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Brief of Professors Peter S. Menell, J. Jonas Anderson, and Arti K. Rai as Amici Curiae in Support of Neither Party, *Teva v. Sandoz*, No. 13-854, slip op.

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**In The
Supreme Court of the United States**

TEVA PHARMACEUTICALS USA, INC., ET AL.,

Petitioners,

v.

SANDOZ, INC., ET AL.,

Respondents.

**On Writ Of Certiorari To The
United States Court Of Appeals
For The Federal Circuit**

**BRIEF OF PROFESSORS PETER S. MENELL,
J. JONAS ANDERSON, AND ARTI K. RAI AS
AMICI CURIAE IN SUPPORT OF NEITHER PARTY**

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**STATEMENT OF INTEREST
OF *AMICI CURIAE*¹**

The authors of this brief are law professors who study and teach intellectual property law.

Professor Peter S. Menell holds a law degree and a doctorate degree in economics. Since law school, he has focused a significant portion of his research on intellectual property law. Soon after joining the University of California at Berkeley School of Law faculty in 1990, he laid the groundwork to establish the Berkeley Center for Law & Technology (BCLT). Since its founding in 1995, BCLT has sought to foster the beneficial and ethical understanding of intellectual property (IP) law and related fields as they affect public policy, business, science and technology through a broad range of public policy conferences, collaboration with government agencies (U.S. Patent & Trademark Office, Federal Trade Commission), interaction with intellectual property practitioners and technology companies, and research and educational initiatives. BCLT has provided a valuable

¹ Pursuant to Sup. Ct. R. 37.6, *amici* note that no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amici curiae* made a monetary contribution to its preparation or submission. We have received letters from Petitioners and Respondents Sandoz Inc. and Momenta Pharmaceuticals Inc. consenting to the filing of this brief. Respondents Mylan Pharmaceuticals Inc., Mylan Inc., and Natco Pharma Ltd. have authorized blanket consent with the Clerk's Office.

ongoing vantage point for viewing the evolution of the high technology field as well as the challenges posed by legal protection for computer software for inventors, start-up companies, entrepreneurs, established technology companies, patent professionals, government officials, jurists, and the public. Since 1998, Professor Menell has organized and taught more than 50 judicial education programs for the Federal Judicial Center on intellectual property law, including an annual multi-day program for 30-45 federal judges that covers patent case management with particular attention devoted to claim construction. That experience led him to develop and co-author a treatise for federal judges. See Peter S. Menell, Lynn H. Pasahow, James Pooley & Matthew D. Powers, Fed. Judicial Ctr., *Patent Case Management Judicial Guide* (1st ed. 2009, 2d ed. forthcoming (adding Steven C. Carlson and Jeffrey G. Homrig)). From June 2012 through June 2013, Professor Menell served as one of the inaugural Thomas Alva Edison Visiting Professionals at the U.S. Patent & Trademark Office (USPTO) where he devoted a substantial part of his work to improving patent claim clarity. These efforts have informed his research on claim construction jurisprudence and patent case management.

Professor J. Jonas Anderson teaches patent law and trade secret law at American University's Washington College of Law and has also taught intellectual property-related courses at the University of California at Berkeley School of Law. He previously clerked

on the United States Court of Appeals for the Federal Circuit and worked as a patent litigation associate at the Silicon Valley Office of Latham & Watkins. His research has focused on evaluating the institutional design of the patent system and improving the clarity of patent claims.

Professor Arti K. Rai teaches patent law and administrative law at Duke Law School. Professor Rai has also taught intellectual property law at Harvard, Yale, and the University of Pennsylvania law schools. Prior to entering academia, Professor Rai clerked for a trial judge who presided over numerous patent cases in the Northern District of California; worked on patent litigation as an associate at the Washington D.C. office of Jenner & Block; and was a litigation attorney at the U.S. Department of Justice. From 2009 to 2010, Professor Rai served as the Administrator of the Office of External Affairs at the USPTO. As External Affairs Administrator, Professor Rai led the policy analysis of legislation aimed at improving patent quality that ultimately became the America Invents Act of 2011. Professor Rai is also a public member of the Administrative Conference of the United States. Based on this background, Professor Rai is committed to improving judicial and administrative processes in patent law.



