

Syllabus

TEVA PHARMACEUTICALS USA, INC., ET AL. *v.*
SANDOZ, INC., ET AL.CERTIORARI TO THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

No. 13–854. Argued October 15, 2014—Decided January 20, 2015

Petitioners, Teva Pharmaceuticals (and related firms), own a patent that covers a manufacturing method for the multiple sclerosis drug Copaxone. When respondents, Sandoz, Inc. (and other firms), tried to market a generic version of the drug, Teva sued them for patent infringement. Sandoz countered that the patent was invalid. Specifically, Sandoz argued that the claim that Copaxone’s active ingredient had “a molecular weight of 5 to 9 kilodaltons” was fatally indefinite, see 35 U.S.C. § 112, ¶2, because it did not state which of three methods of calculation—the weight of the most prevalent molecule, the weight as calculated by the average weight of all molecules, or the weight as calculated by an average in which heavier molecules count for more—was used to determine that weight. After considering conflicting expert evidence, the District Court concluded that the patent claim was sufficiently definite and the patent was thus valid. As relevant here, it found that in context a skilled artisan would understand that the term “molecular weight” referred to molecular weight as calculated by the first method. In finding the “molecular weight” term indefinite and the patent invalid on appeal, the Federal Circuit reviewed *de novo* all aspects of the District Court’s claim construction, including the District Court’s determination of subsidiary facts.

Held: When reviewing a district court’s resolution of subsidiary factual matters made in the course of its construction of a patent claim, the Federal Circuit must apply a “clear error,” not a *de novo*, standard of review. Pp. 324–336.

(a) Federal Rule of Civil Procedure 52(a)(6) states that a court of appeals “must not . . . set aside” a district court’s “[f]indings of fact” unless they are “clearly erroneous.” It sets out a “clear command,” *Anderson v. Bessemer City*, 470 U.S. 564, 574, and “does not make exceptions or . . . exclude certain categories of factual findings” from the court of appeals’ obligation, *Pullman-Standard v. Swint*, 456 U.S. 273, 287. The Rule thus applies to both subsidiary and ultimate facts. *Ibid.* And the function of an appeals court reviewing the findings of a “‘district court sitting without a jury . . . is not to decide factual issues *de novo*.’” *Anderson, supra*, at 573. Even if exceptions to the Rule were permissible, there is no convincing ground for creating an excep-

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tion here. *Markman v. Westview Instruments, Inc.*, 517 U. S. 370, neither created, nor argued for, such an exception. There, the Court held that the ultimate question of claim construction is for the judge, not the jury, *id.*, at 372, but it did not thereby create an exception from the ordinary rule governing appellate review of factual matters. Instead, the Court pointed out that a judge, in construing a patent claim, is engaged in much the same task as the judge would be in construing other written instruments, such as deeds, contracts, or tariffs. *Id.*, at 384, 386, 388, 389. Construction of written instruments often presents a “question solely of law,” at least when the words in those instruments are “used in their ordinary meaning.” *Great Northern R. Co. v. Merchants Elevator Co.*, 259 U. S. 285, 291. But if a written instrument uses “technical words or phrases not commonly understood,” *id.*, at 292, those words may give rise to a factual dispute. If so, extrinsic evidence may help to “establish a usage of trade or locality.” *Ibid.* And in that circumstance, the “determination of the matter of fact” will “preced[e]” the “function of construction.” *Ibid.*

The *Markman* Court also recognized that courts will sometimes have to resolve subsidiary factual disputes in patent construction; Rule 52 requires appellate courts to review such disputes under the “clearly erroneous” standard. Application of this standard is further supported by precedent and by practical considerations. Clear error review is “particularly” important in patent cases because a district court judge who has presided over, and listened to, the entire proceeding has a comparatively greater opportunity to gain the necessary “familiarity with specific scientific problems and principles,” *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U. S. 605, 610, than an appeals court judge who must read a written transcript or perhaps just those portions referenced by the parties. Pp. 324–328.

(b) Arguments to the contrary are unavailing. Sandoz claims that separating “factual” from “legal” questions may be difficult and, like the Federal Circuit, posits that it is simpler for the appellate court to review the entirety of the district court’s claim construction *de novo* than to apply two separate standards. But courts of appeals have long been able to separate factual from legal matters, see, e. g., *First Options of Chicago, Inc. v. Kaplan*, 514 U. S. 938, 947–948, and the Federal Circuit’s efforts to treat factual findings and legal conclusions similarly have brought with them their own complexities. As for Sandoz’s argument that “clear error” review will bring about less uniformity, neither the Circuit nor Sandoz has shown that divergent claim construction stemming from divergent findings of fact on subsidiary matters should occur more than occasionally. Pp. 328–331.

(c) This leaves the question of how the clear error standard should be applied when reviewing subsidiary factfinding in patent claim construc-

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tion. When the district court reviews only evidence intrinsic to the patent, the judge's determination is solely a determination of law, and the court of appeals will review that construction *de novo*. However, where the district court needs to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period, and where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about the extrinsic evidence. The district judge, after deciding the factual dispute, will then interpret the patent claim in light of the facts as he has found them. The ultimate construction of the claim is a legal conclusion that the appellate court can review *de novo*. But to overturn the judge's resolution of an underlying factual dispute, the appellate court must find that the judge, in respect to those factual findings, has made a clear error. Pp. 331–333.

(d) Here, for example, the District Court made a factual finding, crediting Teva's expert's account, and thereby rejecting Sandoz's expert's contrary explanation, about how a skilled artisan would understand the way in which a curve created from chromatogram data reflects molecular weights. Based on that factual finding, the District Court reached the legal conclusion that figure 1 did not undermine Teva's argument that molecular weight referred to the first method of calculating molecular weight. When the Federal Circuit reviewed the District Court's decision, it did not accept Teva's expert's explanation, and it failed to accept that explanation without finding that the District Court's contrary determination was "clearly erroneous." The Federal Circuit erred in failing to review this factual finding only for clear error. Teva asserts that there are two additional instances in which the Federal Circuit rejected the District Court's factual findings without concluding that they were clearly erroneous; those matters are left for the Federal Circuit to consider on remand. Pp. 333–336.

723 F. 3d 1363, vacated and remanded.

BREYER, J., delivered the opinion of the Court, in which ROBERTS, C. J., and SCALIA, KENNEDY, GINSBURG, SOTOMAYOR, and KAGAN, JJ., joined. THOMAS, J., filed a dissenting opinion, in which ALITO, J., joined, *post*, p. 337.

William M. Jay argued the cause for petitioners. With him on the briefs were *David M. Hashmall*, *Daryl L. Wiesen*, *Henry C. Dinger*, *John C. Englander*, *Nicholas K. Mitroostas*, *Jay P. Lefkowitz*, *John C. O'Quinn*, *Elizabeth J. Holland*, *William G. James II*, and *Alan M. Dershowitz*.

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Ginger D. Anders argued the cause for the United States as *amicus curiae* urging vacatur. With her on the brief were *Solicitor General Verrilli, Assistant Attorney General Delery, Deputy Solicitor General Stewart, Mark R. Freeman, and Robert J. McManus.*

Carter G. Phillips argued the cause for respondents. With him on the brief were *Ryan C. Morris, Eric D. Miller, David L. Anstaett, Brandon White, Evan R. Chesler, Richard J. Stark, Deanne E. Maynard, Brian R. Matsui, Marc A. Hearron, David C. Doyle, Anders T. Aannestad, Brian M. Kramer, and Elizabeth Cary Miller.**

JUSTICE BREYER delivered the opinion of the Court.

