

**United States Court of Appeals
for the Federal Circuit**

PRISM TECHNOLOGIES LLC,
Plaintiff-Cross-Appellant

v.

SPRINT SPECTRUM L.P., DBA SPRINT PCS,
Defendant-Appellant

2016-1456, 2016-1457

Appeals from the United States District Court for the District of Nebraska in No. 8:12-cv-00123-LES-TDT, Senior Judge Lyle E. Strom.

Decided: March 6, 2017

PAUL J. ANDRE, Kramer Levin Naftalis & Frankel LLP, Menlo Park, CA, argued for plaintiff-cross-appellant. Also represented by LISA KOBIALKA; MARK BAGHDASSARIAN, JONATHAN CAPLAN, AARON M. FRANKEL, CRISTINA MARTINEZ, New York, NY; ANDRE J. BAHOU, Secure Axxcess, LLC, Plano, TX.

CARTER GLASGOW PHILLIPS, Sidley Austin LLP, Washington, DC, argued for defendant-appellant. Also represented by JENNIFER J. CLARK, RYAN C. MORRIS; MICHAEL J. BETTINGER, IRENE YANG, San Francisco, CA.

Before TARANTO, LINN, and CHEN, *Circuit Judges*.

TARANTO, *Circuit Judge*.

The jury in this case found Sprint Spectrum L.P. liable to Prism Technologies LLC for infringement of U.S. Patent Nos. 8,127,345 and 8,387,155. The jury awarded Prism \$30 million in reasonable-royalty damages under 35 U.S.C. § 284. The district court denied Sprint's post-trial motions, and it also denied Prism's motion for additional monetary relief for times after the period Prism said was covered by the jury verdict. Sprint appeals, and Prism cross-appeals. We affirm.

I

Prism owns the '345 and '155 patents, which claim and describe methods and systems for managing access to protected information provided over certain networks that, the parties agree, must be "untrusted" networks. The technology involves an access server, an authentication server, and a client. '345 patent, col. 1, line 60, through col. 2, line 21. The access server forwards client requests for protected information to the authentication server. *Id.* If the authentication server, using stored identity data, successfully authenticates the client, the client receives authorization to access the information. *Id.* The patents issued from continuations of U.S. Patent Application No. 08/872,710 and have similar specifications.

Claim 1 of the '345 patent is representative of the claims at issue in this appeal. That claim recites:

1. A method for controlling access, by at least one authentication server, to protected computer resources provided via an Internet Protocol network, the method comprising:

receiving, at the at least one authentication server from at least one access server, identity data associated with at least one client computer device, the identity data forwarded to the at least one access server from the at least one client computer device with a request from the at least one client computer device for the protected computer resources;

authenticating, by the at least one authentication server, the identity data received from the at least one access server, the identity data being stored in the at least one authentication server;

authorizing, by the at least one authentication server, the at least one client computer device to receive at least a portion of the protected computer resources requested by the at least one client computer device, based on data associated with the requested protected computer resources stored in at least one database associated with the at least one authentication server; and

permitting access, by the at least one authentication server, to the at least the portion of the protected computer resources upon successfully authenticating the identity data and upon successfully authorizing the at least one client computer device.

'345 patent, col. 34, lines 17–42. The other asserted claims are similar. The parties do not identify any material differences between the claims.

Sprint offers wireless telecommunications services that employ technologies complying with 3G, 4G LTE,

and 4G WiMAX standards. As part of its operations, Sprint transports data to and from its base stations, which communicate with customers' wireless devices, and its data centers, further in the core of the network. In doing so, Sprint often uses Ethernet backhaul network services purchased from third parties. Each third-party provider, or alternative access vendor (AAV), owns, operates, and controls the network leg on which it provides its backhaul transport service to Sprint. Sprint sometimes also uses other arrangements to move data, including femtocells and picocells, which, according to Sprint, do not rely on the third-party backhaul networks.¹