SUMMARY OF ARGUMENT

In the seminal *Markman* decision, this Court sought to usher in a more effective, transparent patent litigation regime through its ruling that “the construction of a patent, including terms of art within its claim, is exclusively within the province of the court.” *Markman v. Westview Instruments, Inc. (Markman II)*, 517 U.S. 370, 372 (1996). Notwithstanding the constitutional right to patent jury trials, this Court ruled that claim construction would no longer be conducted by lay jurors in shrouded deliberations. Rather, based on historical analysis of the role of juries in patent cases, characterization of the nature of claim construction, and a comparative assessment of judicial institutional capabilities, this Court concluded that the Seventh Amendment right of trial by jury did not extend to claim construction and that trial judges were better equipped than juries to resolve the mixed fact/law controversies inherent in construing disputed patent claim terms.

In the aftermath of *Markman II*, the Federal Circuit adhered to its *Markman* decision, *Markman v. Westview Instruments, Inc. (Markman I)*, 52 F.3d 967 (1995) (*en banc*) – that claim construction is a “purely legal issue” subject to plenary *de novo* review, see *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448, 1451 (Fed. Cir. 1998) (*en banc*) – downplaying this Court’s more nuanced description of claim construction as a “mongrel practice” merely “within the province of the court.” *Markman II*, 517 U.S. at 372, 378. Over nearly two decades of experience in

the post-*Markman* era, it has become apparent that the Federal Circuit's adherence to its *Markman I* plenary *de novo* appellate review standard has frustrated district courts' distinctive capabilities to apprehend and resolve the factual disputes inherent in claim construction determinations, undermined the transparency of the claim construction process, discouraged detailed and transparent explanations of claim construction reasoning, and produced unusual and at times alarming levels of appellate reversals. These effects have cast doubt on the predictability of patent litigation, discouraged settlements, delayed resolution of patent disputes, and run up the overall costs of patent litigation.

This Court's *Markman II* decision points toward a balanced, structurally sound, legally appropriate, hybrid standard of appellate review that would promote more accurate and efficient patent dispute resolution. Factual determinations underlying claim construction rulings should be subject to the "clearly erroneous" standard of review, while the Federal Circuit should retain *de novo* review over the ultimate claim construction decision. In this manner, district court judges, in their capacity as fact-finders, could better surmount the distinctive challenges posed by the technical, mixed fact/law controversies inherent in patent claim construction. A hybrid standard would encourage district judges to identify the "person of ordinary skill in the art" and, where appropriate, build fuller, more transparent records to support their claim construction decisions. These effects would promote clearer substantive analysis,

more settlements following claim construction and trial, more effective appellate review, and fewer reversals and remands.

A hybrid appellate standard is unlikely to undermine the national uniformity of the patent system. In any event, concerns about national uniformity and clarity of patent claims are more appropriately addressed through improvements to the patent prosecution process, meaningful implementation of the 35 U.S.C. §112(b) claim indefiniteness standard, post-grant review and reexamination procedures, consolidation of claim construction through multi-district litigation, and adjustments to substantive claim construction jurisprudence.



ARGUMENT

I. *Cybor's* Plenary *De Novo* Standard of Review Misapprehends the Mixed Fact/Law Nature of Patent Claim Construction

It has long been established that district judges must step into the shoes of persons having ordinary skill in the relevant art to resolve disputes as to proper construction of patent claim terms. More than a century ago, Professor William Callyhan Robinson explained that:

the court may have recourse to any testimony to explain the meaning of its language, or to expert evidence to ascertain the essential characteristics of the described invention

and the differences between it and other patented inventions, or to papers in the Patent Office which are connected with the patent or whose contents were known to the inventor at the date of his application, to show the significance which he attached to the terms that he employed.

