpretation.

The difference between the doctrinal approaches to claim construction and trademark distinctiveness is no doubt justified. Determining the meaning of a trademark in the “text-free” context of a tangible good differs substantially from interpreting a claim term (sometimes a lengthy phrase) in the context of a written instrument. Nonetheless, the two forms of vicarious interpretation share similar elements and confounding interpretive issues: terms with multiple meanings, terms with special meanings to an elite group, and terms whose meanings change with

⁹¹ Courts conduct a two-prong inquiry in trademark infringement disputes. The first prong asks whether the trademark is valid; i.e., distinctive enough to function as a trademark. The second prong asks whether the defendant’s mark infringes; i.e., likely causes consumers to confuse the mark holder’s and defendant’s products. *See Sec. Ctr., Ltd. v. Nat’l Sec. Ctrs.*, 750 F.2d 1295, 1298 (5th Cir. 1985).

⁹² The distinctiveness spectrum includes four categories ranging in distinctiveness: generic, descriptive, suggestive, and fanciful. Generic and descriptive terms are ineligible for mark protection, while suggestive and fanciful terms are. *See Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763 (1992) (approving the classic formulation of the distinctiveness spectrum as established in *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4) (2d Cir. 1976)).

⁹³ The three categories of inherent distinctiveness are suggestive, arbitrary, and fanciful. A mark that initially served to describe the product may nonetheless serve as a trademark if over time the mark acquires a secondary meaning as a source indicator in the minds of relevant purchasers. *See Two Pesos*, 505 U.S. at 768-69.

⁹⁴ *See* McCarthy, *supra* note 100, § 11:3, at 11-9 (surveying the various circuits’ treatment of distinctiveness as a factual issue and noting the rare exception at the district court level). *But see Am. Online, Inc. v. AT&T Corp.*, 243 F.3d 812, 821 (4th Cir. 2001) (analogizing genericness determination to mixed factual and legal issues in construction of contracts, and determining as a matter of law that America Online’s mark “YOU HAVE MAIL” was generic, based in part on America Online’s and its competitors’ use of the phrase “functionally – consistently with that phrase’s common meaning”).

⁹⁵ *See, e.g., In re Nett Designs, Inc.*, 236 F.3d 1339, 1341 (Fed. Cir. 2001); *In re Merrill Lynch, Pierce, Fenner, and Smith, Inc.*, 828 F.2d 1567, 1570 (Fed. Cir. 1987).

time. Several aspects of the evidentiary approach in trademark distinctiveness are highlighted here.

A. *Distinctiveness Determination from Message Receivers' Perspective*

Trademark terms are “interpreted” from the perspective of the relevant class of consumers. The perspective of trademark distinctiveness falls squarely on the message receivers (buyers). The classic formulation of the genericness inquiry is “[w]hat do the *buyers* understand by the word for whose use the parties are contending? . . . It makes no difference whatever what efforts the [mark holder] has made to get them to understand more.”⁹⁶ The inquiry rejects a perspective shift from message receivers (buyers) to message sender (mark holder).⁹⁷ Courts respect the vicarious nature of the inquiry and generally refrain from substituting their interpretations for those of consumers when evaluating a mark’s distinctiveness: “It is the relevant consumers, not the courts, who determine whether the term signifies the genus of [products].”⁹⁸

Accordingly, the most valuable evidence is direct evidence of how the relevant purchasing public perceives the term: as a generic term or mere descriptor of a product class, or rather as a designator of a single product line or producer. Most valuable are consumer surveys,⁹⁹ which are practically “*de rigueur*” in trademark litigation.¹⁰⁰ In addition, courts consult a wide range of documentary sources resembling extrinsic evidence in patent cases,

⁹⁶ *Bayer Co. v. United Drug Co.*, 272 F. 505, 509 (S.D.N.Y. 1921).

⁹⁷ Bernacchi likens the classic formulation of the distinctiveness inquiry to a “message decoding” standard. See M.D. Bernacchi, *Trademark Meaning and Non-Partisan Survey Research: A Marriage of Necessity*, 30 Admin. L. Rev. 447, 448 (1978) “A trademark is interpreted in the light of its message decoding rather than its message encoding.” Donald A. Kaul, *Generic Trademarks*, at 120 n.107 (PLI Patents, Copyrights, Trademarks and Literary Property Course Handbook Series G4-3697, 1981) (agreeing with Bernacchi, at 119 n. 98, and noting that the message transmitted by the mark holder “cannot accurately determine the extent to which a trademark affects people constituting the relevant universe”).

⁹⁸ See *Berner Int’l Corp. v. Mars Sales Co.*, 987 F.2d 975, 982 (3d Cir. 1993); cf. *In re Merrill Lynch, Pierce, Fenner, and Smith, Inc.*, 828 F.2d 1567, 1569-70 (Fed. Cir. 1987) (quoting *Application of Automatic Radio Mfg. Co.*, 404 F.2d 1391, 1396 (C.C.P.A. 1969) (“It seems elementary that one must find out how people in the trade and the purchasers use the terms with respect to the involved goods in order to determine whether or not they are descriptive.”)).