In *Markman v. Westview Instruments, Inc.*, 517 U. S. 370 (1996), we explained that a patent claim is that “portion of the patent document that defines the scope of the patentee’s rights.” *Id.*, at 372. We held that “the construction of a patent, including terms of art within its claim,” is not for a jury but “exclusively” for “the court” to determine. *Ibid.* That is so even where the construction of a term of art has “evidentiary underpinnings.” *Id.*, at 390.

Today’s case involves claim construction with “evidentiary underpinnings.” See Part III, *infra*. And, it requires us to determine what standard the Court of Appeals should use

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Briefs of *amici curiae* were filed for the American Bar Association by *James R. Silkenat* and *Edward V. Filardi*; for the American Intellectual Property Law Association by *Q. Todd Dickinson*; for the Fédération Internationale des Conseils en Propriété Intellectuelle by *Maxim H. Waldbaum* and *Robert D. Katz*; for Fresenius Kabi USA, LLC, by *Lawrence M. Sung*; for the Houston Intellectual Property Law Association by *L. Lee Eubanks IV* and *Peter J. Corcoran III*; for the Intellectual Property Owners Association by *Paul H. Berghoff, Philip S. Johnson, and Kevin H. Rhodes*; and for Peter S. Menell et al. by *Mr. Menell, pro se.*

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when it reviews a trial judge's resolution of an underlying factual dispute. Should the Court of Appeals review the district court's factfinding *de novo* as it would review a question of law? Or, should it review that factfinding as it would review a trial judge's factfinding in other cases, namely, by taking them as correct "unless clearly erroneous"? See Fed. Rule Civ. Proc. 52(a)(6). We hold that the appellate court must apply a "clear error," not a *de novo*, standard of review.

I

The basic dispute in this case concerns the meaning of the words "molecular weight" as those words appear in a patent claim. The petitioners, Teva Pharmaceuticals (along with related firms), own the relevant patent. The patent covers a manufacturing method for Copaxone, a drug used to treat multiple sclerosis. The drug's active ingredient, called "copolymer-1," is made up of molecules of varying sizes. App. 1143a. And the relevant claim describes that ingredient as having "a molecular weight of 5 to 9 kilodaltons." *Id.*, at 1145a.

The respondents, Sandoz, Inc. (and several other firms), tried to market a generic version of Copaxone. Teva sued Sandoz for patent infringement. 810 F. Supp. 2d 578, 581 (SDNY 2011). Sandoz defended the suit by arguing that the patent was invalid. *Ibid.* The Patent Act requires that a claim "particularly poin[t] out and distinctly clai[m] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, ¶2 (2006 ed.); see *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 902–903, n. 1 (2014). The phrase "molecular weight of 5 to 9 kilodaltons," said Sandoz, did not satisfy this requirement.

The reason that the phrase is fatally indefinite, Sandoz argued, is that, in the context of this patent claim, the term "molecular weight" might mean any one of three different things. The phrase might refer (1) to molecular weight as calculated by the weight of the molecule that is most preva-

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lent in the mix that makes up copolymer-1. (The scientific term for molecular weight so calculated is, we are told, “peak average molecular weight.”) The phrase might refer (2) to molecular weight as calculated by taking all the different-sized molecules in the mix that makes up copolymer-1 and calculating the average weight, *i. e.*, adding up the weight of each molecule and dividing by the number of molecules. (The scientific term for molecular weight so calculated is, we are told, “number average molecular weight.”) Or, the phrase might refer (3) to molecular weight as calculated by taking all the different-sized molecules in the mix that makes up copolymer-1 and calculating their average weight while giving heavier molecules a weight-related bonus when doing so. (The scientific term for molecular weight so calculated, we are told, is “weight average molecular weight.”) See 723 F. 3d 1363, 1367 (CA Fed. 2013); App. 124a. In Sandoz’s view, since Teva’s patent claim does not say which method of calculation should be used, the claim’s phrase “molecular weight” is indefinite, and the claim fails to satisfy the critical patent law requirement.

The District Court, after taking evidence from experts, concluded that the patent claim was sufficiently definite. Among other things, it found that in context a skilled artisan would understand that the term “molecular weight” referred to molecular weight as calculated by the first method, *i. e.*, “peak average molecular weight.” 810 F. Supp. 2d, at 596; see *Nautilus, supra*, at 911 (“[T]he definiteness inquiry trains on the understanding of a skilled artisan at the time of the patent application”). In part for this reason, the District Court held the patent valid. 810 F. Supp. 2d, at 596.

On appeal, the Federal Circuit held to the contrary. It found that the term “molecular weight” was indefinite. And it consequently held the patent invalid. 723 F. 3d, at 1369. In reaching this conclusion, the Federal Circuit reviewed *de novo* all aspects of the District Court’s claim construction, including the District Court’s determination of subsidiary

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facts. *Id.*, at 1369, 1373; see also *Lighting Ballast Control LLC v. Philips Electronics North Am. Corp.*, 744 F.3d 1272, 1276–1277 (CA Fed. 2014) (en banc) (reaffirming *de novo* review of district court claim construction).

Teva filed a petition for certiorari. And we granted that petition. The Federal Circuit reviews the claim construction decisions of federal district courts throughout the Nation, and we consequently believe it important to clarify the standard of review that it must apply when doing so.

II

A

Federal Rule of Civil Procedure 52(a)(6) states that a court of appeals “must not . . . set aside” a district court’s “[f]indings of fact” unless they are “clearly erroneous.” In our view, this rule and the standard it sets forth must apply when a court of appeals reviews a district court’s resolution of subsidiary factual matters made in the course of its construction of a patent claim. We have made clear that the Rule sets forth a “clear command.” *Anderson v. Bessemer City*, 470 U.S. 564, 574 (1985). “It does not make exceptions or purport to exclude certain categories of factual findings from the obligation of a court of appeals to accept a district court’s findings unless clearly erroneous.” *Pullman-Standard v. Swint*, 456 U.S. 273, 287 (1982). Accordingly, the Rule applies to both subsidiary and ultimate facts. *Ibid.* And we have said that, when reviewing the findings of a “‘district court sitting without a jury, appellate courts must constantly have in mind that their function is not to decide factual issues *de novo*.’” *Anderson, supra*, at 573 (quoting *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 123 (1969)).

Even if exceptions to the Rule were permissible, we cannot find any convincing ground for creating an exception to that Rule here. The Rules Advisory Committee pointed out that, in general, exceptions “would tend to undermine the

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legitimacy of the district courts . . . , multiply appeals . . . , and needlessly reallocate judicial authority.” Advisory Committee’s 1985 Note on subd. (a) of Fed. Rule Civ. Proc. 52, 28 U. S. C. App., pp. 908–909; see also *Anderson, supra*, at 574–575 (*de novo* review of factual findings “would very likely contribute only negligibly” to accuracy “at a huge cost in diversion of judicial resources”).

Our opinion in *Markman* neither created, nor argued for, an exception to Rule 52(a). The question presented in that case was a Seventh Amendment question: Should a jury or a judge construe patent claims? 517 U. S., at 372. We pointed out that history provides no clear answer. *Id.*, at 388. The task primarily involves the construction of written instruments. *Id.*, at 386, 388, 389. And that task is better matched to a judge’s skills. *Id.*, at 388 (“The construction of written instruments is one of those things that judges often do and are likely to do better than jurors unburdened by training in exegesis”). We consequently held that claim construction falls “exclusively within the province of the court,” not that of the jury. *Id.*, at 372.

