No. 13-854

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 FOR PETITIONERS

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QUESTION PRESENTED

Rule 52(a) of the Federal Rules of Civil Procedure provides that in matters tried to a district court, the court's "[f]indings of fact ... must not be set aside unless clearly erroneous."

The question presented is as follows:

Whether a district court's factual finding in support of its construction of a patent claim term may be reviewed *de novo*, as the Federal Circuit requires (and as the panel explicitly did in this case), or only for clear error, as Rule 52(a) requires.

PARTIES TO THE PROCEEDING

Petitioners (collectively referred to as "Teva") are Teva Pharmaceuticals USA, Inc., Teva Pharmaceutical Industries Ltd., Teva Neuroscience, Inc., and Yeda Research and Development Co. Ltd. All were plaintiffs-appellees below.

Respondents are Sandoz Inc., Momenta Pharmaceuticals Inc. (together "Sandoz"), Mylan Pharmaceuticals Inc., Mylan Inc., and Natco Pharma Ltd. (together "Mylan"). All were defendants-appellants below.

Sandoz International GmbH and Novartis AG were defendants in the district court, but were not parties in the court of appeals.

RULE 29.6 STATEMENT

The parent companies of Teva Pharmaceuticals USA, Inc. are: Orvet UK Unlimited, Teva Pharmaceutical Holdings Cooperative U.A., Ivax LLC (f/k/a IVAX Corporation), Teva Pharmaceuticals Europe, B.V., and Teva Pharmaceutical Industries Ltd.; Teva Pharmaceutical Industries Ltd. is the only publicly traded company that owns 10% or more of Teva Pharmaceuticals USA, Inc.

Teva Pharmaceutical Industries Ltd. has no parent company, and no publicly traded company owns 10% or more of Teva Pharmaceutical Industries Ltd.

The parent companies of Teva Neuroscience, Inc. are: IVAX Corporation, Teva Pharmaceuticals USA, Inc., Orvet UK Unlimited, Teva Pharmaceutical Holdings Cooperative U.A., Ivax LLC (f/k/a IVAX Corporation), Teva Pharmaceuticals Europe, B.V., and Teva Pharmaceutical Industries Ltd.; Teva Pharmaceutical Industries Ltd. is the only publicly traded company that owns 10% or more of Teva Neuroscience, Inc.

Yeda Research and Development Co. Ltd. is wholly owned by Yeda Trust; no publicly traded company owns 10% or more of Yeda Research and Development Co. Ltd.

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Stephen Breyer, Introduction, in Fed. Judicial Ctr., Reference Manual on Scientific Evi- dence 6-7 (3d ed. 2011)
Fed. Judicial Ctr., <i>Reference Manual on</i> Scientific Evidence (3d ed. 2011)
Judge James F. Holderman & Halley Guren, <i>The Patent Litigation Predicament in the</i> <i>United States</i> , 2007 U. Ill. J.L. Tech. & Pol'y 1
5 Margaret N. Kniffin, Corbin on Contracts § 24.30 (rev. ed. 1998)
David Krinsky, The Supreme Court, Stare Decisis, and the Role of Appellate Deference in Patent Claim Construction Appeals, 66 Md. L. Rev. 194 (2006)
12 Richard A. Lord, <i>Williston on Contracts</i> § 34:19 (4th ed. 2012)
 Hon. Kathleen M. O'Malley et al., A Panel Discussion: Claim Construction from the Perspective of the District Judge, 54 Case W. Res. L. Rev. 671 (2004)
Restatement (Second) of Contracts (1981): § 212(2) & cmt. e
9C Charles Alan Wright & Arthur R. Miller, Federal Practice & Procedure § 2587 (3d ed. 2008)
Charles Alan Wright, <i>The Doubtful</i> <i>Omniscience of Appellate Courts</i> , 41 Minn. L. Rev. 751 (1957)

BRIEF FOR PETITIONERS

The interpretation of a term in a patent claim can make the difference between finding the claim valid or invalid, infringed or not infringed. This Court assigned the task of interpreting patents to district courts, not to juries, in Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996). As a result, district courts in patent litigation often hold a "Markman hearing" to determine the scope of the patent's claims. These hearings may be "live hearings with argument and testimony, sometimes covering several days."¹ The parties identify which terms of the patent claims have a disputed meaning, and both sides offer their proposed constructions, generally supported by the patent's written description, its prosecution history, and evidence of how a person of skill in the art would have understood the disputed terms at the time of the patent application. The district court then resolves that dispute, often making express findings of fact. The parties then litigate infringement and validity in accordance with that claim construction.

But once the case is appealed, the Federal Circuit jettisons all of the district court's work resolving the disputed scientific facts and starts over. Even though Federal Rule of Civil Procedure 52(a)(6) requires all courts of appeals—including the Federal Circuit—to review district courts' factfinding deferentially, the Federal Circuit instead reviews *de novo* "any allegedly fact-based questions relating to claim

¹ *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 659 F.3d 1369, 1374 (Fed. Cir. 2011) (O'Malley, J., dissenting from denial of rehearing en banc).

construction." Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc). As determined dissenters from that misguided rule have pointed out for nearly twenty years, patents are written to be read by skilled artisans, not by lawyers, and factfinding is often necessary to determine the accepted scientific meaning of particular terms or the baseline scientific understanding against which a patent must be read. The Federal Circuit does not disagree that fact evidence often is necessary to claim interpretation; it merely prefers to find the facts for itself, unconstrained by the district court's findings. That is precisely what Rule 52(a)(6) forbids.

This Court should reverse the Federal Circuit's decision and hold that factual findings made during claim construction—like all other factual findings must be reviewed deferentially on appeal.

OPINIONS BELOW

The decision of the court of appeals (Pet. App. 1a-25a) is reported at 723 F.3d 1363. The district court's claim-construction decision (Pet. App. 26a-72a) is reported at 810 F. Supp. 2d 578. A previous decision of the district court denying Sandoz's motion for summary judgment (J.A. 426a-38a) is reported at 749 F. Supp. 2d 130. The district court's post-trial findings of fact and conclusions of law (J.A. 848a-1113a) are reported at 876 F. Supp. 2d 295.

JURISDICTION

The judgment of the court of appeals was entered on July 26, 2013. Pet. App. 2a. A petition for rehearing was denied on October 18, 2013. *Id.* at 84a-85a. The petition for a writ of certiorari was filed on January 16, 2014, and granted on March 31, 2014. The jurisdiction of this Court rests on 28 U.S.C. § 1254(1).

STATUTORY PROVISION INVOLVED

Rule 52(a) of the Federal Rules of Civil Procedure provides in pertinent part:

Findings and conclusions by the court; judgment on partial findings

(a) FINDINGS AND CONCLUSIONS.

* * * *

(6) Setting Aside the Findings. Findings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, and the reviewing court must give due regard to the trial court's opportunity to judge the witnesses' credibility.

The remainder of Rule 52 and pertinent provisions of the Patent Act are reproduced in the appendix to this brief.

STATEMENT

A. The District Court Concluded, Based On Factual Findings, That Teva's Patent Has A Definite Meaning

Teva is a pharmaceutical company that markets Copaxone[®], the leading prescription drug for the treatment of multiple sclerosis. Respondents are generic drug companies that sought FDA approval to market generic formulations of Copaxone[®]. Teva brought patent-infringement actions, later consolidated, against respondents in the Southern District of New York, contending that respondents' generic products would infringe various patents held by Teva.

The only claim now at issue is the single claim of U.S. Patent No. 5,800,808. Contrary to the Federal Circuit's incorrect statement (Pet. App. 24a n.5), the '808 patent expires in September 2015. *See id.* at 80a-81a. The other claims previously at issue all expired on May 24, 2014.²

1. The Key Term Is "Average Molecular Weight"

The active ingredient in Copaxone[®], referred to as "copolymer-1," is a mixture of many polypeptide molecules. Each molecule consists of a chain of four amino acids linked in essentially random sequence but in specified proportions. The chains vary in length and amino-acid sequence, and therefore in molecular weight. The '808 patent and the other patents previously at issue all reflect the inventors' discovery that, contrary to the prevailing understanding at the time, copolymer-1 promised therapeutic effectiveness against multiple sclerosis with an improved side-effect profile when the mixture contained polypeptide molecules of relatively *low* molecular weight.

The patent therefore claims copolymer-1 with particular molecular-weight characteristics. J.A. 1145a (patented method "result[s] in copolymer-1 having a molecular weight of about 5 to 9 kilodaltons").³ It is undisputed that the claim term "molecular weight"

 $^{^2}$ This brief therefore refers only to the '808 patent ("the patent") and omits reference to the other similarly worded claims in what the Federal Circuit called "Group I."

³ A dalton (Da) is a unit of molecular weight, roughly the weight of one proton. A kilodalton (kDa) is 1000 daltons.

in the context of a mixture like copolymer-1 refers to *average* molecular weight. *See, e.g.*, Pet. App. 41a, 62a n.10. The key question in the courts below was whether "average molecular weight" was indefinite as used in the patent.

2. Relying On Expert Testimony, The District Court Found That "Average Molecular Weight" Was Not Indefinite Because Skilled Artisans Would Have Understood Its Meaning

The district court engaged in extensive factfinding about the science reflected in the patent and prosecution history. The court of appeals later reached its own conclusion about these facts without giving any deference to those findings.

Respondents contended that "average molecular weight" had multiple potential meanings and rendered the patent invalid for "indefiniteness"—failure to satisfy the Patent Act's requirement that a claim be definite enough to be understood by a person skilled in the art. See 35 U.S.C. § 112 ¶ 2 (2006); Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2124 (2014).⁴ The burden to show indefiniteness, by clear and convincing evidence, fell on respondents. See Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238 (2011).

⁴ Congress amended Section 112 in 2011 in ways not material here. The amendments do not apply to this case, which involves patents filed before September 16, 2012. *See* 35 U.S.C. § 112 note (Supp. V 2011). References in this brief to Title 35 are to the pre-2011 version.

At the time of the invention, the term "average molecular weight," in isolation, had several potential meanings to a person skilled in the art. *See* Pet. App. 4a-5a, 41a. The three meanings relevant here are:

- Peak average molecular weight (M_p);
- Weight average molecular weight (M_w); and
- Number average molecular weight (M_n).

Because the patent did not expressly specify one of those measures, respondents contended that a person of ordinary skill in the art could not have discerned which measure the inventors meant. The district court construed the claim and rejected respondents' contention. The court found that skilled artisans would have understood from the technical discussion in the patent specification that the correct measure was *peak* average molecular weight. Pet. App. 40a-62a.