In April 2012, Prism sued Sprint in the District of Nebraska for infringing the '345 patent and U.S. Patent No. 7,290,288. The same day, Prism sued AT&T Mobility LLC, for infringement of those patents. *See Prism Techs. LLC v. AT&T Mobility, Inc.*, No. 8:12-cv-122-LES-TDT (D. Neb. filed Apr. 4, 2012). Prism filed three other suits, against other companies, making similar allegations. *See Prism Techs. LLC v. T-Mobile USA Inc.*, No. 8:12-cv-124-LES-TDT (D. Neb. filed Apr. 4, 2012); *Prism Techs. LLC v. U.S. Cellular Corp.*, No. 8:12-cv-125-LES-SMB (D. Neb. filed Apr. 4, 2012); *Prism Techs. LLC v. Cellco P'ship*, No. 8:12-cv-126-LES-SMB (D. Neb. filed Apr. 4, 2012). In March 2013, after the '155 patent issued, Prism amended its complaint against Sprint to allege infringement of that patent.

The district court consolidated some of the pre-trial proceedings in Prism's suits. In July 2013, the court issued its claim-construction order, in which it construed "Internet Protocol network" and similar limitations as "an untrusted network using any protocol of the Internet Protocol Suite including at least one of IP, TCP/IP,

¹ On appeal, the parties' arguments concern almost entirely Sprint's 3G, 4G LTE, and 4G WiMAX systems.

UDP/IP, HTTP, and HTTP/IP.” J.A. 45. The court further defined an “untrusted” network as “a public network with no controlling organization, with the path to access the network being undefined and the user being anonymous.” *Id.*

In March 2014, Prism notified Sprint and the other defendants that it was withdrawing its claims regarding the '288 patent “to further streamline the issues.” *See* Index of Evid. Ex. 5, at 1, *Prism Techs.*, No. 8:12-cv-122-LES-TDT (D. Neb. June 27, 2014), ECF No. 243-5. The district court acknowledged that Prism had “dropped” its assertion of the '288 patent from the action, leaving only the '345 and '155 patents asserted in the case. J.A. 86.

In July 2014, Sprint moved to exclude the testimony of Prism’s expert, John Minor. Sprint argued that Mr. Minor’s proposed testimony—that Sprint’s backhaul networks constitute an “Internet Protocol network” because “no *single* organization” controls them in the aggregate—impermissibly modified the district court’s construction of that term. J.A. 91–92. The court denied Sprint’s motion. The court concluded that Mr. Minor’s proposed testimony was not contrary to the adopted claim construction because it was consistent with the '345 and '155 patents’ disclosure of the Internet itself as the preferred embodiment of an “Internet Protocol network.” J.A. 94. The court permitted the jury to decide whether the backhaul networks “constitute a public, uncontrolled, undefined pathway, anonymous-user internet like the aggregated internet.” *Id.*

The district court tried Prism’s cases separately. In October 2014, after two and a half years of litigation, the case against AT&T proceeded to trial. On the last day of that trial, just before closing arguments, Prism and AT&T settled, and the court dismissed the parties’ claims. *See* Order, *Prism Techs.*, 8:12-cv-122-LES-TDT (D. Neb. Dec. 29, 2014), ECF No. 498.

Sprint asked the district court in the present case to refuse to admit the AT&T Settlement Agreement into evidence, arguing that it was not comparable to the hypothetical license relevant here and that its admission would be unfairly prejudicial under Federal Rule of Evidence 403. The court denied the motion on June 8, 2015, and the Agreement was ultimately admitted. The court also denied Sprint's motion to exclude the testimony of James Malackowski, Prism's damages expert.

In June 2015, a jury found that Sprint infringed claims 1 and 33 of the '345 patent and claims 7 and 37 of the '155 patent. The jury also awarded Prism reasonable-royalty damages of \$30 million. In July 2015, Sprint moved for judgment as a matter of law (JMOL) and a new trial, and Prism moved for (as relevant here) additional damages and an ongoing royalty for infringement post-dating the period (ending in 2014) that Prism said was covered by the jury award. The district court denied those motions. Sprint and Prism each appeal. We have jurisdiction under 28 U.S.C. § 1295(a)(1).²