When describing claim construction we concluded that it was proper to treat the ultimate question of the proper construction of the patent as a question of law in the way that we treat document construction as a question of law. *Id.*, at 388–391. But this does not imply an exception to Rule 52(a) for underlying factual disputes. We used the term “question of law” while pointing out that a judge, in construing a patent claim, is engaged in much the same task as the judge would be in construing other written instruments, such as deeds, contracts, or tariffs. *Id.*, at 384, 386, 388, 389; see also *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U. S. 502, 510 (1917) (patent claims are “aptly likened to the description in a deed, which sets the bounds to the grant which it contains”); *Goodyear Dental Vulcanite Co. v. Davis*, 102 U. S. 222, 227 (1880) (analogizing patent construction to the construction of other written instruments like contracts).

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Construction of written instruments often presents a “question solely of law,” at least when the words in those instruments are “used in their ordinary meaning.” *Great Northern R. Co. v. Merchants Elevator Co.*, 259 U.S. 285, 291 (1922). But sometimes, say, when a written instrument uses “technical words or phrases not commonly understood,” *id.*, at 292, those words may give rise to a factual dispute. If so, extrinsic evidence may help to “establish a usage of trade or locality.” *Ibid.* And in that circumstance, the “determination of the matter of fact” will “preced[e]” the “function of construction.” *Ibid.*; see also 12 R. Lord, Williston on Contracts §§ 34:1, 34:19, pp. 2, 174 (4th ed. 2012) (In contract interpretation, the existence of a “usage”—a “practice or method” in the relevant industry—“is a question of fact” (internal quotation marks omitted)). This factual determination, like all other factual determinations, must be reviewed for clear error. See *Pullman-Standard*, *supra*, at 287 (The Rule does not “exclude certain categories of factual findings” and applies to both “subsidiary” and “ultimate” facts (internal quotation marks omitted)).

Accordingly, when we held in *Markman* that the ultimate question of claim construction is for the judge and not the jury, we did not create an exception from the ordinary rule governing appellate review of factual matters. *Markman* no more creates an exception to Rule 52(a) than would a holding that judges, not juries, determine equitable claims, such as requests for injunctions. A conclusion that an issue is for the judge does not indicate that Rule 52(a) is inapplicable. See Fed. Rule Civ. Proc. 52 (setting the standard of review for “[Factual] Findings and Conclusions by the Court” (emphasis added)).

While we held in *Markman* that the ultimate issue of the proper construction of a claim should be treated as a question of law, we also recognized that in patent construction, subsidiary factfinding is sometimes necessary. Indeed, we referred to claim construction as a practice with “evidentiary

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underpinnings,” a practice that “falls somewhere between a pristine legal standard and a simple historical fact.” 517 U. S., at 378, 388, 390. We added that sometimes courts may have to make “credibility judgments” about witnesses. *Id.*, at 389. In other words, we recognized that courts may have to resolve subsidiary factual disputes. And, as explained above, the Rule requires appellate courts to review all such subsidiary factual findings under the “clearly erroneous” standard.

Precedent further supports application of the “clearly erroneous” standard. Before the creation of the Federal Circuit, the Second Circuit explained that in claim construction, the subsidiary “question . . . of how the art understood the term . . . was plainly a question of fact; and unless the [district court’s] finding was ‘clearly erroneous,’ we are to take” it “as controlling.” *Harries v. Air King Products Co.*, 183 F.2d 158, 164 (1950) (L. Hand, C. J.). We have said the same as to subsidiary factual findings concerning other patent law inquiries, including “obviousness.” *Dennison Mfg. Co. v. Panduit Corp.*, 475 U. S. 809, 811 (1986) (*per curiam*) (“subsidiary determinations of the District Court” subject to Rule 52(a)’s clear error standard).

Finally, practical considerations favor clear error review. We have previously pointed out that clear error review is “particularly” important where patent law is at issue because patent law is “a field where so much depends upon familiarity with specific scientific problems and principles not usually contained in the general storehouse of knowledge and experience.” *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U. S. 605, 610 (1950). A district court judge who has presided over, and listened to, the entirety of a proceeding has a comparatively greater opportunity to gain that familiarity than an appeals court judge who must read a written transcript or perhaps just those portions to which the parties have referred. Cf. *Lighting Ballast*, 744 F.3d, at 1311 (O’Malley, J., dissenting) (Federal Circuit judges

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“lack the tools that district courts have available to resolve factual disputes fairly and accurately,” such as questioning the experts, examining the invention in operation, or appointing a court-appointed expert); *Anderson*, 470 U.S., at 574 (“The trial judge’s major role is the determination of fact, and with experience in fulfilling that role comes expertise”).

B

Sandoz argues that claim construction mostly consists of construing a set of written documents that do not give rise to subsidiary factual disputes. Tr. of Oral Arg. 39. It adds that separating “factual” from “legal” questions is often difficult. And Sandoz, like the Federal Circuit itself, argues that it is simpler for that appellate court to review the entirety of the district court’s claim construction *de novo* rather than to apply two separate standards. *Id.*, at 38; see also *Lighting Ballast*, *supra*, at 1284 (criticizing clear error review in part because of the purportedly difficult task of “disentangling” fact from law).

But even were we free to ignore the Federal Rule (which we are not), we would not find this argument convincing. Courts of appeals have long found it possible to separate factual from legal matters. See, e.g., *First Options of Chicago, Inc. v. Kaplan*, 514 U.S. 938, 947–948 (1995) (review of factual findings for clear error and legal conclusions *de novo* is the “ordinary” standard for courts of appeals). At the same time, the Federal Circuit’s efforts to treat factual findings and legal conclusions similarly have brought with them their own complexities. See, e.g., *Cybor Corp. v. FAS Technologies, Inc.*, 138 F. 3d 1448, 1454 (1998) (en banc) (claim construction does not involve “factual evidentiary findings” (citation and internal quotation marks omitted)); *Lighting Ballast*, *supra*, at 1284 (claim construction has “arguably factual aspects”); *Dow Jones & Co. v. Abblaise Ltd.*, 606 F. 3d 1338, 1344–1345 (2010) (“[T]his court,” while reviewing claim construction without deference, “takes into account the

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views of the trial judge”); *Nazomi Communications, Inc. v. Arm Holdings, PLC*, 403 F.3d 1364, 1371 (2005) (“[C]ommon sense dictates that the trial judge’s view will carry weight” (citation and internal quotation marks omitted)); *Lighting Ballast, supra*, at 1294 (Lourie, J., concurring) (we should “rarely” overturn district court’s true subsidiary factfinding; “we should, and do, give proper informal deference to the work of judges of a subordinate tribunal”); *Cybor, supra*, at 1480 (opinion of Newman, J.) (“By continuing the fiction that there are no facts to be found in claim interpretations, we confound rather than ease the litigation process”); see also *Anderson, supra*, at 575 (the parties “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”); Brief for Peter S. Menell et al. as *Amici Curiae* 5 (Federal Circuit overturns district court claim construction at unusually high rate).

Finally, the Circuit feared that “clear error” review would bring about less uniformity. *Lighting Ballast, supra*, at 1280. Neither the Circuit nor Sandoz, however, has shown that (or explained why) divergent claim construction stemming from divergent findings of fact (on subsidiary matters) should occur more than occasionally. After all, the Federal Circuit will continue to review *de novo* the district court’s ultimate interpretation of the patent claims. And the attorneys will no doubt bring cases construing the same claim to the attention of the trial judge; those prior cases will sometimes be binding because of issue preclusion, see *Markman*, 517 U. S., at 391, and sometimes will serve as persuasive authority. Moreover, it is always possible to consolidate for discovery different cases that involve construction of the same claims. And, as we said in *Markman*, subsidiary factfinding is unlikely to loom large in the universe of litigated claim construction. *Id.*, at 389–390.