The district court reached that finding after extensive study of the art. As the district court found and respondents' own experts largely agreed, "[t]he level of ordinary skill in the art in this case is very high," requiring both a Ph.D. and extensive experience in polymer synthesis. J.A. 914a-15a. The parties submitted extensive evidence in the form of expert declarations, discovery documents, and deposition testimony. The parties had a chance to cross-examine each other's witnesses at deposition and to submit deposition testimony to the district court to impeach and rebut opposing experts. After considering all the evidence and holding two hearings, J.A. 20a, 29a, the district court found critically important, and credited, the extensive evidence provided by Teva's expert witness, Dr. Gregory Grant. See Pet. App. 42a-45a, 48a-50a, 52a.

a. Use of SEC technology: While the patent did not expressly use the term "peak average molecular weight," it did indicate that the average molecular weight should be determined using an analytical technique called size exclusion chromatography ("SEC"). Pet. App. 42a-43a, 144a; J.A. 1143a-44a. Dr. Grant explained that the patent's instruction to determine the average molecular weight using SEC technology would have indicated to a skilled artisan that the intended measure was *peak* average, the only measure that can be read directly from an SEC chromatogram. Pet. App. 125a; J.A. 348a.

SEC technology separates molecules in a sample on the basis of their size, by passing the sample through a column filled with gel particles. Smaller molecules travel through the column more slowly than larger molecules, and molecules of the same size (which generally have the same molecular weight) exit the column at the same time. The user can determine the molecular weight distribution of molecules in the sample by measuring the amount of the sample coming out of the column over time; plotting those amounts against time to produce a graph known as a "chromatogram"; and then calibrating the column to ascertain what molecular weight corresponds to each time. Pet. App. 107a-11a.

The highest point on the chromatogram is the "peak":

Chromatogram



J.A. 809a. The molecular weight that is associated with the peak is the peak average molecular weight—the molecular weight of the molecules present in the sample in greatest abundance. Pet. App. 43a; J.A. 907a, 909a.

Peak average is the *only* expression of average molecular weight that can be derived directly from the chromatogram. Determining either number average or weight average molecular weight, by contrast, requires additional calculations based on the underlying chromatographic data. The patent does not specify any such further calculations. Pet. App. 125a. Furthermore, number average and weight average are generally reported together; it would be uncommon for either to be listed by itself. *Id.* at 129a. Therefore, Dr. Grant testified, a person of ordinary skill in the art would conclude that "average molecular weight" means peak average where it is reported as a single value, obtained using SEC technology, without additional calculations. *Id.* at 125a. The district court credited Dr. Grant's testimony on this point, which was unrebutted, and found that once a skilled artisan learned that "average molecular weight" would be determined using SEC, "the presumed meaning" of "average molecular weight" to that skilled artisan would have been *peak* average. Pet. App. 43a; *see also* J.A. 437a.

b. The peak of Figure 1: Respondents also asserted that Figure 1 of the patent demonstrated that average molecular weight could not mean peak average. Figure 1 is not a chromatogram, but it plots the results of chromatography experiments.



Pet. App. 139a; J.A. 1141a.

According to the legend, the first two curves (which overlap) were generated from samples having an average molecular weight of 7.7 kDa. Respondents observed that the peak of these curves was not at 7.7 kDa (7700 Da on the x-axis of the figure). On this point there was a scientific disagreement between Dr. Grant and Mylan's expert, Dr. Ryu. Dr. Grant explained that, because Figure 1 plainly is not a chromatogram and the data from a chromatogram must be transformed to produce Figure 1, a person skilled in the art would not have expected the peak of the curve in Figure 1 to match peak average molecular weight precisely. Rather, a skilled artisan would have understood why the peak value from the chromatogram would shift somewhat during the transformation to Figure 1. Pet. App. 111a-18a, 126a-27a; J.A. 348a-49a, 1119a-20a. Dr. Ryu disagreed and contended that the peak would not be expected to shift. J.A. 375a-76a.

The district court resolved this factual dispute in Teva's favor. The court found that skilled artisans would have understood that Figure 1 was not a chromatogram, but "was created by transforming data from a chromatogram," and that the transformation likely would cause the peaks to shift slightly. Pet. App. 45a, 49a. As a result, the court found, "the fact that the peaks in Figure 1 do not match the listed [average molecular weights (AMWs)] precisely" does not render Figure 1 inconsistent with the use of *peak* average molecular weight. *Id.* at 49a.

c. Prosecution history: There was no pertinent prosecution history on the '808 patent, which issued in 1998. Pet. App. 137a; J.A. 1138a. But on two instances after the '808 patent issued, during prosecution of two of the *other* patents-in-suit, the patent examiner inquired about the meaning of average molecular weight.

In June 2002, during prosecution of the '847 patent, Teva gave a scientifically incorrect responsethat the claim's expression of average molecular weight in kilodalton units "implies a weight average molecular weight." J.A. 1322a. In fact, as both sides' experts agreed, the use of kilodaltons does *not* distinguish the type of average molecular weight: *all* methods of expressing molecular weight use kilodalton units. Pet. App. 128-29a.

Later, in December 2004, during prosecution of the '539 patent, the same primary examiner who examined all three patents⁵ again raised the same issue. J.A. 1343a, 1345a. Teva responded that the patent specification (including Figure 1) would make clear to a skilled artisan that average molecular weight is *peak* average. J.A. 1355a. The Patent and Trademark Office (PTO) accepted the changed answer.

Because both sides' experts agreed that the earlier of the two statements was scientifically flawed, Pet. App. 52a, the district court found as a fact that a person of ordinary skill in the art would not credit the earlier statement. The later statement, by contrast, was consistent with the specification and helped to defeat respondents' indefiniteness claim. *Id.* at 45a, 52a.

At trial, respondents pursued a different indefiniteness theory and proffered no additional evidence on the meaning of "average molecular weight." The district court found that respondents had failed to prove their indefiniteness defense by clear and convincing evidence. J.A. 1066a-69a. The court then entered judgment that the patents were not invalid. Pet. App. 76a-78a. The district court also held that Teva had proved infringement, and enjoined re-

⁵ See J.A. 1138a, 1188a, 1233a (Examiner Krass).

spondents from committing any act of infringement during the remaining life of the patents. *Id.* at 76a-81a.

B. The Federal Circuit Reviewed The Evidence *De Novo* And Found The Patent Indefinite.

On appeal, respondents made no attempt to argue that the District Court clearly erred in any of these findings. Rather, they asked the Federal Circuit to consider *de novo* whether the patent claim was indefinite, in line with the circuit's precedent that even "any allegedly fact-based questions relating to claim construction" are reviewed "*de novo* on appeal." *Cybor*, 138 F.3d at 1456.

The court of appeals reversed the district court and held the patent invalid because the term "average molecular weight" was indefinite. Pet. App. 1a-11a.⁶ The court expressly stated that it would review "*de novo*" and would not defer to the district court's factual findings. *Id.* at 7a, 10a. The court concluded that a person of ordinary skill would *not* be able to discern the meaning of "average molecular weight" as used in the patent. *Id.* at 8a-11a.

Although both Dr. Grant and the district court had addressed every one of the grounds on which the panel disagreed with the district court's reading of the patent, the panel gave no weight to the district court's contrary factual findings.

⁶ The court of appeals affirmed the infringement finding and the ruling that the remaining claims were not invalid. *See* Pet. App. 12a-24a.

- SEC technology: The panel emphasized that other measures of average molecular weightnumber average and weight average—"can also be obtained from the data generated by the SEC method after some calculations." Pet. App. 10a. But the panel did not refute or even acknowledge the key factual and scientific bases for the district court's contrary finding—that peak average would be the "presumed meaning" to a skilled artisan, in part because peak average was the only measure that could be read directly from a chromatogram "without any 'further calculation" and the patent disclosed no further calculations. Id. at 43a, 48a (emphasis added).
- Figure 1: The panel found significant that the peak of the curve in Figure 1 was not at 7.7 kDa, the specified "average molecular weight." *Id.* at 10a-11a. The panel equated the peak of that curve with the sample's peak average molecular weight. *See id.* at 10a. But the panel did not refute or even acknowledge the District Court's factual findings, based on Dr. Grant's testimony: that peak average is found from a chromatogram; that Figure 1 is not a chromatogram; that the peak would be expected to shift when the data was converted from a chromatogram to Figure 1. *Id.* at 45a-49a.
- *Prosecution history:* The panel emphasized that the two statements in the subsequent patents' prosecution history were inconsistent with each other. *Id.* at 9a. But the panel did not refute or even acknowledge the District Court's factual finding—based on undisputed evidence—that

any skilled artisan would recognize the error in the earlier statement and therefore would not rely on it. *Id.* at 52a.

The Federal Circuit then denied rehearing and issued its mandate. Pet. App. 84a-85a.⁷

SUMMARY OF ARGUMENT

The Federal Circuit has asserted the power to reweigh or even find facts on appeal by engaging in *de novo* review. But under Federal Rule of Civil Procedure 52(a)(6), *de novo* review and factual findings are incompatible. When patent claim construction entails factfinding—as it did here, and as it often does—then the Federal Circuit is limited to reviewing those findings for clear error.

I. Factfinding takes place in the district court, not the court of appeals. A court of appeals is not permitted to weigh the facts for itself or to find new facts. Findings of fact may not be set aside "unless clearly erroneous." Fed. R. Civ. P. 52(a)(6). That rule of deference "does not make exceptions." *Pullman-Standard v. Swint*, 456 U.S. 273, 287 (1982).

District courts have more expertise with factfinding, and tools that appellate judges lack (such as the

⁷ Since the panel's decision, Teva and respondents have separately engaged in various proceedings before the Patent and Trademark Office. Teva asked the PTO to reissue the '808 patent with the perceived indefiniteness corrected. See Cert. Reply 5 n.3; 35 U.S.C. § 251. The PTO denied the request on grounds not relevant here. Teva's notice of appeal of that decision to the Patent Trial and Appeal Board is due July 3, 2014. More recently, one of the respondents asked the PTO to initiate an *ex parte* re-examination of the '808 patent (Control No. 90/013,249), again on grounds not relevant here.

ability to appoint their own experts or to question the parties' experts directly and personally). Those considerations led this Court to promulgate Rule 52(a)(6): the Court determined that district courts are better at factfinding—in *all* cases, not just those involving live testimony and credibility assessment. And even if district courts lacked those advantages, appellate factfinding would still be unjustifiable because of the systemic costs. *De novo* review of factual findings would "contribute only negligibly to the accuracy" of those findings, yet impose "a huge cost in diversion of judicial resources." *E.g.*, *Anderson v. City of Bessemer City*, 470 U.S. 564, 574-75 (1985).