2 WILLIAM CALLYHAN ROBINSON, *THE LAW OF PATENTS FOR USEFUL INVENTIONS* 248 (1890) (footnote omitted). Robinson further explained that “of whatever aid the courts avail themselves, their interpretation must be based upon the patent as it stands, and when its scope is once fairly apparent it can neither be limited nor extended by extraneous evidence.” *Id.*

This same basic framework applies today. Yet the Federal Circuit’s *en banc Cybor* ruling, recently reaffirmed in *Lighting Ballast Control LLC v. Philips Electronics North America Corp.*, 744 F.3d 1272 (Fed. Cir. 2014) (*en banc*), holds that patent claim construction is a pure question of law, overriding the more nuanced interplay of documentary sources (the patent record) and historical facts (understandings of skilled artisans).²

This Court’s *Markman II* decision provides the foundation for resolving this conundrum. In construing the term “inventory” as used in a claim to

² Although Professor Robinson characterized claim construction as a “question of law,” it was unclear whether he was referring to the ultimate question. Furthermore, he wrote before the promulgation of FED. R. CIV. P. 52.

a dry-cleaning inventory control system, the jury accepted the patentee expert's testimony regarding the understanding of the term in the art and accordingly found infringement. On post-trial motions, the judge overturned the jury's verdict, explaining that the expert's testimony regarding the definition of "inventory" conflicted with "the ordinary and customary meaning of [this term], as well as the obvious meaning intended by the patentee, determined from the specifications, the drawings and the file histories of the original patent and the patent-in-suit." *Markman v. Westview Instruments, Inc.*, 772 F. Supp. 1535, 1537 (E.D. Pa. 1991).

In upholding the district court's judgment, a majority of the Federal Circuit sitting *en banc* concluded that the construction of patent claims is properly "a matter of law" that should not be given to the jury because of "the fundamental principle of American law that 'the construction of a written evidence is exclusively with the court.'" *Markman I*, 52 F.3d at 978 (citations omitted). Over vehement dissents, the majority concluded that "[b]ecause claim construction is a matter of law, the construction given the claims is reviewed *de novo* on appeal." *Id.* at 979.

Rebuffing the patentee's Seventh Amendment challenge, the majority also masked the inherently factual nature of claim construction by arguing that although the trial judge may use:

certain extrinsic evidence that the court finds helpful and reject[] other evidence as

unhelpful, and resolv[e] disputes *en route* to pronouncing the meaning of claim language as a matter of law based on the patent documents themselves, the court is *not* crediting certain evidence over other evidence or making factual evidentiary findings. Rather, the court is looking to the extrinsic evidence to assist in its construction of the written document, a task it is required to perform.

Id. at 981 (italics in original) (footnote omitted).

Although this Court affirmed the Federal Circuit’s conclusion that the Seventh Amendment did not require that claim construction be resolved by juries, it reached this result through very different reasoning. *See Markman II*, 517 U.S. at 372. Failing to find clear historical evidence of how claim construction was handled in 1791, this Court turned to “the relative interpretive skills of judges and juries and the statutory policies that ought to be furthered by the allocation.” *Id.* at 384. The Court came down firmly on the side of allocating claim construction to the trial judge in view of judges’ “training in exegesis [of written instruments],” *id.* at 388, notwithstanding what it characterized as the “mongrel practice” of patent claim construction, *id.* at 378. In a critical passage, the Court explained:

It is, of course, true that credibility judgments have to be made about the experts who testify in patent cases, and in theory there could be a case in which a simple credibility judgment would suffice to choose between experts whose testimony was equally

consistent with a patent's internal logic. But our own experience with document construction leaves us doubtful that trial courts will run into many cases like that. In the main, we expect, any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document, required by the standard construction rule that a term can be defined only in a way that comports with the instrument as a whole. Thus, in these cases a jury's capabilities to evaluate demeanor, to sense the 'main-springs of human conduct,' or to reflect community standards, are much less significant than a trained ability to evaluate the testimony in relation to the overall structure of the patent. The decisionmaker vested with the task of construing the patent is in the better position to ascertain whether an expert's proposed definition fully comports with the specification and claims and so will preserve the patent's internal coherence. We accordingly think there is sufficient reason to treat construction of terms of art like many other responsibilities that we cede to a judge in the normal course of trial, notwithstanding its evidentiary underpinnings.

Id. at 389-90 (citations omitted).

In contrast with the Federal Circuit's *Markman I* decision, this Court did not deem patent claim construction a "pure question of law." Rather, consistent with its characterization of claim construction as a "mongrel practice," this Court noted merely that

claim construction was a matter “exclusively within the province of the court.” *Markman II*, 517 U.S. at 372.