⁹⁹ See e.g., *Nestle Co. v. Chester’s Mkt., Inc.*, 571 F. Supp. 763, 773 (D. Conn. 1983), *vacated*, 609 F. Supp. 588 (D. Conn. 1985) (remarking that consumer survey evidence is “of undeniable importance in a case of this kind as it is the most practical and useful way of assessing public opinion”); *Gimix, Inc. v. JS&A Group, Inc.*, No. 80 C 6592, 1982 U.S. Dist. LEXIS 10731, at *2-3, 213 U.S.P.Q. (BNA) 1005, 1006 (N.D. Ill. 1982) (chastising both parties for failing to produce survey evidence and holding them “at fault for such laxness”); see also Ralph H. Folsom & Larry L. Teply, *Surveying “Genericness” in Trademark Litigation*, 78 Trademark Rep. 1, 10-11 (1988) (“survey evidence . . . is now the single most important type of evidence in genericness litigation”);

¹⁰⁰ See J. Thomas McCarthy, 2 McCarthy on Trademarks and Unfair Competition § 12:14, at 12-36 (4th ed. 2005).

including dictionaries, articles from trade journals, newspapers, and other publications.¹⁰¹ Indeed, “any competent source” is acceptable as evidence.¹⁰² Documentary evidence also assumes an important evidentiary role in the classification of marks as generic, descriptive or suggestive.¹⁰³

B. *The Vicarious Inquiry in Trademarks: What Does the Term Mean to the Relevant Purchasing Public at a Particular Time as a Matter of Fact?*

The vicarious inquiry of trademark distinctiveness may be phrased as: what does a trademark mean to the relevant purchasing public at a particular time in the context of the goods or services? On a general level, the vicarious inquiries of distinctiveness determination and claim construction share common elements: (1) the meaning of a term, (2) to the relevant message receivers, (3) at a particular time (the time of filing in patents, or the time of registration, or gain or loss of distinctiveness in trademarks). Yet the two inquiries differ in their legal labels: factual in trademark law, legal in patent law. Each element in the trademark context is discussed separately here.

1. The Meaning of the Mark or Term

At first glance, classifying a simple word or phrase used as a trademark may not seem to be a form of term interpretation. But many judges who have classified borderline generic or descriptive trademarks would disagree. Determining a mark’s distinctiveness requires pondering complexities and nuances of language that defy formulaic analysis.¹⁰⁴ One judge contemplating the genericness of “You Have Mail” remarked that “a debate over whether a word or phrase is being used in a context that communicates merely its common meaning can quickly become as metaphysical as the study of language itself.”¹⁰⁵

¹⁰¹ *In re Northland Aluminum Prods., Inc.*, 777 F.2d 1556, 1559 (Fed. Cir. 1985) (“evidence of the public’s understanding of the term may be obtained from any competent source”); *Glover v. Ampak, Inc.* 74 F.3d 57, 59 (4th Cir. 1996) (“[E]vidence may come from purchaser testimony, consumer surveys, dictionary entries, trade journals, newspapers and other publications.”); *Birtcher Electro Med. Sys., Inc. v. Beacon Labs., Inc.*, 738 F. Supp. 417, 421 (D. Colo. 1990) (evidence of generic status found in articles from professional journals).

¹⁰² See, e.g., *In re Nett Designs, Inc.*, 236 F.3d 1339, 1341 (Fed. Cir. 2001); *In re Merrill Lynch, Pierce, Fenner, and Smith, Inc.*, 828 F.2d 1567, 1570 (Fed. Cir. 1987).

¹⁰³ See Rita M. Irani, *The Importance of Record Evidence to Categorize Marks as Generic, Descriptive, or Suggestive*, 83 Trademark Rep. 607, 607-08 (1993). Even when consumer surveys are available, documentary evidence of word usage plays an important role, since courts discount surveys with flawed or questionable methodologies.

¹⁰⁴ See *Banff, Ltd. v. Federated Dep’t Stores, Inc.*, 841 F.2d 486, 489 (2d Cir. 1988) (commenting that “placing a mark in one of these four categories is far from an exact science, and . . . placing a mark in its proper context and attaching it to one of the four labels [is] a tricky business at best.”). Compare *Phillips v. AWH Corp.*, 415 F.3d 1303, 1324 (Fed. Cir. 2005), cert. denied, 2006 WL 386393 (U.S. Feb. 21, 2006) (“there is no magic formula or catechism for conducting claim construction”).

¹⁰⁵ *Amer. Online, Inc. v. AT&T Corp.* 243 F.3d 812, 820 (4th Cir. 2001).

Borderline generic and descriptive marks present interpretive challenges because of the need to interpret the marks in context. The context of the good itself informs the mark's meaning to relevant purchasers,¹⁰⁶ as does the textual environment of the mark's presentation to the public, taking into account part of speech and modifiers used with the mark.¹⁰⁷ Furthermore, courts may conduct difficult textual analyses of documentary evidence showing how the mark holder, competitors, and third parties use the mark. The textual context in newspaper articles, publications, instructional product guides, and advertisements all bear on the meaning of a mark.¹⁰⁸ Linguistic experts often aid courts in navigating through this "complex world of etymology, connotation, syntax, and meaning."¹⁰⁹

2. The Relevant Message Receivers

In trademark law, courts vicariously inquire what a term means to the relevant message receivers, or the relevant purchasing public.¹¹⁰ These message receivers may comprise a technologically elite group, such as manufacturers of semiconductors, medical doctors, and computer programmers.¹¹¹ Courts precisely define the relevant purchasing public so as not to over- or under-include actual and potential purchasers.¹¹²

¹⁰⁶ For example, "windows" is generic when in the context of panes of glass spanning the opening of a wall, but perhaps not in the context of computer operating systems.

¹⁰⁷ See, e.g., *Bayer Co. v. United Drug Co.*, 272 F.505, 511-12 (S.D.N.Y. 1921) (finding "Aspirin" to be generic for the drug acetyl salicylic acid, in part because Bayer presented the mark to consumers as "Bayer – Tablets of Aspirin," implying that "Aspirin" functioned as a generic noun "following the significant word 'of'" and that "Bayer" acted as a source identifier).