² Section 1295(a)(1) authorizes us to hear “an appeal from a final decision of a district court.” Although the parties have not identified any order dismissing Prism's claims regarding the '288 patent, the district court and the parties agree that Prism abandoned those claims and that the court's judgment decided all claims remaining in the case. See J.A. 86. That suffices for finality. See *Pandrol USA, LP v. Airboss Ry. Prods., Inc.*, 320 F.3d 1354, 1363 (Fed. Cir. 2003); *Chiari v. City of League City*, 920 F.2d 311, 314 (5th Cir. 1991); *Baltimore Orioles, Inc. v. Major League Baseball Players Ass'n*, 805 F.2d 663, 666–67 (7th Cir. 1986); *Perkin-Elmer Corp. v. Computervision Corp.*, 680 F.2d 669, 670–671 (9th Cir. 1982); 15A Charles Alan Wright et al., *Federal Practice & Procedure* § 3914.7 (2d ed. 2016).

II

Sprint argues that the district court erred in denying its motion for a new trial. Specifically, Sprint contends, the court erred by (1) allowing Prism to modify its claim construction, (2) admitting the AT&T Settlement Agreement, (3) applying the wrong legal standard in deciding its motion for a new trial, and (4) admitting Prism’s cost-savings damages evidence. We reject Sprint’s challenges.

A

Sprint argues that the district court erred by allowing Prism’s expert, Mr. Minor, to modify the court’s construction of “Internet Protocol network.” In particular, Sprint criticizes Mr. Minor’s testimony that Sprint’s backhaul networks constitute an “untrusted” network (as required by the claim construction) because (1) the networks have no *single* controlling organization (as opposed to no controlling organization) and (2) the path *through* the networks (as opposed to the path *to access* the networks) is undefined. We see no legal error or other abuse of discretion in the district court’s allowing of Mr. Minor’s testimony. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 141–43 (1997) (evidentiary rulings reviewed for abuse of discretion); *Highmark Inc. v. Allcare Health Mgt. Sys., Inc.*, 134 S. Ct. 1744, 1748 n.2 (2014) (decision based on legal error is abuse of discretion); *Harris v. Chand*, 506 F.3d 1135, 1139 (8th Cir. 2007) (evidentiary rulings reviewed for abuse of discretion).

1

The district court correctly concluded that Mr. Minor’s testimony was consistent with the ’345 and ’155 patents’ requirement of an “Internet Protocol network,” as already construed to refer to certain “untrusted” networks with “no controlling organization.” As the court recognized, the proper understanding of the claim term, and the court’s articulated construction, should include the Internet

itself, which the patents describe as a preferred embodiment of an “untrusted network.” *See, e.g.*, ’345 patent, col. 3, lines 47–52 (“[T]he present invention is directed to a secure transaction system that is particularly adapted for use with an untrusted network, such as the Internet worldwide web.”).³ In accordance with that disclosure, Mr. Minor proposed to testify that the backhaul networks, in common with the Internet, constitute a “network-of-networks with many of the individual constituent components privately owned and controlled, but [for which] in the aggregate there is no controlling organization.” J.A. 93. Sprint has not shown an abuse of discretion in allowing that testimony as consistent with a proper understanding of the claims.

Sprint argues that the district court neglected its duty to resolve the parties’ dispute over the scope of “Internet Protocol network” by allowing the jury to decide whether Sprint’s backhaul networks are sufficiently controlled to constitute an “Internet Protocol network.” *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008). We disagree. The court’s order denying Sprint’s exclusion request did not fail to resolve the claim-construction issue; it resolved the issue. The order makes clear the court’s determination that Mr. Minor correctly interpreted the scope of the claims, *i.e.*, that “Internet Protocol network” could indeed encompass networks that “in the aggregate” have “no controlling organization.” J.A. 93.

Whether Sprint’s backhaul networks actually constitute such an aggregate network, as Mr. Minor argued, was a question of fact, which the court properly reserved for the jury. Sprint does not appear to dispute that there is sufficient evidence to support an affirmative answer to

³ The district court’s claim-construction order analyzes an identical passage in the ’288 patent.

that question. Indeed, there was evidence, including from Sprint's witnesses, that each of the AAVs used by Sprint (substantial in number) controls its own facilities and may contract with other AAVs to complete backhaul transmission paths to reach places in which it lacks its own facilities. See J.A. 26925–27, 26943–49, 27478–79, 27744, 29373–74.⁴