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C

The dissent argues that claim construction does not involve any “factfinding,” or, if it does, claim construction factfinding is akin to the factfinding that underlies our interpretation of statutes. *Post*, at 337, 340–343 (opinion of THOMAS, J.). Its first, broader contention runs contrary to our recognition in *Markman* that claim construction has “evidentiary underpinnings” and that courts construing patent claims must sometimes make “credibility judgments” about witnesses. 517 U.S., at 389–390. Indeed, as discussed in Part III, *infra*, this case provides a perfect example of the factfinding that sometimes underlies claim construction: The parties here presented the District Court with competing fact-related claims by different experts, and the District Court resolved the issues of fact that divided those experts.

The dissent’s contention also runs contrary to Sandoz’s concession at oral argument that claim construction will sometimes require subsidiary factfinding. Tr. of Oral Arg. 33–34, 38–40. It is in tension with our interpretation of related areas of patent law, such as the interpretation of “obviousness,” which we have said involves subsidiary factfinding subject to Rule 52(a)’s clear error review. See *Den-nison*, 475 U.S., at 811. And it fights the question presented in this case, which *assumes* the existence of such factfinding. See Pet. for Cert. i (whether “a district court’s factual finding in support of its construction of a patent claim term may be reviewed *de novo*, . . . or only for clear error”).

Neither do we find factfinding in this context sufficiently similar to the factfinding that underlies statutory interpretation. Statutes, in general, address themselves to the general public; patent claims concern a small portion of that public. Statutes typically (though not always) rest upon congressional consideration of general facts related to a reasonably broad set of social circumstances; patents typically (though not always) rest upon consideration by a few private parties, experts, and administrators of more narrowly circumscribed facts related to specific technical matters. The

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public, and often an adversarial public, typically considers and discusses the relevant general facts before Congress enacts a statute; only private parties, experts, and administrators likely consider the relevant technical facts before the award of a patent. Given these differences, it is not surprising that this Court has never previously compared patent claim construction in any here relevant way to statutory construction. As discussed *supra*, at 325, however, the Court has repeatedly compared patent claim construction to the construction of other written instruments such as deeds and contracts. See, e. g., *Markman*, *supra*, at 384, 386, 388, 389; *Motion Picture Patent Co.*, 243 U. S., at 510; *Goodyear*, 102 U. S., at 227.

D

Now that we have set forth *why* the Federal Circuit must apply clear error review when reviewing subsidiary factfinding in patent claim construction, it is necessary to explain *how* the rule must be applied in that context. We recognize that a district court's construction of a patent claim, like a district court's interpretation of a written instrument, often requires the judge only to examine and to construe the document's words without requiring the judge to resolve any underlying factual disputes. As all parties agree, when the district court reviews only evidence intrinsic to the patent (the patent claims and specifications, along with the patent's prosecution history), the judge's determination will amount solely to a determination of law, and the Court of Appeals will review that construction *de novo*. See Brief for Petitioners 27; Reply Brief 16; Brief for Respondents 43; see also Brief for United States as *Amicus Curiae* 12–13.

In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. See, e. g., *Seymour v. Osborne*, 11 Wall. 516, 546 (1871) (a patent may be “so interspersed with technical terms and terms of art that the tes-

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timony of scientific witnesses is indispensable to a correct understanding of its meaning”). In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the “evidentiary underpinnings” of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.

For example, if a district court resolves a dispute between experts and makes a factual finding that, in general, a certain term of art had a particular meaning to a person of ordinary skill in the art at the time of the invention, the district court must then conduct a legal analysis: whether a skilled artisan would ascribe that same meaning to that term *in the context of the specific patent claim under review*. That is because “[e]xperts may be examined to explain terms of art, and the state of the art, at any given time,” but they cannot be used to prove “the proper or legal construction of any instrument of writing.” *Winans v. New York & Erie R. Co.*, 21 How. 88, 100–101 (1859); see also *Markman*, *supra*, at 388 (“‘Where technical terms are used, or where the qualities of substances . . . or any similar data necessary to the comprehension of the language of the patent are unknown to the judge, the testimony of witnesses may be received upon these subjects, and any other means of information be employed. *But in the actual interpretation of the patent the court proceeds upon its own responsibility, as an arbiter of the law, giving to the patent its true and final character and force*’” (quoting 2 W. Robinson, *Law of Patents* § 732, pp. 482–483 (1890); emphasis in original)).

Accordingly, the question we have answered here concerns review of the district court’s resolution of a subsidiary factual dispute that helps that court determine the proper interpretation of the written patent claim. The district judge, after deciding the factual dispute, will then interpret the patent claim in light of the facts as he has found them. This ultimate interpretation is a legal conclusion. The appellate court can still review the district court’s ultimate construc-

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tion of the claim *de novo*. But, to overturn the judge's resolution of an underlying factual dispute, the Court of Appeals must find that the judge, in respect to those factual findings, has made a clear error. Fed. Rule Civ. Proc. 52(a)(6).

In some instances, a factual finding will play only a small role in a judge's ultimate legal conclusion about the meaning of the patent term. But in some instances, a factual finding may be close to dispositive of the ultimate legal question of the proper meaning of the term in the context of the patent. Nonetheless, the ultimate question of construction will remain a legal question. Simply because a factual finding may be nearly dispositive does not render the subsidiary question a legal one. "[A]n issue does not lose its factual character merely because its resolution is dispositive of the ultimate" legal question. *Miller v. Fenton*, 474 U. S. 104, 113 (1985). It is analogous to a judge (sitting without a jury) deciding whether a defendant gave a confession voluntarily. The answer to the legal question about the voluntariness of the confession may turn upon the answer to a subsidiary factual question, say, "whether in fact the police engaged in the intimidation tactics alleged by the defendant." *Id.*, at 112. An appellate court will review the trial judge's factual determination about the alleged intimidation deferentially (though, after reviewing the factual findings, it will review a judge's ultimate determination of voluntariness *de novo*). See *id.*, at 112–118. An appellate court similarly should review for clear error those factual findings that underlie a district court's claim construction.

III

We can illustrate our holding by considering an instance in which Teva, with the support of the Solicitor General, argues that the Federal Circuit wrongly reviewed the District Court's factual finding *de novo*. See Brief for Petitioners 54–56; Brief for United States as *Amicus Curiae* 31–32. Recall that Teva's patent claim specifies an active ingredient

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with a “molecular weight of about 5 to 9 kilodaltons.” Recall Sandoz’s basic argument, namely, that the term “molecular weight” is indefinite or ambiguous. The term might refer to the weight of the most numerous molecule, it might refer to weight as calculated by the average weight of all molecules, or it might refer to weight as calculated by an average in which heavier molecules count for more. The claim, Sandoz argues, does not tell us which way we should calculate weight. See Part I, *supra*.

To illustrate, imagine we have a sample of copolymer-1 (the active ingredient) made up of 10 molecules: 4 weigh 6 kilodaltons each, 3 weigh 8 kilodaltons each, and 3 weigh 9 kilodaltons each. Using the first method of calculation, the “molecular weight” would be 6 kilodaltons, the weight of the most prevalent molecule. Using the second method, the molecular weight would be 7.5 (total weight, 75, divided by the number of molecules, 10). Using the third method, the molecular weight would be more than 8, depending upon how much extra weight we gave to the heavier molecules.