Barely two weeks after the Supreme Court’s *Markman II* ruling, a Federal Circuit panel heavily discounted the use of extrinsic evidence, warning that “[a]llowing the public record to be altered or changed by extrinsic evidence introduced at trial, such as expert testimony, would make this right meaningless.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). In contrast, various other Federal Circuit opinions viewed claim construction as a “mixed question of law and fact” for which fact finding would be set aside only upon a showing of clear error. *See Metaullics Sys. Co. v. Cooper*, 100 F.3d 938 (Fed. Cir. 1996); *Wiener v. NEC Elecs., Inc.*, 102 F.3d 534, 539 (Fed. Cir. 1996) (emphasizing a passage from *Markman II* noting that claim construction “falls somewhere between a pristine legal standard and a simple historical fact”).

This split precipitated the Federal Circuit’s *en banc* review of the appellate claim construction standard in *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998). In a sharply divided decision, the Federal Circuit majority reaffirmed that claim construction is purely a legal issue subject to *de novo* appellate review: “the standard of review in *Markman I* . . . was not changed by the Supreme Court’s decision in *Markman II*, and we therefore reaffirm that, as a purely legal question, we review claim construction *de novo* on appeal including any

allegedly fact-based questions relating to claim construction.” *Id.* at 1456. The majority downplayed this Court’s characterization of claim construction as a “‘mongrel practice’” “‘falling somewhere between a pristine legal standard and a simple historical fact’” as merely “prefatory comments.” *See Cybor*, 138 F.3d at 1455 (quoting *Markman II*, 517 U.S. at 378, 388).

The *Cybor* majority justified plenary *de novo* review on a misapprehension of the block quotation from pages 389-90 of *Markman II* excerpted above. This Court noted that its own “experience with document construction” left it “doubtful” that there would be many cases “in which a simple credibility judgment would suffice to choose between experts whose testimony was equally consistent with a patent’s internal logic.” *Id.* at 389. It then observed that “[i]n the main, we expect, any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document, required by the standard construction rule that a term can be defined only in a way that comports with the instrument as a whole.” *Id.* From this inference, this Court reasoned that the trial judge – possessing the

trained ability to evaluate the testimony in relation to the overall structure of the patent . . . is in the better position to ascertain whether an expert’s proposed definition fully comports with the specification and claims and so will preserve the patent’s internal coherence. We accordingly think there is sufficient reason to treat construction of terms of

art like many other responsibilities that we cede to a judge in the normal course of trial, notwithstanding its evidentiary underpinnings.

Id. at 390.

While the sentence noting that “any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document” might be read in isolation to downplay the factual underpinnings of claim construction, the following sentence discussing the “many other responsibilities” ceded to the trial judge indicates that this Court intended the opposite. In that sentence, this Court analogized claim construction to rulings that a trial judge routinely resolves during the course of trial – rulings which are not subject to *de novo* review. See Steven Alan Childress, *Standards of Review Primer: Federal Civil Appeals*, 229 F.R.D. 267, 289-91 (2005) (observing that “[c]ourts commonly recite the deferential ‘abuse of discretion’ test as broadly and generally appropriate on review of evidence calls”).

That the *Cybor* majority missed this subtlety is apparent in its suggestion that “[n]othing in the Supreme Court’s opinion supports the view that the Court endorsed a silent, third option – that claim construction may involve subsidiary or underlying questions of fact.” *Cybor*, 138 F.3d at 1455. In the accompanying footnote to this sentence, the *Cybor* majority reasons that “[i]f this were so, surely the Supreme Court would have discussed whether subsidiary or underlying fact questions should be decided

by the judge or the jury.” *Id.* at 1455 n.4. This Court’s passage quoted above, however, analogizes the trial judge’s “trained ability to evaluate the testimony in relation to the overall structure of the patent” to the “many other responsibilities that we cede to a judge in the normal course of trial.” *Markman II*, 517 U.S. at 390. In so stating, this Court justifies leaving the entire claim construction exercise in the trial judge’s hands “notwithstanding its evidentiary underpinnings” – i.e., its factual character. *See id.* Following this logic, subsidiary factual issues in claim construction rulings, “like the many other responsibilities that we cede to a judge in the normal course of a trial,” would be subject to a more deferential standard of review. *See id.*