II. Construing a patent does not necessarily present a pure question of law, chiefly because patents are written for scientists, not lawyers. *Nautilus*, 134 S. Ct. at 2128. A court often cannot interpret a patent without first understanding what skilled people in the relevant art knew, and what words they used, when the patent application was filed. To gain that understanding, the district court frequently must resolve conflicting accounts of historic and scientific fact. Long before the Federal Circuit was created, federal appellate courts understood that these endeavors by district judges were *factual* inquiries squarely governed by Rule 52.

The Federal Circuit originally did not dispute that district courts' work involves factfinding. Instead, it just asserted the power to review all aspects of claim construction *de novo*, including the "allegedly fact-based" ones. *Cybor*, 138 F.3d at 1456. That holding is flatly incompatible with Rule 52(a)(6). Later, the Federal Circuit changed tacks and stated boldly that there *is* no factfinding during claim construction.

E.g., Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp., 744 F.3d 1272, 1284-85, 1289 (Fed. Cir. 2014) (en banc).⁸ That assertion is equally unavailing. The Federal Circuit has itself held, correctly, that evidence from outside the patent will often be needed to understand the patent. And when district courts follow the Federal Circuit's direction, take evidence, and resolve evidentiary disputes, they are obviously engaged in factfinding-just as they are when taking extrinsic evidence about usage of trade in a contract or tariff case. See, e.g., Great N. Ry. Co. v. Merchants' Elevator Co., 259 U.S. 285, 293 (1922). The ultimate question may be a legal one, but the subsidiary questions are factual in nature. Cf., e.g., Ornelas v. United States, 517 U.S. 690, 699-700 (2006) (probable cause is a question of law that rests on subsidiary questions of fact). Rule 52(a)(6) mandates deference to the district court's answers to those factual questions.

III. Ultimately the Federal Circuit's adoption of de novo review reflects its belief that more searching appellate review will promote a desirable "uniformity" in claim construction. Even if that policy judgment could overcome Rule 52(a)(6)'s plain language. two decades' experience shows that *de novo* review of all aspects of claim construction does more harm than good. It contributes to instability and prolonged delays in patent litigation. District courts' findings are not respected on appeal, which affects litigants' choices (more of them appeal, making litigation longer and more costly) and also district judges' choices (some have given up writing reasoned claim-construction decisions). If district judges

⁸ Lighting Ballast is reprinted at Cert. Reply App. 1a-95a.

sometimes resolve the facts of particular cases differently than the Federal Circuit would, that is not a problem to be solved through heightened appellate review. It is simply the consequence of our litigation system, in which *trial*, not appeal, is the "main event." *Anderson*, 470 U.S. at 575 (citation omitted).

IV. This case illustrates the flaws in *de novo* review. The District Court took more than a year to absorb the relevant facts in this highly complex area, one in which the level of ordinary skill requires a Ph.D. and more. The court found as a matter of fact, after a lengthy *Markman* process, that a person of ordinary skill in the art could understand Teva's patent. On key factual points it credited Teva's expert over respondents'. The Federal Circuit completely undid that work in four short paragraphs (Pet. App. 8a-10a), crediting its own lay understanding of scientific matters set out in the patent specification and prosecution history. And that lay understanding was wrong. The Federal Circuit did not even acknowledge the findings that refuted its position, much less identify any reversible clear error.

Scientific misunderstandings like this one are the natural consequence of the Federal Circuit's nodeference rule. The Federal Circuit has become so accustomed to finding its own facts that it scarcely takes note of the findings below. Here, in substance, the Federal Circuit credited respondents' expert submission over Teva's. But Rule 52(a)(6) "plainly does not entitle a reviewing court to reverse the finding of the trier of fact simply because it is convinced that it would have decided the case differently." Anderson, 470 U.S. at 573. Because that is precisely what the Federal Circuit did, this Court should reverse.

ARGUMENT

The rule in the Federal Circuit is that every aspect of claim construction, even "allegedly fact-based questions," is reviewed de novo. Cybor, 138 F.3d at 1456. The Federal Circuit recently reaffirmed that approach by a divided vote of 6-4, conspicuously not defending its approach on the legal merits but relying instead on stare decisis. Lighting Ballast, 744 F.3d at 1284 (refusing to allow the standard of review to depend on "whether there was or was not a fact at issue"). On the legal merits, the Federal Circuit's rule cannot stand. Resolving matters of historical fact, such as the knowledge or ordinary practice in a given art, is factfinding. And under Rule 52(a)(6), appellate review of factfinding is limited: findings must be sustained unless clearly erroneous. The Federal Circuit cannot dodge that rule by calling a factual question a legal one.

I. The Federal Rules Of Civil Procedure Preclude Appellate Courts From Second-Guessing District Courts' Factual Findings.

Every circuit, including the Federal Circuit, is bound by Rule 52(a)(6). Every circuit, including the Federal Circuit, is precluded by that Rule from reversing factual findings—*any* factual findings unless those findings are clearly erroneous. *See, e.g.*, *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1748 (2014) (reaffirming, in a case from the Federal Circuit, that "decisions on 'questions of fact' are 'reviewable for clear error") (citation omitted). That Rule reflects this Court's longtime recognition that the district courts are better suited to finding facts.

A. District Courts Have Responsibility For Factfinding

Congress and this Court have given responsibility and resources for factfinding to the district courts. District-court proceedings provide better tools for adversarial testing of factual assertions than appellate briefs and argument do. And having facts largely settled in the district court—subject only to deferential review—promotes efficiency, finality, and respect for the judiciary.

For those reasons, Rule 52(a)(6) unambiguously limits the power of the federal appellate courts: in matters tried to a district court, the court's "[f]indings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous." Fed. R. Civ. P. 52(a)(6). That rule "does not make exceptions." *Pullman-Standard*, 456 U.S. at 287. It applies to "all actions tried upon the facts without a jury." *United States v. U.S. Gypsum Co.*, 333 U.S. 364, 394-95 (1948) (emphasis added). And in all such actions, it is the appellate court's "obligation ... to accept a district court's [factual] findings unless clearly erroneous." *Pullman-Standard*, 456 U.S. at 287 (emphasis added).

The obligation to review facts deferentially does not evaporate just because the factfinding lays the groundwork for a legal conclusion that the appellate court will review *de novo*. Rule 52(a)(6) "does not divide findings of fact into those that deal with 'ultimate' and those that deal with 'subsidiary' facts." Pullman-Standard, 456 U.S. at 287.9 Thus, for example, a district court's conclusion that a search or seizure was supported by probable cause is reviewed de novo. Ornelas, 517 U.S. at 699. But the district court's underlying findings of fact-which may include findings about the inferences a police officer draws in light of his training or experience, or the practices and characteristics of criminal organizations—are reviewed deferentially, for clear error. Id. at 699-700.¹⁰ The Court has reiterated that point several times since Ornelas-holding that a given conclusion may be subject to *de novo* review, but that the supporting facts must be reviewed only for clear error. United States v. Bajakajian, 524 U.S. 321, 336 n.10 (1998) (excessiveness of a fine); Cooper Indus., Inc. v. Leatherman Tool Grp., Inc., 532 U.S. 424, 440 & n.14 (2001) (excessiveness of a punitive-damages award); Knowles v. Mirzayance, 556 U.S. 111, 126 (2009) (ineffective assistance of counsel).

This Court opted for deferential review of factfinding for several reasons—the most important of which is that "[t]he trial judge's major role is the determination of fact, and with experience in fulfilling that role comes expertise." *Anderson*, 470 U.S. at 574. District courts see the weaknesses of each party's

⁹ This Court has held that in a narrow category of cases, the Constitution requires independent, searching appellate assessment of certain issues significant to protected rights, such as whether a defamatory statement was made with actual malice. Rule 52(a) does not fully apply to those cases. *Bose Corp. v. Consumers Union of United States, Inc.*, 466 U.S. 485, 514 & n.31 (1984). No such constitutionally-compelled exception is at issue here.

¹⁰ Ornelas was a criminal case, but the same clear-error standard applies. *Maine v. Taylor*, 477 U.S. 131, 145 (1986).

case exposed through adversarial testing. They acquire a "full knowledge of the [case's] factual setting" that is difficult for an appellate court to match. *Pierce v. Underwood*, 487 U.S. 552, 560 (1988). And armed with that knowledge, they are in "a superior position to appraise and weigh the evidence." *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 123 (1969); *see, e.g., Brown v. Plata*, 131 S. Ct. 1910, 1945 (2011) ("The adversary system afford[s] the [district] court an opportunity to weigh and evaluate evidence presented by the parties."). In short, the "first-instance decisionmaker[]" has a superior "feel' for the overall case." *Weisgram v. Marley Co.*, 528 U.S. 440, 443 (2000) (citation omitted).

Allowing litigants to relitigate the facts on appeal would also run contrary to basic principles of "stability and judicial economy." Fed. R. Civ. P. 52 advisory committee's note (1985). "Duplication of the trial judge's efforts in the court of appeals would very likely contribute only negligibly to the accuracy of fact determination," yet retrying the facts on appeal would come "at a huge cost in diversion of judicial resources." Anderson, 470 U.S. at 574-75. "[T]he parties to a case on appeal have already been forced to concentrate their energies and resources on persuading the trial judge that their account of the facts is the correct one; requiring them to persuade three more judges at the appellate level is requiring too much." Id. at 575.

Just as importantly, the principle of deference protects the very "legitimacy of the district courts in the eyes of litigants." Fed. R. Civ. P. 52 advisory committee's note (1985). Telling the parties that anything that happens in district court can be litigated
over again on appeal would "impair[] confidence in the trial courts," 9C Charles Alan Wright & Arthur R. Miller, *Federal Practice & Procedure* § 2587, at 439 (3d ed. 2008), and improperly shift parties' focus from the trial to the appeal. As this Court has said, "the trial on the merits should be 'the "main event" ... rather than a "tryout on the road." " *Anderson*, 470 U.S. at 575 (quoting *Wainwright v. Sykes*, 433 U.S. 72, 90 (1977)).

B. District Courts' Role Extends Beyond Resolving Credibility Disputes

Because district courts are better positioned to learn and master the record, their factfinding role extends beyond just acting as lie detectors during live testimony. District judges have primary responsibility for the facts, not just for the witnesses. Accordingly, the Federal Rules and the decisions of this Court have long made clear that federal district courts are entitled to deference in *all* their "[f]indings of fact, whether based on oral or other evidence." Fed. R. Civ. P. 52(a)(6). Findings based on "physical or documentary evidence or inferences from other facts" reflect the district court's familiarity with the overall case, just as findings based on live testimony do, and likewise receive deference on appeal. Anderson, 470 U.S. at 574; accord U.S. Gypsum, 333 U.S. at 394 (Rule 52(a)'s clear-error standard governs findings based on "inferences drawn from documents or undisputed facts"); Commissioner v. Duberstein, 363 U.S. 278, 291 (1960) (same).