2

Sprint's alternative argument for a new trial, based on allegedly improper testimony by Mr. Minor, is likewise meritless. Sprint argues that Mr. Minor testified that the “path *through* the [accused] network,” not the “path *to access* the [accused] network,” is “undefined,” as the district court's construction required. Sprint's Opening Br. 45–47 (emphases added). What Mr. Minor actually testified was that the path by which data accesses the backhaul networks is undefined because it varies as a user travels from place to place. Although Mr. Minor used the phrase “path through the network” in one pas-

⁴ Sprint argues that we may order judgment in its favor, for lack of sufficient evidence of infringement, if we reverse the admission of Mr. Minor's testimony—even though it says that it is not “raising a sufficiency of the evidence challenge,” Sprint's Reply & Resp. Br. 7 n.1, and does not dispute Prism's observation that its JMOL motion raised only a “divided infringement” argument, outside the scope of its appeal. Although Sprint relies for its remedy contention on *Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1320 & n.3 (Fed. Cir. 2016), the appellant in that case properly preserved a sufficiency-of-the-evidence argument in the district court, *id.* at 1318. In any event, we need not rule on Sprint's remedy contention because we reject its premise, holding that the admission of Mr. Minor's testimony was proper.

sage, the context makes clear that he was referring to the path to access the network. J.A. 26951 (“You’ll change cell sites and the path through the network to access the core changes as you travel on down to Phoenix.”). The district court was not required to grant a new trial based on Mr. Minor’s wording.

B

Sprint challenges the district court’s denial of its motion to exclude the AT&T Settlement Agreement, which Prism argued should be admitted for its probative value—in a supporting rather than principal role—on the proper amount of “reasonable royalty” damages under 35 U.S.C. § 284. See J.A. 105; J.A. 20252–70. Such royalty damages seek to identify “the value of what was taken”—here, by Sprint’s unauthorized use of Prism’s patented technology. *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 648–50 (1915); *AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1334, 1336–37 (Fed. Cir. 2015); *Aqua Shield v. Inter Pool Cover Team*, 774 F.3d 766, 770 (Fed. Cir. 2014); *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014). Sprint challenges only the admission of the evidence on appeal. It does not separately appeal any district court ruling on any objection Sprint may have made to any particular statement about the Agreement by a witness or attorney. As we have noted, we review the court’s admission of this evidence for legal error or other abuse of discretion. We conclude that no such abuse occurred.

1

Sprint’s main argument on appeal is the one it timely presented to the district court. Sprint contends that the district court abused its discretion in declining to exclude the AT&T Settlement Agreement under Rule 403. We disagree.

Under Rule 403, a district court “may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” The language is explicit in calling for a weighing of probative value against what in this case we summarize, following Sprint, as “undue prejudice.” Sprint’s Opening Br. 53. By declaring that the district court “may” exclude what is by assumption relevant evidence, the Rule commits the weighing to the district court’s “broad discretion,” which the Supreme Court has said is “generally not amenable to broad *per se* rules.” *Sprint/United Mgmt. Co. v. Mendelsohn*, 552 U.S. 379, 384, 387 (2008); *see also Old Chief v. United States*, 519 U.S. 172, 183 n.7 (1997); *United States v. Abel*, 469 U.S. 45, 54 (1984); *United States v. Wardlow*, 830 F.3d 817, 822 (8th Cir. 2016); *Young Dental Mfg. Co. v. Q3 Special Prods., Inc.*, 112 F.3d 1137, 1145–46 (Fed. Cir. 1997).

This court has recognized that, depending on the circumstances, a license agreement entered into in settling an earlier patent suit sometimes is admissible in a later patent suit involving the value of the patented technology, and sometimes is not. *See, e.g., AstraZeneca*, 782 F.3d at 1336–37; *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 77–78 (Fed. Cir. 2012); *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 872–73 (Fed. Cir. 2010); *Studiengesellschaft Kohle, m.b.H. v. Dart Indus., Inc.*, 862 F.2d 1564, 1572 (Fed. Cir. 1988); *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1079 (Fed. Cir. 1983). As to settlements generally, the Supreme Court has explained the normal settlement calculus for litigants: “Most defendants are unlikely to settle unless the cost of the predicted judgment, discounted by its probability, plus the transaction costs of further litigation, are greater than the cost of the settlement package.” *Evans v. Jeff D.*, 475 U.S. 717, 734 (1986); *Staton v. Boeing Co.*, 327 F.3d 938, 964

(9th Cir. 2003) (quoting *Evans*, 475 U.S. at 734). That formulation—enumerating “the cost of the predicted judgment,” “its probability,” and “costs of further litigation”—helps identify why and when a district court, conducting the inquiry required by Rule 403, can find earlier patent-suit settlements admissible in valuing a patented technology.