In this way, *Cybor* overlooked the potential for subsidiary factual questions – such as whether a patent claim term has special meaning to a skilled artisan. Such understanding could well be trumped by the intrinsic record, as occurred in the *Markman* case. Nonetheless, *Cybor*’s rejection of any role for subsidiary fact-finding in claim construction determinations misapprehended essential aspects of the search for patent claim meaning. The Federal Circuit perpetuated this misreading of *Markman II* in its recent ruling upholding the *Cybor de novo* standard on *stare decisis* grounds. *See Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272 (Fed. Cir. 2014) (*en banc*). The dissent in *Lighting Ballast* confronted the appropriate standard of review and concluded that *de novo* review of claim construction rulings “misapprehends the Supreme

Court's guidance, contravenes the Federal Rules of Civil Procedure, and adds considerable uncertainty and expense to patent litigation." *See id.* at 1297 (O'Malley, J., dissenting).

II. The Post-*Markman* Era Has Revealed Serious Failings of Plenary *De Novo* Review of Claim Construction Rulings

Over the nearly two decades since the *Markman* decisions, it has become apparent that the Federal Circuit's adherence to its *Markman I* appellate standard has frustrated district judges' distinctive capabilities to apprehend and resolve the factual disputes underlying claim construction determinations, undermined the transparency of the claim construction process, discouraged detailed and transparent explanations of claim construction reasoning, and produced unusual and at times alarming levels of appellate reversals.

Following *Markman*, trial judges initially sought to apply their experience gathering and weighing evidence, including expert testimony, to this challenging new responsibility. While properly emphasizing the primacy of intrinsic evidence to claim construction, the *Vitronics/Cybor* line of cases unfortunately steered district judges away from learning from skilled artisans and using evidentiary techniques for resolving disputes among purported experts. An unusually high reversal rate for claim construction rulings following the *Cybor* decision signaled dissensus.

See Kimberly A. Moore, Markman *Eight Years Later: Is Claim Construction More Predictable?*, 9 LEWIS & CLARK L. REV. 231, 232-34 (2005). The *de novo* standard severely constrained, if not effectively deprived, district judges of resort to an essential tool – focused evidentiary hearings – for resolving disputes over the meaning of scientific and technological terms. With rare exception, federal district judges lack science or engineering training. See S. Jay Plager, *Abolish the Court of Federal Claims? A Question of Democratic Principle*, 71 GEO. WASH. L. REV. 791, 797 (2003) (observing that “[m]ost district court judges do not have scientific training, and most have not chosen law clerks with technical or patent backgrounds”). Yet claim construction doctrine demands that judges interpret patent claims from the standpoint of “persons having ordinary skill in the art.”

Although *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), afforded trial judges greater leeway to gather extrinsic evidence, district judges have long since abandoned formal evidentiary proceedings as part of the claim construction process and steered clear of explaining claim construction rulings as based on any fact-finding. In research examining the effect of the *Phillips* decision on reversal rates and other aspects of patent claim construction, two of us found that the reversal rate for claim construction appeals has declined in the past decade. See Jonas Anderson & Peter S. Menell, *Informal Deference: A Historical, Empirical, and Normative Analysis of Patent Claim Construction*, 108 Nw. U. L. Rev. 1

(2013). Our research indicates, however, that the decline can be attributed to informal deference rather than improved fact-finding or more transparency in the decision-making process. The shadow of formal *de novo* review continues to cast doubt on the predictability of patent litigation, discourage settlements following claim construction and trial, delay resolution of patent disputes, and run up the overall costs of patent litigation. Although informal deference may well be an improvement over pure *de novo* review, it falls short of the proper division of responsibility between district and appellate courts and represents at best an entirely discretionary and panel-dependent regime.