To be sure, findings based on "oral ... evidence," and the credibility of live witnesses, are entitled to *extra* deference: "[T]he reviewing court must give due regard to the trial court's opportunity to judge the witnesses' credibility." Fed. R. Civ. P. 52(a)(6). But that principle does not "alter [the] clear command" of Rule 52(a) that *all* district court findings receive deferential clear-error review. *Anderson*, 470 U.S. at 574.¹¹

Rule 52(a)(6) firmly rejects the notion that appellate judges can dispense with deference whenever they deem themselves to be "in as good a position as the trial court" to judge the facts. Fed. R. Civ. P. 52 advisory committee's note (1985). While some judges have been drawn to that notion over the years, see id.; Anderson, 470 U.S. at 574, it was and is altogether inconsistent with "both the plain meaning and the stated intent of the governing rule," as commentators perceived from the outset. E.g., Charles Alan Wright, The Doubtful Omniscience of Appellate Courts, 41 Minn. L. Rev. 751, 770 (1957), cited in Fed. R. Civ. P. 52 advisory committee's note (1985). But to eliminate any doubt, this Court amended the Rule in 1985 to explicitly require deference to factual findings "whether based on oral or other evidence." Fed. R. Civ. P. 52(a)(6).

¹¹ The same rule applies whether the evidence supporting a finding is contested or uncontested. Indeed, giving less deference to uncontroverted findings would make little sense; in an adversarial process, material facts that are not contested are highly likely to be accurate. Rule 52 accords the same deference on appeal to all findings, "whether the finding is of a fact concerning which there was conflict of testimony, or of a fact deduced or inferred from uncontradicted testimony." Fed. R. Civ. P. 52 advisory committee's note (1937); accord Duberstein, 363 U.S. at 291; U.S. Gypsum, 333 U.S. at 394.

Under Rule 52, especially since its 1985 amendment, district judges find all the facts, not just those turning on witness credibility. And when they exercise that authority, their findings may not be set aside on appeal unless clearly erroneous.

C. District Courts Are Particularly Well Suited To Make Scientific Determinations

The rationale for deference to district court factfinding is "[p]articularly" strong in scientific or technical contexts. Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 610 (1950). When the factual question is a scientific one, "so much depends upon familiarity with specific scientific problems and principles," and the requisite learning is "not usually contained in the general storehouse of knowledge and experience." Id. District courts face fewer institutional constraints than appellate courts on the ability to gain that learning over the course of a given litigation: they consider a developing record, rather than a closed one; they have great discretion to hold a longer hearing, or many hearings; and they can interact directly with experts, even questioning them personally.

When the admissibility of scientific evidence is at stake, this Court has repeatedly and firmly expressed confidence in district courts' ability to make the necessary judgments about validity, reliability, and probative value. District courts enjoy "broad latitude" to determine reliability within generous limits. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 142, 152-53 (1999); see Gen. Elec. Co. v. Joiner, 522 U.S. 136, 138-39 (1997); United States v. Scheffer, 523 U.S. 303, 318 (1998) (Kennedy, J., concurring in part and concurring in the judgment) (noting "the considerable discretion given to the trial court in admitting or excluding scientific evidence"). The same principle applies with equal force when the district court's task involves not just gatekeeping but factfinding.

II. Patent Claim Construction Often Entails Factfinding

Patents are not written primarily to be read by judges or lawyers. *Nautilus*, 134 S. Ct. at 2128. Rather, they are scientific texts designed to be read and used by specialists in the relevant field. Their "descriptions and terms of art often require peculiar knowledge and education to understand them aright," and they often contain slight—but important—"verbal variations, scarcely noticeable to a common reader" but "detect[able] by an expert in the art." *Bischoff v. Wethered*, 76 U.S. 812, 815 (1870). For that reason, judges often need to take factual evidence, such as expert testimony, to enable them to understand patent claims.

Receiving that factual evidence, and resolving disputes between competing experts and other witnesses, is classic factfinding. Determining the common usage in a particular scientific subfield, or ascertaining the effect of converting one type of graph to another, certainly cannot be described as matters of *law*. Nor do these matters of fact lose their factual character merely because they are necessary to patent claim construction. Factual findings must be reviewed deferentially no matter what they are used for—whether determining probable cause, interpreting an ambiguous contract, or construing a patent. *Cf.*, *e.g.*, *Ornelas*, 517 U.S. at 699.

A. Interpreting Patents From The Perspective Of A Skilled Artisan Often Requires Factfinding

Patents are written for a particular audienceskilled artisans—and they are interpreted from the perspective of that audience. Congress has explicitly directed that the patent specification be written for the benefit of a "person skilled in the art." 35 U.S.C. § 112 ¶ 1; see also id. § 103(a) (obviousness judged from the perspective of a person skilled in the art). And patents are construed as a whole, meaning that the claims are drafted in light of the specification and the specification informs the meaning of the claims. Because of how patents are written, and for whom, frequently "it is difficult for persons not skilled in the art to ... appreciate the distinctions which may exist in the words of a claim when read in the context of the art itself." United Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 233 (1942); accord Mowry v. Whitney, 81 U.S. 620, 644 (1872) ("[T]he unskilled may not be able to gather from [the specification] how to use the invention.").

In construing the patent, therefore, a federal judge must replace the perspective she would apply to a statute or a consumer contract with the perspective of a skilled artisan. *See, e.g., United Carbon,* 317 U.S. at 233 (in claim construction, relying on testimony as "the clearest exposition of the significance which the terms employed in the claims had for those skilled in the art"); *Carnegie Steel Co. v. Cambra Iron Co.,* 185 U.S. 403, 437 (1902) ("The specification of the patent is not addressed to lawyers, or even to the public generally, but to the manufacturers of steel").¹² Doing that requires the court to ascertain facts from outside "the general storehouse of knowledge and experience." *Graver Tank*, 339 U.S. at 610. In this case, for example, there was a wide gap between the layperson and the skilled artisan—a Ph.D. with extensive experience in polymer synthesis. *See* J.A. 914a-15a.

Courts often entertain evidence from outside the patent documents during claim construction. The most straightforward reason to entertain such evidence is to determine the specialized meaning that particular terms have to skilled artisans. See, e.g., United Carbon, 317 U.S. at 233-34. The ultimate scope of the patent claims may be a legal question, but (as is common) the answer to that legal question will often depend directly on resolving questions whose answers lie outside the four corners of the patent and its prosecution history: What was the level of ordinary skill in the art at the relevant time? Did the relevant term have a specialized meaning to someone with that level of skill? And if so, what was that meaning? These are factual questions; their answers bear legal significance because of the wellestablished "heavy presumption" that the meaning of a patent claim term is the meaning that people with

¹² See also, e.g., Gen. Elec. Co. v. Wabash Co., 304 U.S. 364, 372 (1938) (examining whether claims "conveyed definite meaning to those skilled in the art").

ordinary skill in the art would give it, in the relevant context. $^{\rm 13}$

Courts also take extrinsic evidence to aid in understanding the specification and the relevant art more broadly. Understanding the relevant art can help in construing a patent from the perspective of a skilled artisan even when the relevant term does not have a single, well-established meaning. For instance, both this Court and the Federal Circuit have often stated that the written description contained in the patent specification is a valuable (often the most valuable) aid to construing the patent claims.¹⁴ But often the written description-written for skilled artisans, see 35 U.S.C. § 112 ¶ 1—needs some elucidation before it can be used by lawyers and judges to interpret the patent claims. Before the court can use the written description for that purpose, its understanding of the written description must be scientifically and factually correct.¹⁵

Expert testimony about the art can also assist in understanding the prosecution history—the backand-forth between the inventor and the PTO. Prosecution history is prone to ambiguity, *see Phillips*, 415 F.3d at 1317 (citing cases), and may even contain er-

 ¹³ Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.,
 262 F.3d 1258, 1268 (Fed. Cir. 2001); see also Phillips v. AWH
 Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005).

¹⁴ E.g., United States v. Adams, 383 U.S. 39, 48-49 (1966); Phillips, 415 F.3d at 1315-17.

¹⁵ See, e.g., Hynix Semiconductor Inc. v. Rambus Inc., 645 F.3d 1336, 1354 (Fed. Cir. 2011) (relying on expert testimony to understand discussion in specification); see also Phillips, 415 F.3d at 1318 (explaining that expert testimony can be useful "to provide background on the technology at issue" and "to explain how an invention works").

rors. Moreover, even taken at face value, prosecution history reflects an exchange with an examiner who is a subject-matter expert, and often not an attorney. Thus, like the patent itself, the prosecution history is read from the perspective of a person of ordinary skill in in the art. And as with the patent itself, resolving ambiguities, identifying errors, and simply understanding the terminology and the science may require the assistance of expert evidence. *See, e.g., Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1373 (Fed. Cir. 2007) (discounting a statement made in prosecution history when a technical witness explained that adhering to that statement would render the invention inoperative).

Finally, in cases where the defense of indefiniteness under 35 U.S.C. § 112 ¶ 2 intersects with claim construction, the dominant inquiry will be a factual one turning on a skilled artisan's knowledge. See *Nautilus*, 134 S. Ct. at 2128. As this Court recently clarified, the question in indefiniteness cases is whether the "claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." Id. at 2129. For that reason, indefiniteness cases can often turn on a factual examination of whether the standard level of knowledge in the art enables a skilled artisan to understand what is "distinctly claimed" by the patent. See Carnegie Steel, 185 U.S. at 437.

Thus, for example, this Court in *Eibel Process Co.* v. *Minnesota & Ontario Paper Co.*, 261 U.S. 45 (1923), relied on expert testimony to sustain a patent against a challenge that the claim terms "substantial elevation" and "rapidly" were indefinite. Expert testimony showed that these terms were precise enough for a skilled artisan and, indeed, that no greater precision was possible because the exact operating conditions "must be found by practice." 267 F. 847, 854 (D. Me. 1920). And there was ample marketplace evidence that the invention was understood from the patent because it had been quickly and successfully adopted "by the whole trade." 261 U.S. at 66. This Court accordingly concluded that "[t]he *evidence* disclose[d] that [a skilled artisan] had no difficulty" comprehending the claimed invention. *Id.* at 65-66 (emphasis added).

B. A District Court Engages In Factfinding When It Uses Evidence Of Scientific Understanding To Resolve Ambiguities In A Patent

The Federal Circuit has historically taken the view that the distinction between fact and law is so malleable that the Federal Circuit can designate as "legal" any question that it thinks would benefit from *de no-vo* review.¹⁶ Rule 52(a)(6) is not so easily circumvented.

Rather, Rule 52(a)(6) unambiguously applies if ascertaining the knowledge or vocabulary of skilled artisans, including resolving disputes among experts, amounts to finding facts. Under this Court's cases, plainly it does.