Teva argued in the District Court that the term “molecular weight” in the patent meant molecular weight calculated in the first way (the weight of the most prevalent molecule, or peak average molecular weight). Sandoz, however, argued that figure 1 of the patent showed that Teva could not be right. 810 F. Supp. 2d, at 590. (We have set forth figure 1 in the Appendix, *infra*). That figure, said Sandoz, helped to show that the patent term did *not* refer to the first method of calculation. Figure 1 shows how the weights of a sample’s molecules were distributed in three different samples. The curves indicate the number of molecules of each weight that were present in each of the three. For example, the figure’s legend says that the first sample’s “molecular weight” is 7.7. According to Teva, that should mean that molecules weighing 7.7 kilodaltons were the most prevalent molecules in the sample. But, look at the curve, said Sandoz. It shows that the most prevalent molecule

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weighed, not 7.7 kilodaltons, but slightly less than 7.7 (about 6.8) kilodaltons. See App. 138a–139a. After all, the *peak* of the first molecular weight distribution curve (the solid curve in the figure) is not at precisely 7.7 kilodaltons, but at a point just before 7.7. Thus, argued Sandoz, the figure shows that the patent claim term “molecular weight” did not mean molecular weight calculated by the first method. It must mean something else. It is indefinite. 810 F. Supp. 2d, at 590.

The District Court did not accept Sandoz’s argument. Teva’s expert testified that a skilled artisan would understand that converting data from a chromatogram to molecular weight distribution curves like those in figure 1 would cause the peak on each curve to shift slightly; this could explain the difference between the value indicated by the peak of the curve (about 6.8) and the value in the figure’s legend (7.7). App. 138a–139a. Sandoz’s expert testified that no such shift would occur. App. 375a–376a. The District Court credited Teva’s expert’s account, thereby rejecting Sandoz’s expert’s explanation. 810 F. Supp. 2d, at 589; Brief for Respondents 61. The District Court’s finding about this matter was a factual finding—about how a skilled artisan would understand the way in which a curve created from chromatogram data reflects molecular weights. Based on that factual finding, the District Court reached the legal conclusion that figure 1 did not undermine Teva’s argument that molecular weight referred to the first method of calculation (peak average molecular weight). 810 F. Supp. 2d, at 590–591.

When the Federal Circuit reviewed the District Court’s decision, it recognized that the peak of the curve did not match the 7.7 kilodaltons listed in the legend of figure 1. 723 F. 3d, at 1369. But the Federal Circuit did not accept Teva’s expert’s explanation as to how a skilled artisan would expect the peaks of the curves to shift. And it failed to accept that explanation without finding that the District

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

Teva claims that there are two additional instances in which the Federal Circuit rejected the District Court's factual findings without concluding that they were clearly erroneous. We leave these matters for the Federal Circuit to consider on remand in light of today's opinion.

We vacate the Federal Circuit's judgment, and we remand the case for further proceedings consistent with this opinion.

It is so ordered.

APPENDIX

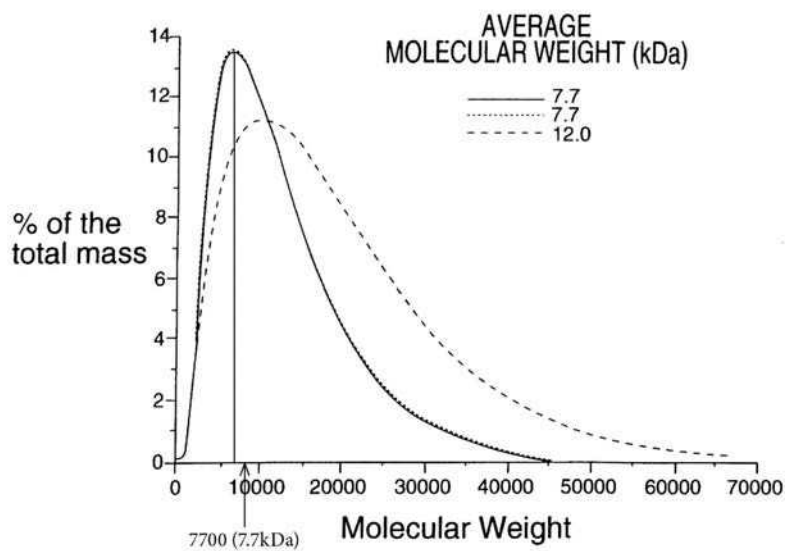


FIG. 1 (with minor additions to emphasize that the peak of the solid curve does not correspond precisely to 7.7kDa)

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JUSTICE THOMAS, with whom JUSTICE ALITO joins, dissenting.

I agree with the Court’s conclusion that there is no special exception to Federal Rule of Civil Procedure 52(a)(6) for claim construction. But that is not the question in this case. Because Rule 52(a)(6) provides for clear error review only of “findings of fact” and “does not apply to conclusions of law,” *Pullman-Standard v. Swint*, 456 U. S. 273, 287 (1982), the question here is whether claim construction involves findings of fact.¹ Because it does not, Rule 52(a)(6) does not apply, and the Court of Appeals properly applied a *de novo* standard of review.

I

In reaching the contrary conclusion, the majority fails to engage the “vexing . . . distinction between questions of fact and questions of law.” *Id.*, at 288. Unfortunately, “Rule 52(a) does not furnish particular guidance with respect to distinguishing law from fact,” and we have found it difficult to discern “any other rule or principle that will unerringly” differentiate the two. *Ibid.* That inquiry is thus not as simple as pointing out the undeniable “evidentiary underpinnings” of claim construction. *Ante*, at 332.

Instead, we must consider how “findings of fact” and “conclusions of law” were understood at the time Rule 52 was adopted. Cf. *Tome v. United States*, 513 U. S. 150, 168 (1995)

¹The majority argues that we are bound by petitioners’ phrasing of the question presented and by respondents’ concession at oral argument that claim construction “will sometimes require subsidiary factfinding.” *Ante*, at 330. But the parties’ stipulations that claim construction involves subsidiary factual determinations, with which I do not quarrel, do not settle the question whether those determinations are “findings of fact” within the meaning of Rule 52(a)(6). And to the extent that the majority premises its holding on what it sees as stipulations that these determinations are “findings of fact” for purposes of Rule 52(a)(6), then its holding applies only to the present dispute, and other parties remain free to contest this premise in the future.

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(SCALIA, J., concurring in part and concurring in judgment) (noting that, because the Federal Rules have their background in common-law principles, “the body of common law knowledge must be a source of guidance in our interpretation of the Rules” (internal quotation marks omitted)). Unfortunately, the pre-1937 evidence of this Court’s treatment of evidentiary determinations underlying claim construction is inconclusive. In several decisions, the Court considered extrinsic evidence related to claim construction with no apparent deference to the District Courts’ findings based on that evidence. *Coupe v. Royer*, 155 U.S. 565, 576 (1895); *Loom Co. v. Higgins*, 105 U.S. 580, 584–587 (1882); *Tilghman v. Proctor*, 102 U.S. 707, 729–731 (1881); *Winans v. Denmead*, 15 How. 330, 339 (1854). None of those decisions, however, expressly turned on a disagreement over a subsidiary evidentiary determination.