More fundamentally, the *Cybor* majority's failure to acknowledge the role for fact-finding deprives the patent adjudication system of the evidentiary record and systematic analysis essential to sound administration of justice. Because of the *de novo* standard, district judges lack motivation to delve beyond the intrinsic record. In fact, as this case illustrates, litigants risk reversal on appeal to the extent that they persuade a judge to rely upon extrinsic evidence. Furthermore, trial judges appropriately perceive that relying on extrinsic evidence in their claim construction ruling could be grounds for reversal. As a result, the skilled artisan's perspective is rarely reflected in trial judges' *Markman* rulings. For this reason, the Federal Circuit makes nearly all of its claim construction decisions without reference to the skilled artisan's perspective. *See Anderson & Menell, supra*, at 5

(finding that only 13 of the 778 (1.7%) claim construction appellate opinions issued from 2000 to 2010 even identify the applicable skilled artisan).

In addition to compromising the care and logic that comes from building a detailed factual record and preparing a reasoned opinion, the plenary *de novo* review regime undermines the appellate process. The parties, the public, and the appellate court lack the fully developed record and reasoned opinions that would enable them to know all of the relevant input and what influenced the trial judge's decision. Instead, plenary *de novo* review substitutes independent review of an anemic record – typically limited to the intrinsic evidence. *See* Anderson & Menell, *supra*, at 45 (finding that in construing claim terms, the Federal Circuit has consulted extrinsic sources only 26.3% of the time since 2005).

The private and social costs of the plenary *de novo* standard of review include lower quality decision-making at both the trial and appellate levels, higher costs of litigation as a result of more appeals and retrials following reversals, greater litigation uncertainty, longer case pendency and litigation costs as a result of fewer and delayed settlements, the distraction and disruption of litigation on the technology marketplace, and the added burdens on the particular judges and the larger judicial system.

Many of these costs derive from the discouraging effect of plenary *de novo* review on early settlement of

patent cases. The cost of an appeal typically pales in comparison to the costs of litigating a patent case through trial. Consequently, parties who lose at trial are more likely to pursue an appeal under the plenary *de novo* standard than they would under a more deferential regime. This not only delays resolution, but also results in a substantial number of retrials. Overall, the plenary *de novo* standard has raised the cost of patent litigation without any discernible benefits in terms of improved decision-making.

III. A Hybrid Appellate Review Standard for Claim Construction Rulings

Federal Rule of Civil Procedure 52(a)(6) provides that “[f]indings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, and the reviewing court must give due regard to the trial court’s opportunity to judge the witnesses’ credibility.” *See Anderson v. City of Bessemer City*, 470 U.S. 564, 574-75 (1985).

Thus, the Federal Circuit must defer to trial judges’ factual determinations in claim construction rulings. Since the patent document defines the invention, the Federal Circuit retains a substantial check on the overall claim construction determination through *de novo* authority over the intrinsic record and over whether a trial court’s factual finding contradicts limitations on the the patent’s scope reflected in the intrinsic evidence – the patent document and file wrapper.

The basis for “deferring” to lower court claim constructions is not trial judges’ policy expertise or experience vis-à-vis the Federal Circuit but rather the inherently factual aspects of some parts of patent claim construction – in particular, the meaning of a contested claim term from the perspective of a skilled artisan at a particular moment in time. The mongrel character of patent claim construction indicates that a reviewing court should be cautious in overturning a district court’s well-supported claim construction absent clear intrinsic evidence to the contrary. Unlike a statute (which is viewed from a lay perspective), the intrinsic evidence in a patent case is viewed from the standpoint of a skilled artisan.

The process of understanding this standpoint should begin, as current claim construction practice does, with the trial judge attempting to determine the plain and ordinary meaning of the patent claim terms within the context of the claim. The trial judge should then determine whether the claim term has particular meaning based on its usage in the patent specification, technical art, and/or claim drafting convention. Cf. John M. Golden, *Construing Patent Claims According to Their “Interpretive Community”*: A Call for an Attorney-Plus-Artisan Perspective, 21 HARV. J.L. & TECH. 321, 348-62 (2008). The more deferential standard of appellate review would invigorate trial courts’ development of the factual record. Although this standard could produce “battles of the experts,” it should not do so any more in claim construction cases than it does in other areas in which

courts must view documents or other evidence from a specialized standpoint.