Judge Easterbrook has put the point pithily while sitting by designation to try a patent case: "[J]udges

¹⁶ See, e.g., Lighting Ballast, 744 F.3d at 1289-90 (relying on *Miller v. Fenton*, 474 U.S. 104, 113-14 (1985)).

should not pretend that all nominally 'legal' issues may be resolved without reference to facts.... What seems clear to a judge may read otherwise to a skilled designer. That is why we had a trial." *In re Mahurkar Double Lumen Hemodialysis Catheter Patent Litig.*, 831 F. Supp. 1354, 1359 (N.D. Ill. 1993), *aff'd on other grounds*, 71 F.3d 1573 (Fed. Cir. 1995).

1. Understanding the level of ordinary skill in the art at the relevant time is a "basic factual inquir[y]," as this Court said in *Graham*. Science is not law, and ascertaining what scientists know is not a legal question, but a factual one. *See, e.g., Taylor*, 477 U.S. at 146 ("[T]he more specific question whether scientifically accepted techniques exist for the sampling and inspection of live baitfish is one of fact, and the District Court's finding that such techniques have not been devised cannot be characterized as clearly erroneous.").

Adding the time element—knowledge or usage in the relevant art at the time the patent application was filed¹⁷—makes the inquiry, if anything, even more a question of historical fact. The court asks what a skilled artisan would have known at some earlier time, not what she would know today. Cf. Bose, 466 U.S. at 498 ("It surely does not stretch the language of the Rule to characterize an inquiry into what a given person knew at a given point in time as a question of 'fact.""). That requires a court to focus on developments in the art and when they became generally accepted—classic factual inquiries. Taylor, 477 U.S. at 146.

¹⁷ See Nautilus, 134 S. Ct. at 2128.

Similarly, vocabulary, usage, and customs among the relevant community are factual questions. For instance, this Court expressly deferred to a district court's resolution of the question whether "custom or practice in the international banking community" could be the basis for inferring an agreement among the parties. *Citibank, N.A. v. Wells Fargo Asia Ltd.*, 495 U.S. 660, 671-72 (1990). The existence of a "relevant custom or practice" was a factual matter on which Rule 52(a) required deference to the district court's finding. *Id.*

2. Ascertaining historical facts, such as the knowledge of a skilled artisan at a particular time, does not become a legal inquiry simply because those facts, once found, will be used to illuminate a legal document or answer another legal question. While the ultimate interpretation of a legal document is indeed a legal question, interpretation has various ingredients, and some of those ingredients—*e.g.*, "what words appear in the contract?" or "do those words have a specialized meaning?"—are factual.

As this Court has explained in the context of other legal documents: the question "whether words in the [document] were used in their ordinary meaning, or in a peculiar meaning" specific to a particular business, is "obviously" a question "of fact" rather than of interpretation. *Great N. Ry.*, 259 U.S. at 293 (interpreting a railroad tariff). Indeed, the interpretation of a legal document can turn completely on a factual question: whether a single word has a specialized meaning in the industry, or instead just carries its ordinary dictionary meaning. *E.g.*, *Tex.* & *Pac. Ry. v. Am. Tie* & *Timber Co.*, 234 U.S. 138, 146-47 (1914) (construction of a tariff depended entirely on the factual question whether the term "lumber" included railway crossties in the usage of the relevant business); see Great N. Ry., 259 U.S. at 293.¹⁸

The same rule is widely followed in contract interpretation. An interpretive question is a question of fact "if it depends on the credibility of extrinsic evidence or on a choice among reasonable inferences to be drawn from extrinsic evidence." Restatement (Second) of Contracts § 212(2) & cmt.e (1981); accord, e.g., 5 Margaret N. Kniffin, Corbin on Contracts § 24.30, at 332-37 (rev. ed. 1998); Rankin v. Fidelity Ins. Trust & Safe Deposit Co., 189 U.S. 242, 252-53 (1903); Meyers v. Selznick Co., 373 F.2d 218, 221-23 (2d Cir. 1966) (Friendly, J.). Similarly, the meaning of the contract itself necessarily depends on extrinsic evidence—and on factfinding—when the interpretive question turns on what the usage or custom was in a given industry at a particular time. Accordingly, "the existence of a particular custom or usage" is a question of fact. 12 Richard A. Lord, Williston on Contracts § 34:19, at 174-78 (4th ed. 2012); accord, e.g., Restatement, supra, § 222(2).

¹⁸ Similarly, this Court has acknowledged that where parol evidence is admissible to aid in interpreting a land patent, it can create a factual question. *Brown v. Huger*, 62 U.S. 305, 320-21 (1859) ("In cases of boundary which depend upon the swearing of witnesses," it is the factfinder that makes "a decision upon the weight of the testimony and the facts which the testimony conduces to establish.") (quoting *Cockrell v. M'Quinn*, 20 Ky. (4 T.B. Mon.) 61, 62, 1827 WL 2577, at *2 (1826)); see also Ott v. *Soulard*, 9 Mo. 581, 1845 WL 3798, at *15-16 (1845) (following *Cockrell* in a land-patent case and holding that parol evidence, including "usage and custom," presented a factual component to be resolved by the factfinder).

C. Patent Law Already Treats Closely Related Questions As Factual

The Federal Circuit's no-deference rule for claim construction leads to a puzzling disuniformity in patent doctrine. The *same evidence* can give rise to factual issues for purposes of other patent-law questions that the district court must answer, but be treated as purely legal by the Federal Circuit when it informs claim construction. As shown above, merely touching on the interpretation of a legal document does not turn a factual determination into a legal one.

For instance, prior art is often relevant to claim construction.¹⁹ Yet in other patent-related contexts, this Court has made clear that the "scope and content" of the prior art is a factual question. *Graham*, 383 U.S. at 17. So is the comparison of the prior art with the patented invention. *See id.*; *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 280 (1976). And while the defense of obviousness presents ultimately a legal question, it "lends itself to [these] basic *factual* inquiries." *Graham*, 383 U.S. at 17 (emphasis added). In fact, in some cases the district court's factfinding will all but compel the outcome of the legal inquiry. *E.g., Sakraida*, 425 U.S. at 280.

This Court has also described as "factual" the application of the doctrine of equivalents to determine what is covered by a patent in addition to what is explicitly described in the claims—*i.e.*, what is "equiva-

¹⁹ See, e.g., Harris Corp. v. IXYS Corp., 114 F.3d 1149, 1153 (Fed. Cir. 1997) (prior art "render[ed] [one] proposed construction ... much less plausible" because "claims should be read in a way that avoids ensnaring prior art").

lent" to what is claimed. See Graver Tank, 339 U.S. at 609 ("A finding of equivalence is a determination of fact."); see also Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 37-39 (1997) (reserving the judge/jury question). "An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was." Graver Tank, 339 U.S. at 609. Thus, this Court has characterized as "factual" an inquiry that bears a strong resemblance to claim construction—a determination of what a person of ordinary skill in the art would consider "equivalent" to the invention described in the patent claim.

Similarly, the background knowledge of a skilled artisan is treated as an evidentiary issue in ascertaining "enablement" (whether the specification enables a skilled artisan to practice the patent, 35 U.S.C. § 112 ¶ 1). E.g., Loom Co. v. Higgins, 105 U.S. 580, 586 (1882) ("[A]s it cannot be expected that the court will possess the requisite knowledge for this purpose, it becomes necessary that it should avail itself of the light furnished by the evidence to enable it to understand the terms used in the patent"). But for claim-construction purposes the Federal Circuit treats that same background knowledge as a question of law—a further illustration of why insisting on *de novo* review requires the court to treat factual issues as legal ones.

III. The Federal Circuit's Various Rationales For Reviewing Factual Findings *De Novo* Are Unpersuasive

Factual findings are reviewed only for clear error, and the factual findings that underlie claim construction are no different than factual findings in any other context. That answers the question presented. Rule 52(a)(6) does not allow the Federal Circuit to select whatever standard of review it thinks best. Just as this Court disapproved the Federal Circuit's attempt to review *agency* factfinding by a standard less deferential than the one Congress prescribed in the Administrative Procedure Act, Dickinson v. Zurko, 527 U.S. 150, 162, 165 (1999), this Court should disapprove the Federal Circuit's attempt to review *district court* factfinding by a standard less deferential than Rule 52's. As in Zurko, there is no warrant for a Federal Circuit-only standard.

The Federal Circuit does not dispute the propriety of using extrinsic evidence in claim construction. The problem is that the Federal Circuit, preferring to weigh that evidence for itself without deferring to the district court, denies that there is anything factual to be drawn from that evidence. In adopting its no-deference rule, the Federal Circuit refused to acknowledge that even "resolving disputes" within the extrinsic evidence could amount to "making factual evidentiary findings."²⁰ But in its key opinions,

²⁰ Markman v. Westview Instruments, Inc., 52 F. 3d 967, 981 (Fed. Cir. 1995) (en banc). The court insisted that even in "rejecting [certain] evidence as unhelpful, and resolving disputes en route to pronouncing the meaning of claim language ..., the

the Federal Circuit has never provided a valid explanation for how a battle of experts can be resolved *without* factfinding. As this Court has made clear, "[d]etermining the weight and credibility of the evidence is the special province of the trier of fact." *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 856 (1982).

Instead, the Federal Circuit has articulated three rationales for *de novo* review: *First*, that this Court either expressly or implicitly decided the issue in *Markman*; *second*, that the interpretation of any written instrument is a pure question of law; and *third*, that *de novo* review is *preferable* to deference for various reasons. None of these justifications is persuasive. The reality remains that claim construction often turns on "basic factual inquiries," *Graham*, 383 U.S. at 17.

A. Recognizing That Claim Construction May Entail Factfinding Is Entirely Consistent With This Court's Decision In Markman

The Federal Circuit's decision in *Cybor* offered essentially no reasoning for adopting *de novo* review of claim-construction factfinding. Instead, the Federal Circuit stated that this Court had authoritatively answered the question in *Markman*. 138 F.3d at 1455-56 & n.4. Respondents have not defended that reasoning and did not mention *Markman* in their argument at the certiorari stage. *See* Br. in Opp. v, 5, 14-30. And with good reason. *Markman* resolved

court is *not* crediting certain evidence over other evidence or making factual evidentiary findings." *Id.*

only who shall perform the claim construction: the district court, not the jury. But that cannot defeat Rule 52(a)(6): every case that falls under Rule 52 by definition involves a decision by a district court, not a jury. The question presented here turns not on who shall decide, but on what is to be decided: only a pure question of law, or subsidiary factual questions as well? This Court did not answer that question in Markman. If anything, it articulated that the ultimate question of claim construction sometimes turns on subsidiary questions of fact—directly contrary to the Federal Circuit's belief that there are no factual issues in claim construction.