On one side of the Rule 403 balance is the strong connection a settlement can have to the merits of an issue common to the earlier and later suits. Specifically, a settlement involving the patented technology can be probative of the technology’s value if that value was at issue in the earlier case. The reason is simple: such a settlement can reflect the assessment by interested and adversarial parties of the range of plausible litigation outcomes on that very issue of valuation. And given the necessary premise that discovery and adversarial processes tend to move a legal inquiry toward improved answers, the parties’ agreement seems especially probative if reached after the litigation was far enough along that the issue was already well explored and well tested. See *AstraZeneca*, 782 F.3d at 1336–37.

On the other side of the balance, for various reasons a settlement may be pushed toward being either too low, as in *Hanson*, or too high, as in *LaserDynamics*, relative to the value of the patented technology at issue in a later suit. As to the former, for example, even if the technology is identical in the earlier and later suits, the earlier suit’s settlement figure may be too low to the extent that it was lowered by the patent owner’s discounting of value by a probability of losing on validity or infringement. As the unchallenged jury instructions in this case indicate, the hypothetical-negotiation rubric for the assessment of royalty damages assumes that the asserted patents are valid and infringed. See J.A. 23473–75; *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325 (Fed. Cir. 2009). Accordingly, whereas a settlement reached after a

determination of liability (though subject to appeal) is particularly reliable as evidence of value, *AstraZeneca*, 782 F.3d at 1337, a settlement tends to undervalue the technology where it reflects a discount for the probability of losing. A patent owner may also accept too little, relative to the patent's value, when it accepts an amount out of a desire to avoid further expenditure of (presumptively unrecoverable) litigation costs.

At the same time, various factors may work in the opposite direction, tending to make a settlement of an earlier suit too high as evidence on the valuation question presented in a later suit. An earlier settlement may cover technology either not the same as or comparable to the patented technology at issue in the later suit, or may cover the patented technology plus other technologies. The earlier suit may have included a risk of enhanced damages, a factor in the settling parties' assessment of risk that would push settlement value above the value of the technology. And, of course, the litigation costs still to come at the time of settlement may loom large in parties' decisions to settle. *See Rude v. Westcott*, 130 U.S. 152, 164 (1889) ("Many considerations other than the value of the improvements patented may induce the payment in such cases. The avoidance of the risk and expense of litigation will always be a potential motive for a settlement."); *LaserDynamics*, 694 F.3d at 78 (discussing "desire to avoid further litigation under the circumstances," including "the numerous harsh sanctions imposed" on the settling defendant in the earlier suit).

What is needed for assessing the probativeness and prejudice components of the Rule 403 balance, then, is consideration of various aspects (of which we have mentioned some) of the particular litigation settlements offered for admission into evidence. That approach, reflected in our decisions, is also supported by the inherent connection between patent licenses and at least the potential for litigation. A patent gives nothing but the

right to exclude, which in our system generally means a right to call on the courts. *See, e.g., Crown Die & Tool Co. v. Nye Tool & Mach. Works*, 261 U.S. 24, 35 (1923); *Bloomer v. McQuewan*, 55 U.S. (14 How.) 539, 549 (1852). We have frequently recognized that a (non-exclusive) license to practice a patent is in substance nothing but a covenant not to sue: what such a license is, at its core, is an elimination of the potential for litigation. *See TransCore, LP v. Elec. Transactions Consultants Corp.*, 563 F.3d 1271, 1275–76 (Fed. Cir. 2009). Although the potential for litigation therefore must loom over patent licenses generally, including those signed without any suit ever being filed, Sprint has not contested the long-accepted proposition that a “party may use the royalty rate from sufficiently comparable licenses.” *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015); *see also Ericsson*, 773 F.3d at 1227; *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1316–18 (Fed. Cir. 2011); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1211–12 (Fed. Cir. 2010); *Wordtech Sys., Inc. v. Integrated Network Solutions, Inc.*, 609 F.3d 1308, 1318–22 (Fed. Cir. 2010). But, as a logical matter, the mere filing of a complaint—shifting from potential to actual litigation—does not automatically turn the prejudice side of the Rule 403 balance into one that substantially outweighs the probativeness side. The particulars of the case that was settled and the settlement, as well as of the case in which the settlement is offered as evidence, matter to the Rule 403 balance.