¹⁰⁸ See generally Irani, *supra* note 103.

¹⁰⁹ See *In re Nett Designs, Inc.*, 236 F.3d 1339, 1341 (Fed. Cir. 2001) ("In the complex world of etymology, connotation, syntax, and meaning, a term may possess elements of suggestiveness and descriptiveness at the same time. No clean boundaries separate these legal categories. Rather, a term may slide along the continuum between suggestiveness and descriptiveness depending on usage, context and other factors that affect the relevant public's perception of the term."); Helene D. Jaffe & Robert G. Sugerman, *The Use of Experts and Survey Evidence in Copyright, Trademark and Unfair Competition Litigation*, in Practising Law Institute: 419 Patents, Copyrights, Trademarks and Literary Property Course Handbook Series 429, 519 (Nov. – Dec. 1995) ("The expert testimony most often offered on issues of [trademark] validity is that of lexicographers, etymologists, linguists, and philologists who render opinions on the meaning of words.").

¹¹⁰ The Senate Report to the Trademark Clarification of Act of 1984 clarified that "the test of genericism is whether the relevant consuming public perceives a mark as an indication of source." S. Rep. No. 98-627, at 1 (1984), as reprinted in 1984 U.S.C.C.A.N. 5718, 5718. See also *Magic Wand, Inc. v. RDB, Inc.*, 940 F.2d 638, 641 (Fed. Cir. 1991) (identifying "the test for genericness [as] the primary significance of the mark to the relevant public limited to actual or potential purchasers of the goods or services.").

¹¹¹ See, e.g., *Narton Corp. v. STMicroelectronics, Inc.*, 305 F.3d 397, 404 (6th Cir. 2002) (holding that "smart power" was a generic name of a type of integrated circuit to the target group of professionals in the semiconductor industry, including manufacturers, customers, suppliers, vendors, and the trade and technical press); *Loglan Inst., Inc. v. Logical Language Group, Inc.*, 962 F.2d 1038, 1041 (Fed. Cir. 1992) (target group whose perception is relevant for the use of symbolic language was a small group of persons who are involved in the area; LOGLAN was held a generic name of a type of symbolic logical language); *Intel Corp. v. Advanced Micro Devices, Inc.*, 756 F. Supp. 1292, 1297 (N.D. Cal. 1991) (finding that "386" was a generic name for a type of microprocessor to the target

Sometimes the relevant purchasing public splits on the mark's meaning. Some message receivers may assign a generic meaning to the term while others see it as a brand designator. To resolve this issue, courts apply the primary significance test,¹¹³ which in effect amounts to a majority-usage-controls test.¹¹⁴ If the majority of the relevant public primarily understands the mark to refer to the genus of goods, then the term's primary significance is a generic name.¹¹⁵ If, on the other hand, only a minority of the relevant public sees the mark as generic and the majority understands the term to mean a particular producer of goods, then trademark protection attaches.¹¹⁶ Majority and minority usages of the term are established numerically by consumer surveys.

group; here, the original equipment manufacturers who bought microprocessors to incorporate into computers, not end users of personal computers); *Ross-Whitney Corp. v. Smith Kline & French Labs.*, 207 F.2d 190, 195 (9th Cir. 1953) (holding that "DEXEDRINE" brand dextroamphetamine sulfate was non-generic to druggists and prescribing physicians); see also McCarthy, *supra* note 100, § 12:5, at 12-15 ("A 'relevant public' could be composed of a relatively small group of highly trained and knowledgeable professional customers for a particular specialized product or service.").

¹¹² See, e.g., *Magic Wand, Inc. v. RDB, Inc.*, 940 F.2d 638, 641 (Fed. Cir. 1991) (affirming the Trademark Trial and Appeal Board's denial of petition to cancel registration of "TOUCHLESS" trademark based solely on evidence that operators and manufacturers of car wash equipment perceived the term as generic, since they comprised a small part of the relevant purchasing public (here, largely automobile owners and operators in addition to vendors, operators, and manufacturers of washing services)).

¹¹³ See *Kellogg Co. v. Nat'l Biscuit Co.*, 305 U.S. 111, 113 (1938) (stating that a producer has the exclusive right to use a term when "the primary significance of the term in the minds of the consuming public is not the product but the producer"). The primary significance test is a longstanding solution to the common dual-meaning problem. The test was first articulated by Judge Learned Hand in *Bayer Co. v. United Drug Co.*, 272 F.505, 509 (S.D.N.Y. 1921), and courts consider the 1984 Amendments to the Lanham Act to codify that test. The relevant provision reads in part: "The primary significance of the registered mark to the relevant public . . . shall be the test for determining whether the registered mark has become the generic name of goods or services on or in connection with which it has been used." 15 U.S.C. § 1064(3) (2000).

¹¹⁴ McCarthy, *supra* note 100, § 12-6, at 12-16.1.

¹¹⁵ See, e.g., *King-Seely Thermos Co. v. Aladdin Indus., Inc.*, 321 F.2d 577, 579 (2d Cir. 1963) (determining that the principal significance of "thermos" was a generic name for vacuum insulated container when 75% of the public so indicated in a consumer survey); cf. *Feathercombs, Inc. v. Solo Prods. Corp.*, 306 F.2d 251, 256 (2d Cir. 1962) ("A mark is not generic merely because it has *some* significance to the public as an indication of the nature or class of an article In order to become generic the *principle* significance of the word must be its indication of the nature or class of an article, rather than an indication of its origin.").