Furthermore, hybrid standards are already pervasive in patent law. For example, as this Court has long recognized, the pivotal patent validity doctrine of nonobviousness requires the trial court to make factual findings that underpin the ultimate legal conclusion. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 426-27 (2007); *Graham v. John Deere Co.*, 383 U.S. 1 (1966). Moreover, as this Court has emphasized, the Federal Circuit must follow ordinary legal rules by reviewing factual findings under the deferential standard of Rule 52(a). *See Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809, 810-11 (1986) (*per curiam*).

It is important for trial judges to incorporate into their analysis the overarching notice goal of the patent system. As Professor Robinson explained more than a century ago, intrinsic evidence should play a central and critical role in claim construction. But courts should not be constrained in their use of expert witnesses in determining the manner in which a patent would be interpreted by one of ordinary skill in the art. Indeed, in some cases, it may be impossible to interpret a claim correctly without the assistance of experts in the relevant field.

In practice, this proposed standard of review, consistent with *Markman II*, will introduce a hybrid character to appellate review depending on the quality of the patent disclosure, nature of the disputed

claim term (technical, common parlance, or glossary), evidentiary record, and the rationale for the trial court's construction. Where the patent clearly defines the disputed term, there will be little or no role for extrinsic evidence or fact-finding. But where the patent instrument is opaque, the specification does not address the term (as occurs with some frequency when claims are amended), or the term arguably diverges from common parlance, then the judge's resolution of conflicting testimony takes on much greater moment.

Such an approach comports with Federal Rule of Civil Procedure 52(a) and mirrors the general framework in which district judges operate. Over time, the district courts will likely better account for the fact/law distinction in their Patent Local Rules and *Markman* hearings. For example, courts could require litigants to more clearly set forth the intrinsic and extrinsic bases for claim construction, requiring a party seeking to bring forward expert testimony to disclose any gaps in the intrinsic record that skilled artisan testimony could fill. Furthermore, courts could innovate in the use of focused evidentiary hearings, possibly in conjunction with tutorials, for efficiently developing a factual record for claim construction.

IV. The Hybrid Appellate Review Standard, “National Uniformity,” and the Role of the USPTO

The Federal Circuit based its plenary *de novo* standard in part on promoting better notice, certainty, and national uniformity of patent boundaries. The logic appears to be that as the national appellate patent court, the Federal Circuit is uniquely positioned to provide nationally uniform interpretations of patent boundaries. While these are worthy goals, it is doubtful that plenary *de novo* review of claim construction rulings can ever serve these goals effectively due to structural and practical problems.

At the structural level, courts lack authority to declare the boundaries of a patent beyond the parties in suit. See *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313 (1971). Thus, the Federal Circuit’s interpretation of a patent in one case cannot be asserted offensively by the patentee in a later infringement action against other defendants. At most, it can bar the patentee from seeking an alternative interpretation. Because the patent system has no mechanism for conclusively establishing patent scope with regard to all potential infringers, the certainty that flows from appellate interpretations is not iron-clad, as subsequent defendants can potentially bring new evidence or more effective advocacy to bear on claim meaning. While plenary *de novo* review increases the likelihood that the Federal Circuit will construe a patent in the same manner across cases, it also decreases certainty by making district court

claim constructions more vulnerable to reversal. *See* Kelly Casey Mullally, *Legal (Un)Certainty, Legal Process, and Patent Law*, 43 LOY. L.A. L. REV. 1109 (2010).

If the Federal Circuit's construction of a term in a particular patent claim cannot bind even subsequent defendants against whom that patent claim term is asserted, it can hardly create any binding guidance for litigation of third-party patents that happen to use the same term. Indeed, given the variability of patent claim terms, and the fact that terms must be construed in light of the specification and other intrinsic evidence, even the precedential value of a given construction is likely to be limited. Precedential value is likely to arise not from any conclusion the Federal Circuit reaches about a particular term but rather from generalizable rules it applies in reaching that conclusion. *See* Arti K. Rai, *Engaging Facts and Policy: A Multi-Institutional Approach to Patent System Reform*, 103 COLUM. L. REV. 1035, 1086-87 (2003). With respect to those generalizable rules, which represent the pivotal components of a nationally uniform patent system, our proposed hybrid standard would mandate *de novo* review.