Absent specific evidence of the treatment of a particular issue at the time Rule 52 was adopted, we have drawn analogies to the treatment of other issues under Rule 52(a)(6). See, e.g., *Pullman*, *supra*, at 288. In general, we have treated district-court determinations as “analytically more akin to a fact” the more they pertain to a simple historical fact of the case, and as “analytically more akin to . . . a legal conclusion” the more they define rules applicable beyond the parties’ dispute. *Miller v. Fenton*, 474 U.S. 104, 116 (1985); see also *Bose Corp. v. Consumers Union of United States, Inc.*, 466 U.S. 485 (1984); *Baumgartner v. United States*, 322 U.S. 665, 671 (1944). Under this approach, determinations underlying claim construction fall on the law side of the dividing line.

A

Patents are written instruments, so other written instruments supply the logical analogy. See *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 381 (1996). And as the majority recognizes, the construction of written instruments is generally a question of law. See *ante*, at 325. But

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in certain contexts, a court construing a written instrument makes subsidiary determinations that the law treats as findings of fact.

The classic case of a written instrument whose construction does *not* involve subsidiary findings of fact is a statute. Our treatment of subsidiary evidentiary findings underlying statutory construction as conclusions of law makes sense for two reasons.

First, although statutory construction may demand some inquiry into legislative “intent,” that inquiry is analytically legal: The meaning of a statute does not turn on what an individual lawmaker intended as a matter of fact, but only on what intent has been enacted into law through the constitutionally defined channels of bicameralism and presentment. See *Wyeth v. Levine*, 555 U. S. 555, 587 (2009) (THOMAS, J., concurring in judgment). This remains so even if deciding what passed through those channels requires a court to determine a “fact” of historical understanding through an examination of extrinsic evidence. See, *e. g.*, *Sosa v. Alvarez-Machain*, 542 U. S. 692, 714–715 (2004) (examining the historical understanding of the term “law of nations” when the Alien Tort Statute was enacted); see also, *e. g.*, *McIntyre v. Ohio Elections Comm’n*, 514 U. S. 334, 359–366 (1995) (THOMAS, J., concurring in judgment) (construing a constitutional provision by asking how the words were originally understood and marshaling evidence of that understanding). The Court has given no hint that this practice changes when the statute it construes is a land patent—that is, a public land grant. See *Leo Sheep Co. v. United States*, 440 U. S. 668, 669 (1979) (making detailed historical findings in the course of construing a land grant because “‘courts, in construing a statute, may with propriety recur to the history of the times when it was passed . . . in order to ascertain the reason as well as the meaning of particular provisions in it’”); see also *Marvin M. Brandt Revocable Trust v. United States*, 572 U. S. 93, 103–104 (2014) (looking to the historical

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background against which a land grant was passed to confirm its interpretation).

Second, statutes govern the rights and duties of the public as a whole, so subsidiary evidentiary findings shape legal rules that apply far beyond the boundaries of the dispute involved. Our rules of construction for legislative acts have long been consciously shaped by the public's stake in those acts. See, *e.g.*, *The Binghamton Bridge*, 3 Wall. 51, 75 (1866) (describing a rule of construction borrowed from English common law and reflected in the decisions of the several States).

The construction of contracts and deeds, by contrast, sometimes involves subsidiary findings of fact. Our treatment of subsidiary evidentiary findings as findings of fact in this context makes sense because, in construing contracts and deeds, “the avowed purpose and primary function of the court is to ascertain the intention of the parties.” 11 R. Lord, *Williston on Contracts* §30:2, pp. 17–18 (4th ed. 2012) (Williston); see also *Reed v. Proprietors of Locks and Canals on Merrimac River*, 8 How. 274, 288–289 (1850). Sometimes that intention is clearly “set forth in the express language of the contract,” 11 Williston §31:1, at 341–342, so no subsidiary findings of fact are necessary to its construction, *id.*, §30:1. But when ambiguities require a court to look beyond the express language, its search for intent becomes factual in nature. That search focuses on “real intention[s]”—embodied in an actual meeting of minds or an actual conveyance of a physical parcel of land—that have an existence outside the written instrument and that the instrument merely records. See *William & James Brown & Co. v. McGran*, 14 Pet. 479, 493 (1840) (Story, J.); *Reed*, *supra*, at 289. See generally *Union Pacific R. Co. v. United States*, 10 Ct. Cl. 548, 577–578 (1874) (declining to interpret a contract-like statute according to contract rules because “[a]ll the terms of the compact are dictated and accepted by one side, and the only

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intent which judicial construction can make certain is the intent of the legislative power”), cited in 3 N. Singer, Sutherland on Statutory Construction § 63:1, p. 405, n. 6 (7th ed. 2008).

Of course, not all subsidiary inquiries that a court makes in the course of construing contracts amount to findings of fact. For example, when a court searches for the meaning that a hypothetical person “conversant with the subject-matter with which the contract is dealing” would give to the words of the contract, its conclusion often remains one of law. *Silver King Coalition Mines Co. of Nevada v. Silver King Consol. Mining Co. of Utah*, 204 F. 166, 172 (CA8 1913), cited in Advisory Committee’s 1937 Notes on Fed. Rule Civ. Proc. 52, 28 U. S. C. App., p. 686.

The question we must ask, then, is whether the subsidiary findings underlying claim construction more closely resemble the subsidiary findings underlying the construction of statutes or those underlying the construction of contracts and deeds that are treated as findings of fact. This, in turn, depends on whether patent claims are more like statutes or more like contracts and deeds.

B

A patent, generally speaking, is “an official document reflecting a grant by a sovereign that is made public, or ‘patent.’” *Marvin M. Brandt Revocable Trust, supra*, at 99. Invention patents originated not as private property rights, but as royal prerogatives. See 4 W. Holdsworth, *A History of English Law* 350–351 (1924). They could be issued and revoked only by the Crown, which sometimes used the patent to delegate governmental power to regulate an industry. *Id.*, at 344–347. Provoked by the Crown’s use of these so-called “monopoly patents” to promote private economic interests over innovation and beneficial commerce, Parliament enacted the Statute of Monopolies in 1624. *Id.*, at 353. But

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even under the regime that Parliament put in place, patents remained sovereign grants, issued, enforced, and revoked by the Privy Council. Lemley, *Why Do Juries Decide if Patents Are Valid?* 99 Va. L. Rev. 1673, 1681 (2013).

The Framers adopted a similar scheme. Article I of the U. S. Constitution vests the patent power in Congress, authorizing it “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” Art. I, § 8, cl. 8. Although Congress could issue such patents as special statutes, see, e. g., *Bloomer v. McQuewan*, 14 How. 539, 549–550 (1853), it has mostly acted by authorizing the Executive Branch to issue patents when certain statutory requirements are met. See 35 U. S. C. § 151; see also Act of July 8, 1870, § 31, 16 Stat. 202; Act of July 4, 1836, § 7, 5 Stat. 119; Act of Apr. 10, 1790, ch. 7, § 1, 1 Stat. 109–110.

Like the royal prerogatives that were their historical antecedents, patents have a regulatory effect: They “restrain *others* from manufacturing, using or selling that which [the patent holder] has invented” for a specified period of time. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U. S. 502, 510 (1917) (emphasis added). And because the regulatory scope of a patent is determined by the claims in the patent, the subsidiary findings that a court makes during claim construction contribute to rules that limit conduct by the public at large.

Because they are governmental dispositions and provide rules that bind the public at large, patent claims resemble statutes. The scope of a patent holder’s monopoly right is defined by claims legally actualized through the procedures established by Congress pursuant to its patent power. Thus, a patent holder’s actual intentions have effect only to the extent that they are expressed in the public record. See *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U. S. 274, 279 (1877); see also *Goodyear Dental Vulcanite Co. v. Davis*, 102 U. S. 222, 227 (1880) (examining “the avowed understanding

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of the patentee,” but disclaiming any holding that such understanding “c[ould] be allowed to enlarge, diminish, or vary the language of a patent afterwards issued”).