1. Markman came to this Court as a Seventh Amendment case. The Federal Circuit had reasoned broadly (1) that claim construction is always a matter of law for the court; (2) that this allocation of responsibility is consistent with the Seventh Amendment; and (3) that claim construction must always be reviewed de novo. Markman brought to this Court only the question whether the Seventh Amendment required submitting all claim-construction disputes to the jury. See Pet. at i, Markman, supra (No. 95-26).²¹

The constitutional question before this Court in *Markman* did not turn on whether claim construction involves issues of fact as well as law, or is instead a pure question of law, and this Court applied no such distinction. The Court described claim construction as a "mongrel practice" with attributes of

²¹ See also, e.g., Tr. of Oral Arg., *Markman, supra*, 1996 WL 12585, at *11-12 (No. 95-26) (Markman's argument that even a claim-construction dispute based purely on the patent and the prosecution history must be submitted to the jury).

both fact and law, 517 U.S. at 378, and specifically declined to decide whether "the Seventh Amendment can be said to have crystallized a law/fact distinction ... or whether post-1791 precedent classifying an issue as one of fact would trigger the protections of the Seventh Amendment," at least presumptively. *Id.* at 384 n.10. And throughout the opinion, the Court carefully referred to the question before it as the judge/jury question, not as a law/fact question. *See*, *e.g.*, *id.* at 376, 377, 380, 384, 388, 390, 391.

The Markman Court first stated that historical practice at the time of the Seventh Amendment's adoption did not definitively resolve the Seventh Amendment question, because common law juries had little experience with patent-infringement cases before the nineteenth century. *Id.* at 380-81; *see id.* at 375-76. Relying on precedents suggesting that judges, not juries, historically tended to construe written documents, the Court reasoned by analogy that the construction of patent claims was the kind of task historically reserved for the trial court. *Id.* at 384.

The Court then turned to "functional considerations." Noting again that claim construction presented a mixed question of fact and law, the Court asked whether, as between juries and trial judges, "one judicial actor is better positioned than another to decide the issue in question." *Id.* at 388. The Court concluded that "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." *Id.* That buttressed the Court's conclusion that claim construction should be a matter for the trial court, not the jury. 2. The standard of appellate review does not turn on the factors, such as historical practice and "functional considerations," that drove this Court's holding in *Markman*. Unlike the Seventh Amendment, Rule 52(a)(6) draws a categorical distinction between findings of fact and conclusions of law, and directs appellate courts to uphold the former unless they are "clearly erroneous." To the extent this Court's opinion in *Markman* is relevant here, it *refutes* the Federal Circuit's position, because it recognizes that claim construction can rest on factual questions (even though those factual questions need not go to a jury).

The Federal Circuit in Cybor stressed that in *Markman* this Court cited, in passing, a habeas corpus case applying a fact/law distinction. See Cybor, 138 F.3d at 1455; Markman, 517 U.S. at 388 (citing Miller, 474 U.S. at 114). But in Markman this Court was simply noting that it would look to "functional" considerations in allocating the judge/jury responsibility, just as the Court had done in *Miller* in parsing a fact/law distinction in the statute providing for habeas review of state-court judgments. The Federal Circuit was simply wrong in deriving from this lone citation the message that "the Supreme Court was addressing under which category, fact or law, claim construction should fall." Cybor, 138 F.3d at 1455. As noted, this Court disclaimed reliance on the fact/law distinction altogether. 517 U.S. at 384 n.10.

In fact, the Court in *Markman* explicitly acknowledged the "evidentiary underpinnings" of claim construction. 517 U.S. at 390. The Court acknowledged that district courts construing a patent may have to consider "an expert's proposed definition" of a patent claim term—for example, because the term involves "a question of meaning peculiar to a trade or profession." Id. at 389, 390. The Court also accepted that where there is conflicting testimony, the trial judge may have to make judgments concerning the credibility of competing experts. Id. at 389. Indeed, "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." Id. For the most part, the Court noted, such credibility determinations "will be subsumed within the necessarily sophisticated analysis of the whole [patent]," a broader exercise in "exegesis" for which judges are better suited than jurors. 517 U.S. at 388, 389. But the Court said nothing to dispute that a trial judge acts as a factfinder in resolving those "evidentiary underpinnings" of claim construction. Id. at 390.

B. When Extrinsic Evidence Is Used To Interpret Written Instruments, Factfinding Resolves Any Disputes

When the Federal Circuit has offered an independent rationale for its no-deference rule, it has relied on the notion that patents are written instruments and must be construed purely as a matter of law.²²

²² Markman, 52 F.3d at 978. The Federal Circuit cited a host of cases from this Court treating claim construction as a question of law. None of those cases remotely establishes that the question of law includes the consideration of extrinsic evidence. To the contrary, in those cases the question was one of law precisely because "it [wa]s apparent from the face of the [patent] instrument that extrinsic evidence [wa]s not needed to explain terms of art therein, or to apply the descriptions to the subject matter." Singer Mfg. Co. v. Cramer, 192 U.S. 265, 275 (1904);

But factfinding to construe a written instrument is entirely commonplace—in this Court's jurisprudence and elsewhere. See pp. 32-33, supra. That point has been raised in the Federal Circuit by dissenting judges, litigants, and amici, including the United States. The Federal Circuit's sole response has been repeated *ipse dixit* assertions that reliance on extrinsic evidence "does not transform that meaning from a question of law into a question of fact." Lighting Bal*last*, 744 F.3d at 1284.²³ That question-begging statement gets the analysis backwards: it is incumbent on the proponents of *de novo* review to explain why the resolution of factual disputes, potentially based on credibility judgments at a live hearing,²⁴ should *not* be entitled to deferential review.

²⁴ See, e.g., Honeywell Int'l, Inc. v. Hamilton Sunstrand Corp., 523 F.3d 1304, 1314 (Fed. Cir. 2008) ("While both parties presented expert witnesses, the district court determined, after observing the witnesses' demeanor and credibility, that the resolution was not close.").

accord Mkt. St. Cable Ry. Co. v. Rowley, 155 U.S. 621, 625 (1895).

²³ Accord Lighting Ballast, 744 F.3d at 1285 ("[E]xperts in the science or technology may assist the court in understanding the meaning and usage of a claim term, but this does not morph the question into one of fact. ... The presentation of expert testimony on the meaning of a claim term does not transform the question from one of law to one of fact."); *id.* at 1289 ("[T]he meaning a person of ordinary skill in the art would give a term at the time of the filing of the patent application is not a question of fact"); *see also id.* at 1293 (Lourie, J., concurring) ("It is true that there may be questions concerning what a particular claim term meant to one skilled in the art at a particular time, but, in my view, when the trial judge is subjected to dueling experts selected for their views, choosing which of them to credit hardly amounts to historical fact-finding.").

The ultimate use to which the facts will be put here, informing the interpretation of a patent claim—does not make the inquiry any less factual in nature. See Pullman-Standard, 456 U.S. at 287 ("subsidiary" facts are just as entitled to deference as "ultimate" facts). Extrinsic evidence used to interpret a written instrument still raises a question of historical fact: e.g., what was the accepted meaning in the relevant scientific community at the relevant time? See pp. 31-32, supra; cf. Citibank, 495 U.S. at 671-72 (treating industry "custom or practice" as a factual question reviewed deferentially under Rule 52(a)(6)). As Judge O'Malley of the Federal Circuit, then a district judge, has explained: "Many times [district] judges are asked to construe a term and to define what one of ordinary skill in the art at the time would have understood. The problem is that 'at the time' may have been fifteen years ago. Figuring out what was really understood or known at the time, and figuring out how to define one of [ordinary skill] in a given art are factual inquiries."²⁵

Judge Lourie, concurring in *Lighting Ballast*, attempted to shift the battle to different ground; he asserted that the Federal Circuit should not adopt clear-error review of factfinding because, in his view, there should be less factfinding. 744 F.3d at 1293 ("Courts should be reluctant to go beyond the written record"). But it is too late for that. In many cases like this one—the district court correctly concludes that expert evidence will be helpful, indeed essential, in establishing what a skilled artisan such as a poly-

²⁵ Hon. Kathleen M. O'Malley et al., A Panel Discussion: Claim Construction from the Perspective of the District Judge, 54 Case
W. Res. L. Rev. 671, 679-80 (2004).

peptide chemist would have known two decades $ago.^{26}$ The court may even resolve competing claims by experts on that point. When a case with factual findings like these goes up on appeal, the findings are reviewed for clear error; it is no answer to say that *in future cases* there should be no findings because the plain language of the patent and the prosecution history should answer all the questions. They often do not.

C. Facts Cannot Be Turned Into Law In The Name Of "Uniformity"

The Federal Circuit has repeatedly touted "uniformity" in claim construction as a reason why it should review district court decisions de novo.27 If "uniformity" were a free-standing principle of appellate review, it would allow the Federal Circuit to review *everything* de novo. But uniformity is not desirable at all costs. Claim construction has contained factual elements since long before the Federal Circuit was created, as the regional courts of appeals understood. In creating the Federal Circuit, Congress did not give the new court of appeals power to circumvent Rule 52(a)(6) by recharacterizing those factual determinations as legal ones. Facts cannot be filtered out of patent litigation entirely for the sake of uniform outcomes. For instance, the same patent can be held valid in one court and invalid in

²⁶ See, e.g., Eibel Process, 261 U.S. at 65-66; *Phillips*, 415 F.3d at 1317 (explaining the "variety of purposes" for which "extrinsic evidence in the form of expert testimony can be useful to a court").

²⁷ E.g., Lighting Ballast, 744 F.3d at 1277, 1280, 1286, 1287, 1288; *id.* at 1292-93 (Lourie, J., concurring).

another, if a later challenger simply does a better job litigating the content and effect of the prior art.

Before the Federal Circuit was created, the regional circuits generally acknowledged the factual component of claim construction, and reviewed such findings deferentially as a result. For instance, whereas the Federal Circuit today asserts that "the meaning a person of ordinary skill in the art would give a term at the time of the filing of the patent application is not a question of fact," *Lighting Ballast*, 744 F.3d at 1289, Judge Learned Hand took precisely the opposite view. "[H]ow the art understood the term," he wrote, "was plainly a question of fact; and unless the finding was 'clearly erroneous,' we are to take this definition as controlling." *Harries v. Air King Prods. Co.*, 183 F.2d 158, 164 (2d Cir. 1950).²⁸

If that approach led to variations in outcome, that did not concern Congress, which created the Federal Circuit to promote uniformity on matters of "*legal* doctrine." Christianson v. Colt Indus. Operating Corp., 486 U.S. 800, 813 (1988) (emphasis added) (quoting H.R. Rep. No. 97-312, at 23 (1981)). The problem Congress intended to address was legal divergence among the regional circuits over the interpretation of patent *law*, not fact-dependent districtcourt rulings over the interpretation of individual *patents*.