¹¹⁶ See, e.g., *E.I. DuPont de Nemours & Co. v. Yoshida Int'l, Inc.*, 393 F. Supp. 502, 526-27 (E.D.N.Y. 1975) (holding that the term "TEFLON" was entitled to trademark protection because Plaintiff established TEFLON's brand-name status in a consumer survey (68% of the relevant universe identified it as a brand name and 31% regarded it as generic) and further because defendant failed to show that TEFLON's principal significance was a common noun); *Ty, Inc. v. Softbelly's, Inc.*, 353 F.3d 528, 530-31 (7th Cir. 2003) (finding that the primary significance of "BEANIES" was a trademark and not a generic term, based on a survey where 60% of consumer-responders recognized the term as a brand name).

3. The Relevant Time Period

Occasionally in genericness challenges, the court must determine the meaning of a mark to the relevant purchasing public at a particular time in the past. Such an occasion may arise when an accused infringer contends that the term was generic at the time the trademark holder first adopted the mark; or that he first used his mark before plaintiff's merely descriptive mark had acquired secondary meaning; or that plaintiff's mark became generic since its registration. The court may have to discern the meaning of the mark to the relevant purchasing public years or even decades hence.¹¹⁷

Although extremely retrospective interpretations occur infrequently, two extraordinary cases illustrate the range of useful evidentiary sources when consumer surveys or direct testimony is impractical.¹¹⁸ In *Microsoft Corp. v. Lindows.com, Inc.*, the accused infringer sought to establish that Microsoft's "WINDOWS" trademark was generic for computer operating systems before Microsoft adopted the mark.¹¹⁹ Both parties presented evidence from the early 1980s on how the relevant purchasing public (all owners and users of Intel-compatible computers) perceived the term "windows" in the context of computer graphical operating environments. The evidence included competitors' use of the term, articles and publications, computer dictionaries, Microsoft documents, testimony by Microsoft employees, and, lastly, testimony by Microsoft's linguistics expert who reviewed twenty-six general-purpose

¹¹⁷ See, e.g., *Berner Int'l v. Mars Sales Co.*, 987 F.2d 975, 983 (3d Cir. 1993) (reversing district court's determination that plaintiff's trademark "air door" was generic at the time of its registration thirty years ago and remanding for proper determination of genericness); *Feathercombs, Inc. v. Solo Prods. Corp.* 306 F.2d 251, 255 (2d Cir. 1962) (holding that nine years prior the term "Featherlight" was merely descriptive of hair combs and had not developed secondary meaning necessary for trademark protection, and therefore defendant's use of the term "Feathercombs" could not infringe); *Nartron Corp. v. STMicroelectronics, Inc.*, 305 F.3d 397, 403-404 (6th Cir. 2002) (affirming finding that the term "Smart Power" to denote electric power circuits had become generic in the semiconductor industry in the twenty years since the plaintiff registered the mark); *Microsoft Corp. v. Lindows.com, Inc.*, No. 2:01-cv-02155 (W.D. Wash. Jan. 22, 2003) (denying accused infringer's motion for summary judgment after finding a genuine issue of material fact regarding the genericness of the term "windows" to denote computer operating systems when plaintiff first began using the mark over twenty years ago), reprinted in Jane C. Ginsburg, Jessica Litman, & Mary L. Kevlin, *Trademark and Unfair Competition Law, Cases and Materials* 85 (3d ed. Supp. 2005).

¹¹⁸ Retrospective genericness challenges do not necessarily lead to a burdensome and expensive avalanche of evidence. Limited documentary evidence may suffice to establish or negate a triable issue. See, e.g., *Am. Online, Inc. v. AT&T Corp.*, 243 F.3d 812, 819 (4th Cir. 2001) (finding support for the genericness of the "YOU HAVE MAIL" mark in instructional guides authored by developers of the UNIX operating system published in 1981 and 1985 that used the phrase in a functional way); *Harley Davidson, Inc. v. Grottanelli*, 164 F.3d 806, 808-09, 809 n.4 (finding support for the genericness of "hog" based on its use by motorcycle enthusiasts' in newspaper articles in the 1960s and 1970s, and the appearance of "hog" in dictionaries, including a 1984 edition and a 1992 edition documenting the slang use of the term since 1967).

¹¹⁹ *Microsoft Corp. v. Lindows.com, Inc.*, No. 2:01-cv-02155 (W.D. Wash. Jan. 22, 2003), reprinted in Ginsburg et al., *supra* note 117, at 85. The district court determined that the proper time period consider whether the "WINDOWS" mark was generic was prior to the date Microsoft Windows 1.0 entered the marketplace in November 1995. *Microsoft Corp. v. Lindows.com, Inc.*, 69 U.S.P.Q.2d 1863, 1864 (W.D. Wash.), available at 2004 WL 329250 (W.D. Wash. Feb. 10, 2004) (declaring that the Court would instruct the jury to consider the November 1985 date on the genericness issue and granting Microsoft's motion to determine and certify the controlling question of law regarding the proper time at which to measure whether "windows" was generic), appeal denied, 2004 WL 1208044 (9th Cir. May 19, 2004).

dictionaries dating from 1973 to 2002 to support his opinion that “windows” had never been used generically as a computer term since it emerged in the early 1980s. The court found a genuine issue of material fact regarding the primary significance of “windows” to the relevant purchasing public as generic for graphical operating environments or designating Microsoft’s specific product (Windows 1.0).¹²⁰