Moreover, because the ultimate meaning of a patent claim, like the ultimate meaning of a statute, binds the public at large, it should not depend on the specific evidence presented in a particular infringement case. Although the party presentations shape even statutory construction, *de novo* review on appeal helps to ensure that the construction is not skewed by the specific evidence presented in a given case.

C

For purposes of construction, contracts and deeds are less natural analogies for patents. In particular, patents lack the characteristics of those instruments that have justified departing from the usual practice of treating document construction as a wholly legal inquiry, not subject to subsidiary findings of fact.

To be sure, we have occasionally characterized a patent as “a carefully crafted bargain” between the inventor and the public. *Pfaff v. Wells Electronics, Inc.*, 525 U. S. 55, 63 (1998); see also *Kendall v. Winsor*, 21 How. 322, 327–328 (1859); *Grant v. Raymond*, 6 Pet. 218, 242 (1832). But as our decisions have also recognized, the patent is perhaps better characterized as a reward for feats already accomplished—that is, innovation and public disclosure—than as a mutual exchange of executory promises. See, e. g., *Motion Picture Patents Co.*, *supra*, at 513; *Seymour v. Osborne*, 11 Wall. 516, 533–534 (1871); *Grant*, *supra*, at 242; see also *Markman v. Westview Instruments, Inc.*, 52 F. 3d 967, 985, n. 14 (CA Fed. 1995), *aff’d* 517 U. S. 370 (1996) (distinguishing patents from contracts). In granting a patent, the Government is acting not as a party to a bilateral contract binding upon itself alone, but instead as a sovereign bestowing upon the inventor a right to exclude the public at large from the invention marked out by his claims.

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In this sense, patents are more closely analogous to deeds, *Motion Picture Patents Co.*, *supra*, at 510 (collecting cases), because they share the common characteristic of describing rights that the owner holds against the world. See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 162 (1989). But in the context of land patents, we have been unwilling to interpret sovereign dispositions in the same way we interpret analogous private conveyances. See, e.g., *Leo Sheep Co.*, 440 U.S., at 680–682; *Missouri, K. & T. R. Co. v. Kansas Pacific R. Co.*, 97 U.S. 491, 497 (1878); *Leavenworth, L. & G. R. Co. v. United States*, 92 U.S. 733, 740–741 (1876); see also *Marvin M. Brandt Revocable Trust*, 572 U.S. 93 (interpreting a land grant as a statute rather than as a deed). We should not blithely extend the rules governing the construction of deeds to their even more distant cousins, invention patents.²

²The Anglo-American legal tradition has long distinguished between “core” private rights—including the traditional property rights represented by deeds—and other types of rights. Nelson, *Adjudication in the Political Branches*, 107 Colum. L. Rev. 559, 567 (2007) (Nelson). These other rights fall into two categories: “‘public rights belonging to the people at large,’” and “‘privileges’ or ‘franchises,’” “which public authorities ha[ve] created purely for reasons of public policy and which ha[ve] no counterpart in the Lockean state of nature.” *Id.*, at 566–567. Notwithstanding a movement to recognize a “core” property right in inventions, the English common law placed patents squarely in the final category, as franchises that “depend upon express legislation,” and “hath [their] essence by positive municipal law.” 7 W. Holdsworth, *A History of English Law* 479, n. 7, 480, and n. 4, 497 (1926). The distinction between “core” private rights, on the one hand, and public rights and government-created privileges, on the other, has traditionally had significant implications for the way in which rights are adjudicated. Nelson, *supra*. Thus, no matter how closely a franchise resembles some “core” private right, it does not follow that it must be subject to the same rules of judicial interpretation as its counterpart.

Cases interpreting deeds and land patents exemplify this rule and show why the majority’s assertion that patents affect fewer people than statutes, in addition to being a dubious overgeneralization, is not a material distinction. Land patents are more like deeds than statutes in the sense

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Bearing these differences in mind, the subsidiary facts relevant to the construction of patents, on the one hand, and contracts and deeds, on the other, differ substantially. As explained above, we have justified treating subsidiary determinations about the actual intentions of parties to contracts and deeds as findings of fact. But the subsidiary determinations about patent claims that the majority identifies as factual do not concern historical facts, such as what the parties agreed to do or how a given parcel of land is situated. See *William & James Brown & Co.*, 14 Pet., at 493; *Reed*, 8 How., at 289.

For example, the “fact” of how a skilled artisan would understand a given term or phrase at a particular point in history is a legal fiction; it has no existence independent of the claim construction process. There is no actual “skilled artisan” who, at the moment the application was filed, formed an understanding of the terms of the claim—an understanding that an omniscient factfinder could ascertain. Neither is the skilled artisan’s understanding a proxy for some external fact that, could the court know it, would supply the meaning of a patent claim. Whatever the scope of the inventor’s right under the patent before the introduction of claims, the law has limited that right to the claims as written in the patent. See *Markman*, 517 U. S., at 379. Our decision in *Markman* rested in part on this characteristic of claim construction, distinguishing it from other patent determinations that must go to a jury because they require the factfinder to inspect “‘an embodied conception outside of the patent itself’” or things “‘which have their existence *in pais*.’” *Id.*,

that their effects are more localized, yet the judicial power approaches them differently because they dispose of public rights held by the government on behalf of the people, Nelson 566. See also *The Binghamton Bridge*, 3 Wall. 51, 75 (1866) (interpreting a state grant of a corporate charter as a “contract” but subject to the special common-law rule that all ambiguities must be construed in favor of the State because “in grants by the public nothing passes by implication”).

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at 385–386 (distinguishing *Bischoff v. Wethered*, 9 Wall. 812 (1870)).

Because the skilled artisan inquiry in claim construction more closely resembles determinations categorized as “conclusions of law” than determinations categorized as “findings of fact,” I would hold that it falls outside the scope of Rule 52(a)(6) and is subject to *de novo* review.

II

A

The majority makes little effort to justify its assertion that the subsidiary determinations a district court makes in the course of claim construction are findings of fact. And the few analogies that it attempts to draw either lack support or prove too much.

For example, relying on *Great Northern R. Co. v. Merchants Elevator Co.*, 259 U.S. 285, 292 (1922), the majority compares the search for the meaning of “‘technical words or phrases not commonly understood’” in claim construction to “questions of fact” about the scope of a railway tariff. *Ante*, at 326. It is true that, in *Great Northern*, the Court referred to questions of fact arising in the context of contract construction, which, it pointed out, must go to a jury. 259 U.S., at 292–293. But the Court’s conclusion that similar questions must be settled by the Interstate Commerce Commission (ICC) when they relate to the interpretation of a railway tariff merely proves the point that the allocation of a technical usage inquiry depends upon the legal instrument that the court is construing. In that case, the Court was faced with a tariff filed with, and administered by, the ICC. And it was not concerned with allocating evidentiary determinations between trial and appellate courts, but with allocating them between an agency and the judiciary. *Id.*, at 289. So understood, the distinction the Court drew pertains more to an emerging rule of administrative deference than to a definitive classification of judicial determinations.