²⁸ Accord Johnson & Johnson v. Carolina Lee Knitting Co., 258
F.2d 593, 596 (4th Cir. 1958); Strzałkowski v. Beltone Electronics Corp., 371 F.2d 237, 239 (7th Cir. 1966); Studiengesellschaft Kohle mbH v. Eastman Kodak Co., 616 F.2d 1315, 1333 (5th Cir. 1980); Wilden Pump & Eng'g Co. v. Pressed & Welded Prods. Co., 655 F.2d 984, 986-87 (9th Cir. 1981); Standard Oil Co. (Ind.) v. Montedison, S.p.A., 664 F.2d 356, 362 (3d Cir. 1981).

Neither the Federal Courts Improvement Act of 1982²⁹ (which created the Federal Circuit) nor its legislative history contains any suggestion that Congress was legislating a new patent-only exception to the rule of clear-error review. To the contrary, as then-Chief Judge Markey of the Court of Customs and Patent Appeals explained, "the problem being addressed [wa]s solely at the appellate level, where the concern is the law, and only very rarely, if ever, the facts." Statement of Hon. Howard T. Markey, *Hearings Before the Subcomm. on Improvements in Judicial Machinery of the Senate Comm. on the Judiciary*, 96th Cong. 114 (1979).

Factfinding is not always uniform—as the Federal Circuit itself fully recognizes. The same patentee can end up with different results in infringement litigation against *identical products*. Or the same pa*tent* may survive an indefiniteness challenge in one case, only to fail the test in another case. The legal holding of definiteness in the first case does not bind the Federal Circuit (or the district court) in the second case as a matter of stare decisis. E.g., Mendenhall v. Cedarapids, Inc., 5 F.3d 1557 (Fed. Cir. 1993). That is because indefiniteness rests on factual findings. See, e.g., Graham, 383 U.S. at 17-18. As the Federal Circuit knows and accepts, "different judgments can be reached and must be affirmed even on essentially the same evidentiary record. That is a vagary of our justice system." Mendenhall, 5 F.3d at 1571. And where the evidentiary record *differs*, it is unsurprising that the outcome may differ as well.

²⁹ Pub. L. No. 97-164, 96 Stat. 37.

"Fact-bound resolutions cannot be made uniform through appellate review, de novo or otherwise." *Cooter & Gell v. Hartmarx Corp.*, 496 U.S. 384, 405 (1990) (citation omitted). Whether the Federal Circuit reviews the facts *de novo* or deferentially, different facts can produce different results—rightly so.

The existence of factual variation between patent cases does not prevent the Federal Circuit from providing the benefits of nationwide *legal* guidance under current law. That would not change even if this Court were to reverse the no-deference rule and direct the Federal Circuit to follow Rule 52. True legal holdings—which in the claim-construction context include those announcing and applying canons of claim construction—can and do serve a lawclarifying purpose. It is *that* function that Congress created the Federal Circuit to perform.

At the same time, preclusion principles already ensure that the same patentee does not get multiple bites at the same apple. Whether an issue is characterized as legal or factual, once it is resolved against a patentee, it will be controlling in all other litigation involving the same patent and patentee. *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U. S. 313 (1971). But a litigant generally cannot be bound by litigation in which it was not represented. *Taylor v. Sturgell*, 553 U.S. 880 (2008). So some issues must be litigated anew despite the possibility of "disuniform" results.

This Court noted in *Markman* that decisions by district courts rather than juries would foster uniformity over and above what preclusion can provide, because a district court's claim construction is fully reasoned and publicly accessible and thus can have stare decisis effect "even within a given jurisdiction." 517 U.S. at 391. In other words, district judges may choose to follow each other's claim constructions "on those questions not yet subject to inter jurisdictional uniformity under the authority of the single appeals court," *i.e.*, the Federal Circuit. *Id*. This Court's desire to promote "intrajurisdictional" stare decisis *among district courts, id.*, plainly has nothing to do with the standard of *appellate* review. Rather, it has everything to do with the ability of district courts, rather than juries, to set out a written, reasoned claim construction that others may read and follow. Nothing at issue here affects the settled division of labor between judge and jury that this Court prescribed in *Markman*.

D. Factfinding On Appeal Produces Poorer Decisions And Is Costly To The Patent System

Even if this were a case in which this Court were to select a standard of review, rather than simply to enforce the selection already made by Rule 52(a)(6), *de novo* review of factfinding would still be the wrong choice. The primary justification the Federal Circuit has trumpeted for the no-deference rule is the desire to maximize the potential uniformity the Federal Circuit can bring to patent law. But that argument assumes that uniformity is a virtue rather than a vice. Centralizing all decisionmaking before a single actor makes sense only if that actor will make better decisions. And here the Federal Circuit's role in reviewing disputed facts does not improve the system. "To replace the trier of fact with the Federal Circuit is as unfriendly to the search for truth, as it is unworkable," Judge Newman warned in Markman, and her warning was prescient. 52 F.3d at 1025 n.12 (dissenting opinion).

1. Effect on District-Court Adjudication: The nodeference rule sends a clear message to district judges and litigants: claim construction in the district court is not the main event. Cf. Fed. R. Civ. P. 52 advisory committee's note (1985). De novo review of claim construction continues to produce "alarming levels of appellate reversals." Lighting Ballast, 744 F.3d at 1311 & n.6 (O'Malley, J., dissenting) (quoting amicus brief by Professor Menell, based on data through 2011). And as one experienced district judge has explained, "to some extent, the high reversal rate demoralizes many federal district court judges." O'Malley 682 (remarks of Judge Patti Saris).

"Some district judges have responded to that message by deciding that it is better to provide little or no reasoning for their claim constructions." J. Jonas Anderson & Peter S. Menell, *Informal Deference: A Historical, Empirical, and Normative Analysis of Patent Claim Construction*, 108 Nw. U. L. Rev. 1, 68 & n.320 (2014) (citing cases). They believe their explanations will promptly be discarded by the Federal Circuit, which examines the issues anew. Allowing factual findings to play their proper role—the same role they play in numerous other types of litigation that involve a degree of document interpretation will promote better reasoning in trial-court decisions and better adjudication on appeal.

2. Effect on Appellate Adjudication: Appellate judges have, at best, limited ability to engage deeply with the science, in real time. Their lack of immersion affects the quality of their decisionmaking—

especially when they substitute their own views for the district court's.

The federal rules give district courts—but not appellate courts—tools with which to improve their understanding of scientific and technical matters and to "overcome the inherent difficulty" of resolving these subjects. Joiner, 522 U.S. at 149 (Breyer, J., concur-"[E]xamination by the court" at a pretrial ring). hearing is one example; others include the appointment of special masters, court-appointed experts suggested by the scientific community, or even specially appointed law clerks with specialized training. *Id.* at 149-50. Those tools are beginning to see wider use in patent cases,³⁰ following on a number of other science-focused cases, see Stephen Brever, Introduction, in Fed. Judicial Ctr., Reference Manual on Scientific Evidence 6-7 (3d ed. 2011).

By contrast, an appellate court's capacity to grapple with scientific and technical questions is much more limited. The information available to an appellate judge is restricted to the record already developed, sometimes augmented by the untested assertions of a self-selecting group of amici, presented in lawyer-written briefs. *See* Wright 782 ("[T]he trial judge has the advantage of having made the initial sifting of the entire record and of having put it into logical sequence, while the appellate court has lawyers before it picking out bits and pieces of the record

³⁰ See, e.g., Judge James F. Holderman & Halley Guren, *The Patent Litigation Predicament in the United States*, 2007 U. Ill. J.L. Tech. & Pol'y 1, 16-17 (discussing special masters); *Monolithic Power Sys. v. O2 Micro Int'l*, *Ltd.*, 558 F.3d 1341, 1345-48 (Fed. Cir. 2009) (court-appointed expert appointed where the parties presented "starkly conflicting expert testimony").

to attack or defend a particular finding."). Direct interaction with experts is unavailable. And the opportunity to question counsel is measured in minutes rather than hours or days. *See Cybor*, 138 F.3d at 1477-78 (separate opinion of Rader, J.) (explaining why "[a]n appellate court has none of the[] advantages" that a district court possesses in absorbing scientific learning); *Markman*, 52 F.3d at 1021 n.11 (Newman, J., dissenting) ("No *amicus* explained how improved technological correctness—that is, truth would be more likely to be achieved during the appellate process of page-limited briefs and fifteen minutes per side of argument.").

Furthermore, because each patent is a unique instrument, the Federal Circuit's actual interpretations of individual claim terms are of limited precedential value. "Uniformity" does not mean that particular words must mean the same thing in every claim in which they appear; a different context, or different art, can produce a different meaning. *Markman*, 496 U.S. at 390 ("[A claim] term can be defined only in a way that comports with the instrument as a whole."). And that heavy fact-dependency means that the "normal law-clarifying benefits" of *de novo* review are absent here. *Cooter & Gell*, 496 U.S. at 404 (quoting *Pierce*, 487 U.S. at 561).³¹

Another factor makes any putative "law-clarifying benefits" even more elusive: claims are read from

³¹ See David Krinsky, The Supreme Court, Stare Decisis, and the Role of Appellate Deference in Patent Claim Construction Appeals, 66 Md. L. Rev. 194, 224 (2006) (concluding that judicial interpretations of claim language are "apparently seldom used in practice" to construe the same claim language in later cases).

the perspective of a skilled artisan at the time of the patent application. Thus, changes in the art itself sap the Federal Circuit's interpretations of particular words or phrases of precedential value. The same artisan might interpret the same words in the same context quite differently after some years had passed. *De novo* review is not warranted for the sake of producing precedent that might be "of entirely historical interest," as this Court observed when selecting a standard of review for a somewhat comparable situation—an attorney's-fees statute that asked "not what the law now is, but what the Government was substantially justified in believing it to have been." *Pierce*, 487 U.S. at 561.

3. Effect on Settlement and Cost: Numerous commentators, including sitting federal judges, have observed that the availability of a *de novo* appeal after final judgment encourages litigants to keep litigating. See, e.g., Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1363 (2010) (Clark, District Judge, concurring). Judge Clark observed that under the *de novo* review standard, "rejection of settlement is encouraged, and a decision to appeal is almost compelled, where counsel believes the client's position is valid, even if debatable." Id.

Furthermore, the fact that the Federal Circuit resolutely refuses to entertain claim-construction appeals before final judgment³² means that reversals have hefty consequences. A reversal on claim construction, after summary-judgment motions and at least one trial, will likely result in a new trial. In a patent system where litigation expense is already

³² See Portney v. CIBA Vision Corp., 401 F. App'x 526, 529 (Fed. Cir. 2010)

skyrocketing, the *prolongation* of litigation through summary judgment, trial, and appeal promises to be in no one's interest.