At a more practical level, the sheer number of patents (and patent claims) issued annually by the Patent Office severely limits the Federal Circuit's ability to provide more than a thimble-sized solution to an ocean-sized challenge. The Federal Circuit is able to review a very small subset of the millions of patent claims granted each year, and this review

occurs only after years of litigation and typically millions of dollars spent on litigation.

Concerns about the clarity of patent claims are more appropriately addressed through improvements to the patent prosecution process, post-grant review and reexamination, consolidation of claim construction through multi-district litigation, and adjustments to substantive claim construction jurisprudence. The Patent Office should play a more central role in achieving clear patent boundaries at the front end and developing taxonomies, search tools, and other mechanisms for reinvigorating the patent system's role in resource planning. *See generally* Peter S. Menell & Michael J. Meurer, *Notice Failure and Notice Externalities*, 5 J. LEGAL ANALYSIS 1 (2013). This Court's decision in *Nautilus, Inc. v. Biosig Instruments, Inc.*, No. 13-369, 2014 WL 2440536 (June 2, 2014) encourages patent applicants and the USPTO to place greater emphasis on patent claim clarity.

The Patent Office should impose greater responsibility on patentees to delineate their claims at the front end of the patent process by requiring applicants to: (1) set forth their claims in a standardized, detailed format that delineates each claim restriction in a separate field; (2) specifically define any potentially ambiguous claim terms – including terms of degree (such as “approximately,” “substantially”); (3) designate a default dictionary for guiding the interpretation of any undefined claim terms; (4) hyperlink to or otherwise specify the corresponding “structure, material, or acts” in means-plus-function claim

elements; and (5) consent to recordation of interviews. See Peter S. Menell, *Promoting Patent Claim Clarity* (Nov. 1, 2012), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2171287; Peter S. Menell, *It's Time to Make Vague Software Patents More Clear*, WIRED (Feb. 7, 2013), <http://www.wired.com/opinion/2013/02/its-time-to-make-vague-software-patents-more-clear/>. The dispute over the meaning of the claim term in this case (as well as the many other cases, including *Phillips*, dealing with the presumption that a claim is governed by 35 U.S.C. §112(f)) could likely have been avoided if the USPTO required applicants to simply check a box to indicate whether or not they intended to invoke 35 U.S.C. §112(f). The court can encourage such policies more generally by developing a *contra proferentem* (interpretation against the draftsman) principle for claim construction.

The past decade has revealed that the Patent Office's lax review of claim boundaries is penny-wise and pound-foolish. Failure to scrutinize claim language at the front end of the patent system causes far more harm than good, even if only a small percentage of patents are litigated. It has led to proliferation of poorly drafted patent claims, which contributes to reckless patent assertion, complicates technology licensing, fuels uncertainty in patent litigation, and runs up the litigation and social costs of the patent system.

The Patent Office is paying greater attention to problems of patent notice. It has implemented guidelines for patent examiners that appear to be

increasing rejections of unclear or poorly drafted claims and it is systematically engaging stakeholders in discussions of what other actions it can take. The USPTO is also making vigorous use of the new post-grant review powers under the America Invents Act. Arti K. Rai, *Improving (Software) Patent Quality Through the Administrative Process*, 51 HOUS. L. REV. 503 (2013).

To be sure, much remains to be done. It is unrealistic, however, to believe that courts can make a dent in the patent notice problem through plenary *de novo* review. To the contrary, such a standard undermines the development of an informed record and cannot override the established legal principles and a formal rule, FED. R. CIV. P. 52(a)(6), supporting measured deference to subsidiary factual determinations.

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CONCLUSION

A hybrid standard of appellate review of claim construction rulings would leverage district court judges' special ability to develop the evidentiary record required to resolve the mixed fact/law controversies inherent in patent claim construction while enhancing the quality of appellate review. According greater deference to trial courts through clear error review of the factual underpinnings of claim construction rulings that are supported by sound evidentiary processes, properly documented records, and transparent reasoning would promote more systematic,

well-founded claim construction analysis. Combining deferential review of factual findings with *de novo* review of the overarching claim construction determination – focused on ensuring that claim construction comported with the intrinsic evidence and on ensuring that the trial court followed generally applicable rules of claim construction – would provide the appropriate appellate safeguard.

Respectfully submitted,

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