A similar retrospective genericness analysis arose in *Nartron Corp. v. STMicroelectronics, Inc.* There, the accused infringer established a genuine issue of material fact that “SMART POWER” (the asserted mark) was generic for the general class of power devices that have control circuits. As evidence that the term became generic since the mark was registered in 1982, the defendant produced a 150-page chronology detailing the use of the term “smart power” in the semiconductor industry as shown by trade publications, conferences, symposia, advertisements, newspapers, trade journals, third-party uses (testimony and documentary), patents, and trademark and copyright registrations.¹²¹

To summarize, the elements in the trademark distinctiveness resembles those in claim construction. In both cases, courts seek to determine the context-dependent meaning of a term to a particular group. Common interpretive difficulties include terms with multiple meanings and terms with meanings that change over time. But unlike claim construction, trademark doctrine employs a factual inquiry, emphasizing evidence resembling extrinsic evidence in claim construction. Through a combination of surveys, expert testimonies, and documentary evidence, trademark law uses a principled approach to address difficult interpretive issues that confound claim construction as well.

III. A PROPOSED LIMITED AND REALISTIC ROLE FOR THE SKILLED ARTISAN IN CLAIM CONSTRUCTION

A. *The skilled artisan’s interpretation of the specification should be a question of fact, underlying claim construction as a matter of law.*

This Note proposes a solution to the fact/law conundrum of claim construction by crafting a limited and formal role for the skilled artisan. Specifically, the skilled artisan’s interpretation of a claim term as used in the specification would be a matter of fact. The skilled artisan’s account of the patentee’s intended meaning would provide a valuable touchstone from which to construe the claims. Judges would construe claims as a matter of law, seeking a construction consistent with the skilled artisan’s interpretation of the specification. Claim construction, then, would remain overall a matter of law exclusively within the province of the

¹²⁰ Ginsburg et al., *supra* note 117, at 90. The parties have since settled, with Windows agreeing to change its corporate and brand names to Linspire. See David M. Klein & Daniel C. Glazer, *Patents and Trademarks Broken Windows? Questions Linger on Microsoft’s Ability to Protect Its Brand*, New York Law Journal, Sept. 21, 2004, at 5.

¹²¹ *Nartron Corp. v. STMicroelectronics, Inc.*, 305 F.3d 397, 403-408 (6th Cir. 2002) (affirming the district court’s grant of summary judgment in favor of the accused infringer on the issue of genericness, agreeing with the district court that the defendant’s 150-page chronology of uses of “smart power” established a genuine issue of material fact that the term had become generic and overcome the presumption that the mark was not generic; and further finding that mark holder failed to rebut the defendant’s evidence or provide any evidence establishing a genuine issue of material fact with respect to the issue of genericness).

court, as it must be according to the Supreme Court in *Markman v. Westview Instruments, Inc.*¹²² But that legal construction would encompass a factual component to the extent that the judge relied on the specification for support.

Purely legal questions may arise as to whether the claims should be construed differently or inconsistently with the skilled artisan's understanding of the specification. For instance, the language surrounding the disputed term in the claim may indicate that the patentee intended different meanings in the claim and the specification. Or claim-specific canons of construction (such as claim differentiation or means-plus-function rules) might compel judges to depart from the specification-derived definition. These issues would be a matter of law, and a trial court's conclusion as to these issues would receive no deference on appeal. However, to the extent that the district court relied on the specification to support its construction, that aspect would be a factual finding reviewed for clear error.

Under the proposed methodology, most claim construction rulings would encompass factual questions, since judges almost invariably rely on the specification to construe claims. However, purely legal constructions would be possible when judges do not rely on the specification for support. The following discussion illustrates how the proposed mixed fact/law methodology might apply in practice.

B. Application of the Proposed Methodology

1. Factual Questions: Implicit and "Explicit" Definitions, Disputed Technical Terms, and Inconsistent Uses

When construing a disputed claim term, a court must consult the specification, the "single best guide" to the patentee's intended meaning.¹²³ The principle behind the proposed methodology is that skilled artisans have superior ability to resolve interpretive gaps and quandaries in the specification. Judges must seek assistance from skilled artisans in interpreting the specification and treat skilled artisans' account of the patentee's intended meaning as a matter of fact. Thus, judges would have to consult extrinsic evidence when relying on the specification, leaving to skilled artisans the task of resolving implicit (even "explicit") definitions, art-specific terms with multiple meanings, and inconsistent usages.

To resolve implicit definitions, courts could rely on expert testimony and documentary evidence, similar to the approach in trademark distinctiveness cases. Technical experts skilled in the relevant art could establish through documentary evidence what possible meanings of a disputed claim term existed in the art at the time of the invention. They would then indicate what clues in the specification led them to believe that the patentee intended one in particular. The expert would be free to interpret the term holistically in the context of the entire specification and background knowledge of the field. The judge would weigh documentary evidence and expert testimonies to find skilled artisans' interpretation of the term in the specification. The judge would then use that definition to construe the claims.

¹²² *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). See discussion Part III.C *infra*.

¹²³ *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996), quoted in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc), cert. denied, 2006 WL 386393 (U.S. Feb. 21, 2006).

The same approach should be used for explicit definitions in the specification. No matter how clear a definition seems on its face, skilled artisans should serve as an interpretive filter. Definitions in the specification are not written to comply with claim-drafting or caselaw-derived conventions and cannot simply be “plugged in” to the claims. Patentees speak naturally to their technically-skilled brethren to explain their inventions. But if patentees have to worry that a judge will later formally “construe” their words in the specification by importing them directly into the claims, they would be forced to choose language that sacrifices their communication to skilled artisans. Patentees cannot speak to two audiences simultaneously, each with different areas of expertise and word customs.¹²⁴ Thus, even explicit definitions in the specification should remain the domain of skilled artisans.