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Further reinforcing the point that the nature of the legal instrument dictates our treatment of subsidiary findings is that, although terms in statutes and regulations frequently have technical meanings unknown outside the specialized community they are meant to regulate, we treat the inquiry into those meanings as involving only conclusions of law. See, e. g., *Norfolk & Western R. Co. v. Hiles*, 516 U. S. 400, 401–407, 413–414 (1996); *Aluminum Co. of America v. Central Lincoln Peoples’ Util. Dist.*, 467 U. S. 380, 390 (1984). The majority’s unexamined reliance on technical usage could be read to cast doubt on this practice, as well as on our holding in *Markman* that claim construction is exclusively for the court. If claim construction involves subsidiary questions of technical meaning or usage that are indistinguishable from those questions submitted to the jury in the contract context, see 12 Williston § 34:19, then one might wonder why such issues are not submitted to the jury in the patent and statute contexts, too.

The majority also analogizes to the obviousness inquiry in patent law, which involves findings of fact subject to Rule 52(a)(6). *Ante*, at 330 (citing *Dennison Mfg. Co. v. Panduit Corp.*, 475 U. S. 809, 811 (1986) (*per curiam*)). But this analogy is even further off the mark because obviousness turns on historical facts about the circumstances of the invention, rather than on the construction of a written instrument. *Id.*, at 810–811. Cf. *Markman*, *supra*, at 386 (distinguishing the novelty inquiry from claim construction on these grounds).

B

Nor does the majority attempt to justify its holding by reference to which “‘judicial actor is better positioned . . . to decide the issue in question,’” *Markman*, *supra*, at 388—an inquiry that we have also treated as relevant to the classification of fact versus law, *Miller*, 474 U. S., at 114. In resolving issues of judicial administration, we have considered that federal appellate courts are “expositor[s] of law,” *ibid.*, and

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have acknowledged that they are better positioned than district courts to promote uniformity, *Markman, supra*, at 390; see also *Ornelas v. United States*, 517 U.S. 690, 697–698 (1996). We have recognized, however, that trial courts have a special competence in judging witness credibility and weighing the evidence, *Miller, supra*, at 114, and have been cautious not to waste judicial and party resources through needless relitigation, see *Anderson v. Bessemer City*, 470 U.S. 564, 575 (1985).

To the extent that the construction of a patent claim turns on testimony of expert witnesses, especially live testimony, there is no denying that it falls within the bounds of a district court’s special competence. But as we recognized in *Markman*, and as the majority is careful to reiterate today, “subsidiary factfinding is unlikely to loom large in the universe of litigated claim construction.” *Ante*, at 329. The majority’s reluctance to highlight “allocation,” *Miller, supra*, at 113, is thus understandable. The arguments favoring allocation to the district court, diminished by the majority’s own prediction, are outweighed by the remaining rule-of-law and uniformity considerations that factored into our allocation in *Markman, supra*, at 388–391.

1

We have long been cautious not to allocate issues in a way that would “strip a federal appellate court of its primary function as an expositor of law.” *Miller*, 474 U.S., at 114. Although we have recognized that “an issue does not lose its factual character merely because its resolution is dispositive of the ultimate” dispute, *id.*, at 113, we have been less inclined to defer to seemingly factual determinations that play a dispositive role in the development of legal rules. For example, we have sanctioned *de novo* appellate review of the mixed determinations of “probable cause” and “reasonable suspicion” on the ground that “the legal rules . . . acquire content only through application.” *Ornelas, supra*,

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at 697; see also *Miller, supra*, at 116. Although such determinations depend on the specific facts in a case, their role in shaping rules of law demand a *de novo* standard of review.

As previously noted, patents are authoritative governmental dispositions. Thus, when a judge construes a patent, he is, in a very real sense, “say[ing] what the law is,” *Marbury v. Madison*, 1 Cranch 137, 177 (1803), not just for the parties to the dispute, but for the public at large. It follows that, any time a district court’s claim construction turns on subsidiary evidentiary disputes, the majority’s rule will distort the appellate court’s construction of the law by requiring it to defer to subsidiary determinations that are dispositive as to its meaning. Surely the majority would not countenance such an abdication of the appellate court’s role in the construction of statutes. Yet the majority has not justified applying a different rule to the construction of legislative acts that take the form of a patent.

2

The need for uniformity in claim construction also weighs heavily in favor of *de novo* review of subsidiary evidentiary determinations. Uniformity is a critical feature of our patent system because “[t]he limits of a patent must be known for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject of the patent will be dedicated ultimately to the public.” *Markman*, 517 U. S., at 390. If the boundaries of the patent right could shift from case to case, then the result would be “a ‘zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement.’” *Ibid.*; see also *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U. S. 722, 731 (2002). So damaging is this unpredictability that we identified uniformity as an “independent” reason justifying our allocation of claim construction to the court. See *Markman, supra*, at 390.

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The majority attempts to downplay the effect its decision will have on uniformity by pointing out that “prior cases [construing the same claim] will sometimes be binding because of issue preclusion, and sometimes will serve as persuasive authority.” *Ante*, at 329 (citing *Markman*, *supra*, at 391; citation omitted). But we have already rejected the notion that issue preclusion adequately safeguards the uniformity that our patent system requires. See *Markman*, *supra*, at 391.

Perhaps the majority is correct that “subsidiary factfinding is unlikely to loom large in the universe of litigated claim construction.” *Ante*, at 329. But I doubt it. If this case proves anything, it is that the line between fact and law is an uncertain one—made all the more uncertain by the majority’s failure to identify sound principles for the lines it draws. The majority’s rule provides litigants who prevail in district court a significant opportunity and incentive to take advantage of this uncertainty by arguing on appeal that the district court’s claim construction involved subsidiary findings of fact. At best, today’s holding will spawn costly—and, if the majority is correct about the frequency with which these evidentiary determinations make a difference, meritless—collateral litigation over the line between law and fact. We generally avoid any rule of judicial administration that “results in a substantial expenditure of scarce judicial resources on difficult questions that have no effect on the outcome of the case,” *Pearson v. Callahan*, 555 U.S. 223, 236–237 (2009), and there is no reason to embrace one here. But I fear worse: that today’s decision will result in fewer claim construction decisions receiving precedential effect, thereby injecting uncertainty into the world of invention and innovation.

In short, the majority’s rule finds no support in either the historical understanding of “findings of fact” or considerations of policy that have served as our guide when we have been confronted with a difficult question of fact-law classification. I would not adopt it.

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III

The Court of Appeals reviewed *de novo* not only the District Court’s claim construction, but also its holding that the claims were sufficiently definite to satisfy 35 U.S.C. § 112, ¶2 (2006 ed.). I would hold that the Court of Appeals correctly treated the indefiniteness inquiry as a question of law because it depends entirely on claim construction.

“[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). This standard falls somewhere between a notice requirement and a prohibition on ambiguity. See *id.*, at 909–910. Determining whether a claim is indefinite is thus akin to other legal inquiries commonly performed in the course of interpreting written instruments. See, e.g., *Mayo Foundation for Medical Ed. and Research v. United States*, 562 U.S. 44, 52–53 (2011) (reviewing without deference the District Court’s determination that a statute is unambiguous at step one of *Chevron U. S. A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984)); 11 Williston § 30:5, at 75 (“The determination of whether a contract is ambiguous is a question of law for the court”). Thus, a holding that a patent satisfies the definiteness requirement does not turn on “findings of fact” as that term is used in Rule 52(a)(6), and the Court of Appeals properly applied a *de novo* standard of review.

* * *

Although it relied on expert testimony to understand the science underlying petitioners’ claims, the District Court made no “findings of fact” as that term is used in Rule 52(a)(6). Thus, the Court of Appeals properly reviewed the District Court’s conclusions of law *de novo*. I respectfully dissent.