Sprint necessarily acknowledged as much by its conduct in this case. As detailed *infra*, Sprint itself successfully sought the admission of a number of Prism licenses of the patents at issue that resulted from litigation settlements. If those settlements called for particularized evaluation of probativeness and prejudice, as Sprint urged, so did the AT&T Settlement Agreement.

The district court had an adequate basis for admitting the AT&T Settlement Agreement. That Agreement covered the patents at issue here, though not only the patents at issue here. In that common situation, evidence was needed that reasonably addressed what bearing the amounts in that Agreement had on the value of the particular patents at issue here. *See, e.g., Wordtech Sys.*, 609 F.3d at 1320–21. Prism supplied such evidence, including what the AT&T Settlement Agreement itself says about attributing amounts to particular patents and, more reliably, creditable expert evidence about how the other Agreement-covered patents relate to AT&T's business operations. Prism also supplied evidence about the comparability of AT&T's and Sprint's uses of the '345 and '155 patents' technology, and the lesser uses made by licensees in the lower-amount Prism settlements that Sprint emphasized. The jury was able to evaluate Prism's evidence, and Sprint's evidence on the subject, at trial. Sprint has not shown any reason—for example, material technological or market changes between the agreed-on date for the hypothetical negotiation, in early 2012, and the signing of the AT&T Settlement Agreement, in late 2014—that required the district court to find non-comparability and thus decisively undermined the Agreement's probative value.

The circumstances of the AT&T Settlement Agreement affect the Rule 403 assessment in ways that support the district court's admission of the Agreement. The Agreement was entered into, not just after all discovery was complete, but after the entire trial was finished, except for closing arguments and jury deliberations. Thus, the record was fully developed and thoroughly tested in the adversarial process, enhancing the reliability of the basis on which Prism and AT&T were assessing the likely outcome. The timing of the settlement also means that a very large share of litigation costs had already been sunk, reducing (though of course not eliminating) the role

of litigation-cost avoidance in the settlement decision. Moreover, Sprint has not suggested that enhanced damages were at issue by the time of the settlement; and the proposed jury instructions and verdict forms suggest that they were not. On the other hand, validity and infringement were still open issues at the time of the settlement. But Sprint cannot rely on that fact: possible non-liability is a factor that tends to make settlements too low, not too high.

For those reasons, we see no abuse of discretion by the district court in this case in rejecting Sprint's Rule 403 argument that, while the many lower-amount Prism settlements should be admitted into evidence, the AT&T Settlement Agreement must be excluded.

2

Sprint makes two additional arguments to us in support of excluding the AT&T Settlement Agreement. Both arguments urge a categorical legal rule barring admission of a patentee's licenses entered into in a settlement of infringement litigation, even when the patentee's litigation was against a different alleged infringer for its own separate conduct. We conclude that Sprint has failed to preserve these arguments, which, given Sprint's offering of the other Prism settlement agreements into evidence, are inconsistent with Sprint's position before and during trial in this case.