Never fear, a few voices have urged—the Federal Circuit is beginning to provide some "informal" deference, and the reversal rate is beginning to drop. E.g., Lighting Ballast, 744 F.3d at 1294 (Lourie, J., concurring). But as scholars have observed, the Federal Circuit's reversal rate in claim-construction appeals is still higher than other circuits'. Id. at 1311 (O'Malley, J., dissenting) (citing research). The Federal Circuit has now reaffirmed that factual elements of claim construction are due no extra deference. Id. And an essentially unreasoned, standardless form of deference—which apparently seems to consist of reversing the claim constructions the court disagrees with and affirming the ones it does agree with—will do nothing to enhance the predictability of patent appeals, or to restore the Federal Circuit to the limited role that an appellate court should play on matters of historical scientific fact.

IV. The Federal Circuit's Failure To Review The District Court's Factfinding Deferentially Led It To Misunderstand The Science And Misread The Patent

This was a case in which the *de novo* standard caused the Federal Circuit to ignore the district court's factfinding—and to run astray as a result. Shaped by nearly two decades' experience reviewing facts *de novo*, the Federal Circuit substituted its own lay understanding of Figure 1, of SEC technology, and of the prosecution history, in place of the understanding that the district court found was scientifically correct. Any one of these errors would be enough to justify setting aside the Federal Circuit's claim construction and remanding. But as set out below, *all three* of the indicia on which the Federal Circuit relied were starkly at odds with the district court's factual findings. And respondents have never attempted to argue that any one of those findings was clearly erroneous.³³ *See Microsoft*, 131 S. Ct. at 2242. Because the facts found by the district court demonstrate that Teva's patent is not indefinite, the judgment of the court of appeals should be reversed.

A. The Federal Circuit held that Figure 1 of the patent refutes the district court's reading of the term "average molecular weight" to mean peak average. In that figure, the curves corresponding to the batches identified as having a molecular weight of 7.7 kDa have a (shared) peak that is near, but not at, 7.7 kDa. Therefore, the panel reasoned, "the M_p of the corresponding batch" is not 7.7 kDa.

But the district court had specifically resolved a factual dispute on that very point. The court found that reading Figure 1 as the Federal Circuit later did would misunderstand the scientific and statistical techniques used to create Figure 1. Peak average molecular weight is the value at the peak of a chromatogram, and Figure 1 is not a chromatogram. See Pet. App. 44a-45a, 49a. 126a-127a. The chromatogram "would have to be converted into the graph shown in Figure 1." Id. at 44a. The peak averages would fall "approximately at the peaks of the curves" in Figure 1, but not exactly, because the

³³ See Br. in Opp. 19-25 (contending only that the factual findings were due no deference).

process of subdividing and converting the chromatographic data and plotting the data points would cause a shift. *Id.* at 45a, 49a (emphasis added); *see id.* at 111a-18a. Thus, "the fact that the peaks in Figure 1 do not match the listed AMWs precisely would not dissuade a person of ordinary skill in the art from concluding that AMW refers to M_p ." *Id.* at 49a.

Mylan's expert contended that the peak would *not* be expected to shift, so the molecular weight at the peak of the curve in Figure 1 *was* the peak average. J.A. 374a-76a. Teva's expert explained why Mylan's expert was wrong. J.A. 1119a-20a. The district court found Teva's expert more persuasive. But instead of giving that finding the deference that Rule 52 mandates, the Federal Circuit simply eyeballed its way to its own decision accepting the view of Mylan's expert instead of Teva's.

Respondents have attempted to defend this reasoning by arguing that the district court's due deference because they findings are no "contradicted" Figure 1. Br. in Opp. 22-23. But that is question-begging: Figure 1 is not self-explanatory, and resolving what Figure 1 shows and does not show to a person of ordinary skill in the art requires the court to answer factual questions—how a graph like Figure 1 is produced by transforming a chromatogram, and what the effect of the transformation would be. The district court expressly found that Teva's answer was correct; the

Federal Circuit implicitly, and improperly, credited Mylan's.³⁴

B. The panel also ascribed no significance to the district court's finding that peak average would be the "presumed meaning" of average molecular weight to a skilled artisan, because of the use of SEC. Pet. App. 43a. Peak average is the only measure that is defined by the SEC technology—it is the molecular weight corresponding to the peak of an SEC chromatogram, nothing more and nothing less. It is therefore the only measure that can be read directly from an SEC chromatogram, without any further calculation. Id. at 43a, 111a, 125a. Number average and weight average cannot-although there are other technologies that *would* produce those measurements directly, such as osmometry (number average) and light-scattering (weight average). J.A. 123a-24a, 521a-22a.

As the district court thoroughly understood (based in part on the opinions of Mylan's expert), calculating number average and weight average from SEC results would involve additional work, including determining either the number fraction or weight fraction of the molecular weight distribution and then performing additional calculations. J.A. 372a-

³⁴ The Federal Circuit accepted respondents' argument that the average molecular weight in Figure 1, 7.7 kDa, was "closer to the M_w " than to the peak of the curve in Figure 1, which the court wrongly called "the M_p ." Pet. App. 10a. As stated in text, that does not show whether the *real* M_p of that sample was 7.7 kDa. And what the Federal Circuit confidently called "the M_w " was in fact Dr. Grant's recollection, at deposition, that he had approximated the weight average as "probably around" 8.3 to 8.5 kDa. J.A. 310a. Mylan's Dr. Ryu had calculated the same figure as 12.9 kDa, J.A. 381a—considerably *farther* from 7.7.

73a, 376a-83a. And "[i]t is uncommon ... for only one of M_n or M_w to be listed when referencing data generated by SEC." Pet. App. 129a. Accordingly, the district court found that a skilled artisan would presume that average molecular weight determined by SEC means peak average. *Id.* at 43a. The Federal Circuit, on the other hand, dismissed the differences among the three measurements and concluded in effect that the use of SEC would *not* point a skilled artisan toward peak average. That is not a legal conclusion, but an impermissible secondguessing of the district court's factfinding.

C. Finally, the panel placed great weight on what it considered to be contradictory statements in the prosecution histories of two of the patents-in-suit. Both of those statements were made only after the '808 patent issued. They therefore could not possibly suffice to show that the '808 patent was indefinite *when issued*.

To the extent that this after-the-fact prosecution history bears on the construction of the '808 patent at all, obvious scientific errors carry no weight, particularly when they are later corrected. See, e.g., Rambus Inc. v. Infineon Tech. AG, 318 F.3d 1081, 1089 (Fed. Cir. 2003) (an "incorrect statement in the prosecution history does not govern the meaning of the claims"); Biotec Biologische Naturverpackungen GmbH v. Biocorp Inc., 249 F.3d 1341, 1348 (Fed. Cir. 2001); see also p. 29, supra. The Federal Circuit definiteness of the found the term fatally undermined by the statement in the prosecution of the '847 patent that the specification's expression of average molecular weight in kilodalton units "implies a weight average molecular weight." But
that statement was, as all parties' experts agreed, manifestly wrong. Pet. App. 52a. Peak, number, and weight average molecular weight are all expressed in kilodaltons. A skilled artisan would understand that the statement was akin to answering the question "Is that temperature Fahrenheit or Celsius?" with "Celsius, because it is expressed in degrees." It is a non sequitur. And subsequently, during prosecution of the '539 patent, Teva confirmed that "average molecular weight" meant "peak average molecular weight," just as the District Court found that the specification of all these patents taught.

Whether a statement contains an error—a *scientific* error, apparent to a skilled artisan—is plainly a question of fact, concerning the historical understanding of persons of skill in the pertinent art. The district court here found that the reference to "weight average" reflected obviously false nonscientific reasoning that would be apparent to any skilled artisan. Such a statement in prosecution history cannot be used to undermine the teachings of the specification. The district court's finding was entitled to deference on appeal. Instead the Federal Circuit never even acknowledged it.

* * * *

What happened here has happened in far too many cases over the last two decades: the district court undertook a conscientious effort to grapple with the technology, understand the usage in the art, and construe the patent accordingly. That effort entailed months of expert discovery, two *Markman* hearings, and a lengthy written opinion. The district court made a reasoned finding that a person skilled in the art would understand Teva's patent. Yet the Federal Circuit panel—misunderstanding the patent specification and disregarding factual findings that should have been controlling—substituted its own lay understanding of the patent and held it indefinite. To reverse this flawed outcome and prevent more like it, this Court should direct the Federal Circuit to apply Rule 52(a)(6) to patent cases just as the other courts of appeals apply it to every other type of case.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted.

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STATUTORY APPENDIX

1. 35 U.S.C. § 103(a) (2006) provided:

Conditions for patentability; non-obvious subject matter

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. 35 U.S.C. § 112 (2006) provided:

Specification

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

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. A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

3. Federal Rule of Civil Procedure 52 provides:

Findings and Conclusions by the Court; Judgment on Partial Findings

- (a) Findings and Conclusions.
 - (1) In General. In an action tried on the facts without a jury or with an advisory jury, the court must find the facts specially and state its conclusions of law separately. The findings and conclusions may be stated on the record after the close of the evidence or may appear in an opinion or a memorandum of decision filed by the court. Judgment must be entered under Rule 58.
 - (2) For an Interlocutory Injunction. In granting or refusing an interlocutory injunction, the court must similarly state the findings and conclusions that support its action.
 - (3) *For a Motion*. The court is not required to state findings or conclusions when ruling on a motion under Rule 12 or 56 or, unless these rules provide otherwise, on any other motion.
 - (4) *Effect of a Master's Findings*. A master's findings, to the extent adopted by the court, must be considered the court's findings.
 - (5) *Questioning the Evidentiary Support.* A party may later question the sufficiency of the evidence supporting the findings, whether or not the party requested findings, objected to them, moved to amend them, or moved for partial findings.

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(6) Setting Aside the Findings. Findings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, and the reviewing court must give due regard to the trial court's opportunity to judge the witnesses' credibility.

(b) Amended or Additional Findings. On a party's motion filed no later than 28 days after the entry of judgment, the court may amend its findings—or make additional findings—and may amend the judgment accordingly. The motion may accompany a motion for a new trial under Rule 59.

(c) Judgment on Partial Findings. If a party has been fully heard on an issue during a nonjury trial and the court finds against the party on that issue, the court may enter judgment against the party on a claim or defense that, under the controlling law, can be maintained or defeated only with a favorable finding on that issue. The court may, however, decline to render any judgment until the close of the evidence. A judgment on partial findings must be supported by findings of fact and conclusions of law as required by Rule 52(a).

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