More challenging cases involve technical terms with multiple meanings in the art that shift over time. Here, courts could consult evidence revealing a snapshot of a term’s meaning at the time of filing. Such evidence might reveal which meaning the patentee intended to convey. For instance, evidence establishing technological limitations at the time of the invention could render a certain meaning implausible.¹²⁵ Or if the patentee left too few clues, the court could fairly assume that the patentee intended to use the term as the majority of skilled artisans did.¹²⁶ The trademark genericness cases discussed above illustrate how vast documentary evidence can create an anthology of a term’s meaning over decades, using technical dictionaries published prior to the filing date, patents, treatises, technical articles, industry group and agency standards, electronic databases, and internet-related surveys (depending on the date of the invention).¹²⁷

¹²⁴ *Merck & Co. v. Teva Pharmaceuticals USA, Inc.* is a recent cautionary tale illustrating this point. 395 F.3d 1364, 1369-70 (Fed. Cir. 2005), *reh’g denied*, 405 F.3d 1338 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 488, 163 L. Ed. 2d 384 (U.S. 2005). There, the Federal Circuit interpreted a lengthy technical phrase in the specification by focusing awkwardly on a single preposition (“about”). The entire definitional phrase read (in quotes): “about 70 mg of bone resorption inhibiting bisphosphonate selected from group consisting of alendronate, pharmaceutically acceptable salts thereof, and mixtures thereof, on an alendronic acid basis.” *Id.* at 1378. The dissenting judge and the district court judge (who had considered vast amounts of extrinsic evidence) believed that skilled artisans would attribute a different meaning to the phrase. *See id.* at 1380-81 (Rader, J., dissenting).

¹²⁵ This type of evidence was available in *Phillips Petroleum Co. v. Huntsman Polymers Corp.* and could have guided the Court to a better result, according to the dissenting judge. 157 F.3d 866, 878-79 (Fed. Cir. 1998) (Newman, J., dissenting). There, the disputed term “block copolymer” was understood by some skilled in the polymer art to mean that the polymer product consisted predominantly of block copolymer, while others believed that only a small amount was present. Expert testimony (rejected by the Court because extrinsic) revealed that a polymeric product consisting of predominantly block copolymer was impossible at the time of the invention using the patentee’s chosen monomers. *Id.* at 879. Under the majority’s construction, the term required that the product contain block copolymer that was “a not insignificant and identifiable portion of the molecules,” (*id.* at 871), arguably a meaning that would have meant the impossible to one skilled in that art at the time of filing.

¹²⁶ This approach might have helped in *ACTV, Inc. v. Walt Disney Co.*, where the disputed term underlying the claim construction issue (“uniform resource locator”) had not taken on a settled meaning at the time of filing. 346 F.3d 1082, 1088-89 (Fed. Cir. 2003). Some skilled artisans believed it referred to only absolute URLs, while others thought it referred to relative URLs as well. The intrinsic evidence did not definitely point to one definition or the other. The Court simply assumed the broader definition after finding no intention by the patentee to limit the term’s meaning. *Id.* at 1091. If evidence of majority usage of the term had been presented, an alternative approach would have been to assume that the patentee had used URL in the same way as the majority of those skilled in the art at the time of filing.

¹²⁷ *See supra* notes 119-121 and accompanying text.

These retrospective, documentary surveys need not always be so elaborate, though. If a term is common in the art, then a simple survey of all patents issued in a particular week by the Patent and Trademark Office might suffice.¹²⁸

Finally, trademark doctrine could assist in resolving inconsistent usages of a term in the specification.¹²⁹ This interpretive quandary might be resolved as a factual matter by surveying representative skilled artisans, similar to the consumer surveys in trademark law. Asked to discern what the patentee meant by his idiosyncratic use of a term, the surveyed artisans would read the specification (or the relevant portion) and give their impressions of the patentee's message or decide which of the parties' definitions comes closest. As in trademark surveys, the understanding by a majority of those surveyed would establish the term's meaning in the case.

2. Purely Legal Questions: No Reliance on the Specification and Deliberate Rejections of the Skilled Artisan's View

When a court does not rely on the specification to support a claim construction, then the issue is purely one of law. In such cases, judges are in their natural role as legal specialists and interpret only the portion of the patent addressed to them. The Federal Circuit apparently believes that specification-free interpretation of claim terms is possible when "the ordinary meaning of claim language as understood by a person of skill in the art may be apparent even to lay judges."¹³⁰ Under the proposed methodology, a claim construed without reliance on the specification would be a pure matter of law. These simple cases of construction do not present themselves "in many cases that give rise to litigation," and the norm is for courts to look to intrinsic evidence to determine the meaning of a claim term as understood by persons of skill in the art.¹³¹ Thus, this type of purely legal construction will occur infrequently.

¹²⁸ Judge Newman once conducted a "rough survey" of all patents claiming chemical compositions issued in a single week by the Patent and Trademark Office. *Exxon Chem. Patents v. Lubrizol Corp.*, 77 F.3d 450, 454 (Fed. Cir. 2006) (Newman, J., dissenting) (conducting a survey to satisfying in her mind that the listing of chemical ingredients was the standard way of claiming a chemical composition as a product and did not indicate the patentee's attempt to use a product by process claim). Her finding that all of those patents claimed chemical compositions by listing their ingredients resolved the claim construction issue as she saw it. *Id.*

¹²⁹ The survey approach and/or expert testimony might have helped the Court make sense of the patentee's cryptic use of the term saccharides in the specification in *Pfizer, Inc. v. Teva Pharmaceuticals USA, Inc.*, 429 F.3d 1364, 1373 (Fed. Cir. 2005) (discussing the patentee's use of the term in the specification both broadly to include sugar derivatives ("[m]annitol, lactose, and other sugars are preferred") and narrowly to include only sugars ("i.e., sugars"). Input from skilled artisans (testimony or survey evidence) might have clarified which, if any, types of sugar derivatives the patentee contemplated other than mannitol.