a

Sprint's first argument invokes the Supreme Court's 1889 decision in *Rude v. Wescott*. The Court held in *Rude* that there was insufficient evidence to prove what has been called an "established royalty" as a measure of damages at law for patent infringement—*i.e.*, "such a number of sales by a patentee of licenses to make, use and sell his patents, as to establish a regular price for a license." 130 U.S. at 165 (requiring "common," "frequent

occurrence,” at “uniform” rate, to establish “such a market price for the article that it may be assumed to express, with reference to all similar articles, their salable value”). The three agreements to which the patentee pointed, one of them the result of the threat or actuality of suit, were insufficient to “establish[] such a fixed royalty or license fee as would furnish a criterion by which to estimate complainants’ damages.” *Id.* at 163. In that context, the Court explained that, because a litigation-induced license may be motivated by “[t]he avoidance of the risk and expense of litigation,” such a license “cannot be *taken as a standard* to measure the value of the improvements patented.” *Id.* at 164 (emphasis added). And, once the asserted established-royalty basis for damages was set aside, the Court held, the patentee had nothing but “conjectural” evidence of value, so only nominal damages were proved. *Id.* at 166–67. Later the same Term, the Supreme Court followed *Rude* and described its holding, as to litigation settlements, as addressing “the question of an established license fee.” *Cornely v. Marckwald*, 131 U.S. 159, 161 (1889).

The Court in *Rude* used both the language of patent-damages law and the language of evidence law, and both have changed significantly since *Rude*. As to patent-damages law: this court has long noted that *Rude*, in focusing on an “established royalty” as a reliable measure of a patent technology’s value, reflected the then-unsettled character of, and skepticism about, a “reasonable royalty” as a measure of relevant value in the absence of an established royalty. *See, e.g., Robert Bosch, LLC v. Pylon Mfg. Corp.*, 719 F.3d 1305, 1311 (Fed. Cir. 2013) (en banc); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554 (Fed. Cir. 1995) (en banc); 7 Donald S. Chisum, *Chisum on Patents* § 20.02[2] (2017). In the years after *Rude*, reasonable-royalty damages came to be approved judicially, *Dowagiac Mfg.*, 235 U.S. at 648–50 (approving royalty using other evidence to prove “the value of what was

taken,” *i.e.*, the value of use of the patented technology), and then legislatively, Act of Feb. 18, 1922, ch. 58, § 8, 42 Stat. 389, 392 (permitting a court to “adjudge and decree the payment by the defendant to the complainant of a reasonable sum as profits or general damages for the infringement”), leading to the current prevalence of that damages measure under 35 U.S.C. § 284. *See Robert Bosch*, 719 F.3d at 1311; *Uniloc*, 632 F.3d at 1312; *Chisum*, *supra*, §§ 20.03[3], 20.07. As to evidence law: the Supreme Court has recognized that the federal law of evidence is now embodied in the Federal Rules of Evidence, not in earlier Supreme Court decisions except to the extent they are actually reflected in the Rules. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 587–89 (1993); *Bourjaily v. United States*, 483 U.S. 171, 177 (1987).

For at least those reasons, and given our precedents, Sprint faces challenges in suggesting, as it has now done, that *Rude* categorically bars admission of litigation settlements on the issue of a reasonable (but not “established”) royalty. But we do not further pursue that argument on its merits. Not only did Sprint fail to present its *Rude*-based, categorical-bar contention to the district court in a timely fashion; the contention is positively inconsistent with Sprint’s position before and during trial.⁵

In July 2014, before Prism and AT&T settled, Sprint affirmatively urged the admission of various Prism licenses resulting from patent-litigation settlements. It moved to exclude the damages testimony of Prism’s expert

⁵ Sprint made its categorical-bar argument based on *Rude* in this court for the first time at oral argument. Oral Arg. at 2:01–11:13. We need not consider whether that timing is itself problematic, because we find a failure to preserve the *Rude* point in the district court.

on the ground that he *failed* to rely on such settlement agreements. Sprint contended that those agreements were “reliable marketplace evidence of the value of the patents-in-suit” and therefore “highly probative as to what constitutes a reasonable royalty for those patent rights because such actual licenses most clearly reflect the economic value of the patented technology in the marketplace.” J.A. 11173 (quoting *LaserDynamics*, 694 F.3d at 79). And on May 15, 2015, two weeks after moving to exclude the AT&T Settlement Agreement, Sprint submitted its pretrial exhibit list, which included a number of such settlement agreements. Draft Order on Final Pretrial Conference Ex. B, at 16–17, *Prism Techs.*, No. 8:12-cv-123-LES-TDT (May 15, 2015), ECF No. 390.