¹³⁰ The *Phillips* Court cited *Brown v. 3M* for this principle. See *Phillips v. AWH, Inc.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc), *cert denied*, 2006 WL 386393 (U.S. Feb. 21, 2006) ("In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.") (citing *Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001)).

¹³¹ *Phillips*, 415 F.3d at 1314. Even when the language of the claim seems clear on its face, the court will still confirm its construction by drawing support from the specification, which would implicate a factual issue. See, e.g., *Cannon Rubber Ltd. v. The First Years, Inc.*, No. 05-1063, 2005 U.S. App. LEXIS 28879, at *11 (Fed. Cir. Dec. 28, 2005) (construing "in" in "diaphragm in the body" and noting it is a simple, non-technical term that does not require elaborate interpretation, but nonetheless looking to the specification for confirmation); *Callicrate v. Wadsworth*

A second purely legal issue of construction arises when courts deliberately reject the skilled artisan's understanding of the specification and construe the term inconsistently with that understanding. For instance, a minor claim-drafting error might alert legal specialists but would not influence skilled artisans' interpretation of the specification.¹³² This case would present no factual issue pressing the court to determine how skilled artisans understood the specification.

C. *Markman and the Jury Question*

The strongest objections to the proposed approach sound from the Supreme Court in *Markman v. Westview Instruments, Inc.* The Court held that construction of claims was exclusively within the province of the court and that the Seventh Amendment afforded no right to a jury trial.¹³³ The holding arguably precludes any factual question. If the test for the existence of an underlying factual matter were whether the jury was required to decide the overall issue, then this proposal awaits another day before the Court. However, the Supreme Court has not declared claim construction purely a matter of law, devoid of factual underpinnings; rather the Court endorsed "treating interpretive issues as purely legal"¹³⁴ while recognizing the mixed nature of claim construction.¹³⁵ Nor has the Court definitively decided to what extent the Seventh Amendment right to a jury has "crystallized the law/fact distinction."¹³⁶ The viability of the proposed method turns on whether *Markman* tolerates the skilled artisan's interpretation of the specification as an underlying factual question.

If the subsidiary factual question were for the judge (not the jury), then *Markman* presents no barrier for this proposal. That possibility, perhaps technically assertable, runs counter to the traditional allocation of tasks between the judge and jury. No assertion so bold is

Mfg., Inc., 427 F.3d 1361, 1367-68 (Fed. Cir. 2005) (finding that the claim language itself and straightforward mechanical technology gave the term its meaning, but nonetheless confirming that meaning by looking to the specification).

¹³² See, e.g., *Chef Amer., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004), where the Court construed "to" (the disputed term) admittedly inconsistently with any skilled artisan's understanding of the corresponding phrase in the specification. The patent claimed a baking method that required heating dough "to a temperature in the range of about 400 degrees F. to 850 degrees F." U.S. Pat. No. 4,761,290 col.5, ll.35-41 (filed Jan. 20, 1987) (emphasis added). According to the Court, that claim recited the temperature of the *dough*, not the *oven*, even though the result would be a "charcoal briquette [sic]." 358 F.3d at 1373. Without doubt, one of ordinary skill in the art would have understood the phrase in the specification differently than the *Chef America* Court construed it. The patent described the invention as a process for producing "a cooked dough product having a light, flaky, crispy texture," an impossible result if the dough were literally heated to the claimed range. '290 Patent col.2 ll.57-66. The Director of Baking Assurance of the American Institute of Baking also testified that one skilled in the art would understand the text to mean heating the oven (not the dough) to that temperature, especially since the disclosed examples used "at," not "to." *Id.* at 1375. Here, the Court deliberately adopted a claim construction of the grammar-challenged claim inconsistent with the skilled artisan's understanding in the specification.

¹³³ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996).

¹³⁴ *Id.* at 391.

¹³⁵ *Id.* at 378, 388 (referring to claim construction as a "mongrel practice," falling "somewhere between a pristine legal standard and a simple historical fact").

¹³⁶ *Id.* at 384 n.10.

made here. In this proposal, the question of the skilled artisan's perceived meaning of a claim term in the specification would go to the jury.

Plainly, *Markman* does not embrace the jury's involvement in the interpretation of a patent, whether the terms are from the claims or the specification. In the Court's view, historical practice does not support the jury's role in determining the definition of terms in the specification.¹³⁷ Moreover, according to the Court, "contemporary practice" allocates the interpretation of all "terms within a land patent" to the judge, not the jury.¹³⁸ Finally, the Court held that the patent "must be interpreted as a whole," a task "within the exclusive province of the court."¹³⁹ No doubt the Court would eye even a limited interpretive role by the jury with skepticism.

Several factors argue against treating interpretive matters in the specification as purely legal just like the claims. First, patent law does not uniformly insist on interpreting a patent as a whole. Instead, the three written description requirements bifurcate the patent, isolating the specification for factual evaluation in whole or in part.¹⁴⁰ The written description inquiry asks the jury to determine whether the specification adequately describes the invention such that the skilled artisan would believe that it was in the patentee's possession at the time of filing. According to the Federal Circuit's predecessor court, the inquiry is inherently factual because it "depends on the nature of the invention and the amount of knowledge imparted to those skilled in the art by the disclosure."¹⁴¹ In the enablement inquiry, the jury determines whether the specification sets forth sufficient information to enable one skilled in the art to make and use the invention.¹⁴² In *Battin v. Taggart*, the Supreme Court *insisted* that the jury (not the judge) decide the enablement issue "from the facts in the case."¹⁴³ If the jury is the appropriate actor to

¹³⁷ See *id.* at 380 ("Few of the case reports even touch upon the proper interpretation of disputed terms in the specification at issue, and none demonstrates that the definition of such a term was determined by the jury.") (citations omitted); *cf. id.* at 382 (noting that the earliest English reports describing the construction of patent documents "show the judges construing the terms of the specifications").

¹³⁸ *Id.* at 382-83.

¹³⁹ *Id.* at 383 n.8.

¹⁴⁰ The written description requirement is a matter of fact. *Intirtool, Ltd. v. Texar Corp.*, 369 F.3d 1289, 1294 (Fed. Cir. 2004). Best mode is a question of fact. *Northern Telecom Ltd. v. Samsung Elecs. Co., Ltd.*, 215 F.3d 1281, 1286-87 (Fed. Cir. 2000). Enablement is a matter of law with underlying facts warranting jury consideration. *BJ Servs. Co. v. Halliburton Energy Servs., Inc.* 338 F.3d 1368, 1371-72 (Fed. Cir. 2003) ("Although enablement is a question of law, because of the factual nature of the inquiry in this case, it is amenable to resolution by the jury.").

¹⁴¹ *In the Application of Wertheim*, 541 F.2d 257, 262-63 (C.C.P.A. 1976) ("The primary consideration is factual and depends on the nature of the invention and the amount of knowledge imparted to those skilled in the art by the disclosure. . . . [M]echanical rules [cannot] substitute for an analysis of each case on its facts to determine whether an application conveys to those skilled in the art the information that the applicant invented the subject matter of the claims.")

¹⁴² See *LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1344-45 (Fed. Cir. 2005).

¹⁴³ *Battin v. Taggart*, 58 U.S. 74, 85 (1854) (ruling that the district court erred in taking questions of infringement and validity away from jury and stating: "It was the right of the jury to determine from the facts in the case, whether the specifications, including the claim, were so precise as to enable any person skilled in the structure of machines, to make the one described. This the statute requires, and of this the jury are to judge.")

determine *whether* the specification conveys sufficiently descriptive and enabling information to those skilled in the art, it logically follows that the jury may also find *what* information the specification conveys to those artisans.

Secondly, the role of the jury proposed here would leave interpretation of the patent exclusively to the judge. The jury merely determines what meaning the skilled artisan perceives as the patentee's intended message, analogous to finding the primary significance of a trademark to the relevant purchasing public. In both cases, the relevant message receivers do the interpreting, not the jury. To elaborate, the jury's task is to determine (1) what meanings of a term existed in the art at the time of filing, and (2) which of those meanings one of ordinary skill in the art believes the patentee intended. The judge may use the meaning that the jury selected as the most credible account by skilled artisans. Or the judge may reject any account by skilled artisans if compelled by a legal rule of construction. Thus, the interpretation of the claims remains in the court's exclusive province.

Finally, a subsidiary factual question comports with the Court's final justification for jury-free construction: intrajurisdictional uniformity.¹⁴⁴ Since claim construction would remain a matter of law overall, the court's construction would preclude the patentee from asserting a different construction against another defendant in the same district. Furthermore, a factual component would enhance interjurisdictional uniformity by ensuring consistent treatment of extrinsic evidence across all district courts.

As important as uniformity in claim interpretation are accuracy and trial-level certainty, neither of which received due consideration in *Markman*. The joint interpretation proposed here ensures accurate construction of claims. The technical artisan and legal specialist each gather information from the patent that they understand best in order to decipher the patentee's intended meaning. The technical artisan decodes the technical language in the specification, while the legal specialist deciphers the abstract claim language that evolves with caselaw. The combination of technical and legal understanding ensures accurate determination of claim scope. In court, the interpretive team consists of the trial judge and skilled artisan representatives. Because of the formal factual element, the accuracy of this joint interpretation would be preserved on appeal absent clear error. The enhanced trial-level certainty should result in lower appeal and reversal rates.

CONCLUSION

The Federal Circuit's doctrine increasingly excludes the skilled artisan's perspective from claim construction. The patentee's intended meaning, rather than skilled artisans' perceived meaning, assumes paramount importance. Accordingly, the Court restricts evidence to patent documents authored by patentee. Limiting the skilled artisan's interpretive role is realistic, since claims are properly the domain of legal specialists. However, the Court overshoots by shunning extrinsic evidence and eliminating the skilled artisan's perspective completely. The skilled artisan's interpretive input is a necessary factual component underlying claim construction.

A better approach would be to establish a limited role for the skilled artisan in claim interpretation. The skilled artisan's understanding of terms as used in the specification would be a question of fact, and courts would construe claims as a matter of law consistent with that factual finding. The approach requires modifying *Phillips'* evidentiary scheme to accommodate

¹⁴⁴ 517 U.S. at 391.

extrinsic evidence. Trademark law offers a principled approach to new evidentiary hurdles, where the factual inquiry of trademark distinctiveness parallels the claim construction inquiry. The joint interpretation proposed here ensures accuracy and trial-level certainty in claim construction. While the factual element would introduce the jury into the claim construction process, the jury's non-interpretive role would not run afoul of *Markman*.