When Sprint opposed admission of the AT&T Settlement Agreement, it did not invoke any categorical rule, let alone one based on *Rude*, which it did not cite. J.A. 19351–61. Rather, it argued that the AT&T Settlement Agreement was, for various reasons, irrelevant or simply less reliable and more prejudicial than the other licenses. Sprint has pointed us to no place in the record showing that it argued, before or during trial, for the categorical rule it now urges, whose logical consequence would be exclusion of all the settlement licenses, not just the AT&T Settlement Agreement.

The absence of such an argument is hardly surprising. Such an argument would have been inconsistent with Sprint’s efforts to benefit from the introduction of other litigation-induced settlement agreements. Sprint apparently made a strategic choice not to argue that litigation-induced settlement agreements were categorically barred. And that strategic choice deprived Prism of the chance to consider the option of simply not opposing a categorical-bar-based exclusion motion that would prevent admission of all of the settlement agreements, the Sprint-favored ones (with smaller amounts) along with the Prism-favored one (the AT&T Settlement Agreement).

In these circumstances, Sprint cannot now fairly complain that the district court failed to adopt and follow a rule that categorically excludes litigation settlements from the proceeding. See *United States v. Wells*, 519 U.S. 482, 488 (1997) (“[A] party may not complain on appeal of errors that he himself invited or provoked the . . . court . . . to commit.”); 9C Arthur R. Miller, *Federal Practice & Procedure* § 2558 (3d ed. 2016). This is a matter not just of fairness but of efficiency. The effect of relieving Sprint of its choice would be, according to Sprint, the need for a new trial, when, had the argument been made in a timely way and accepted, the original trial might have proceeded free of the defect Sprint now alleges.

b

Sprint is in essentially the same position with respect to the second source it cites for its categorical-bar contention: Federal Rule of Evidence 408. As relevant to Sprint’s contention, Rule 408 bars admission, “to prove or disprove the validity or amount of a *disputed claim*,” of evidence of “furnishing” or “accepting” of “a valuable consideration in compromising or attempting to compromise *the claim*.” Fed. R. Evid. 408 (emphases added). Sprint’s contention would require decision of an issue raised by the linked “claim” words, an issue hardly settled in Sprint’s favor in the case law: whether Prism’s settlement of its claim against *AT&T* would be admissible to prove the validity or amount of Prism’s claim against *Sprint*—where those claims would be different “claims” under preclusion law because they did not arise from the same transaction. See *Dahlgren v. First Nat’l Bank of Holdrege*, 533 F.3d 681, 699 (8th Cir. 2008); 2 Jack B. Weinstein & Margaret A. Berger, *Weinstein’s Federal Evidence* § 408.04 (Mark S. Brodin ed. 2016). But we do not decide that question. Sprint, presumably unwilling to sacrifice the hoped-for benefit of the smaller-amount settlement agreements, did not timely present its present Rule 408 contention to the district court.

Thus, in moving to exclude the AT&T Settlement Agreement, Sprint did not argue that Rule 408 barred its admission. Rather, Sprint argued only that the Agreement should be excluded under Rule 403's balancing standard. Only once did Sprint refer to Rule 408—in a footnote observing that Rule 408 would exclude evidence of settlement *negotiations* between Prism and *Sprint*. That is twice-removed from any argument for excluding the AT&T Settlement Agreement under Rule 408.

Thus, the district court had no occasion to consider a Rule 408 objection to the Agreement's admission into evidence at a time when it might have simply excluded the evidence—along with other evidence subject to the same Rule 408 interpretation—and continued with the trial if persuaded that Rule 408 was a bar. And Prism had no opportunity to make a choice about whether to simply acquiesce in a Rule 408 motion and thereby exclude all of the settlement agreements.

Sprint invoked Rule 408 only *after* trial, in its motion for a new trial, J.A. 23897, but that was after it received, and evidently was unhappy with, the result of its strategic choice to limit its evidentiary objection so as to preserve admission of the many smaller-amount settlement agreements. At that point, accepting the argument, if the admission were found harmful, would require redoing the trial in whole or in part, and unfairly relieving Sprint of its strategic choice at trial to maintain a benefit that it would lose by making the Rule 408 argument it now makes.

Sprint argues that Prism waived forfeiture by not invoking it in responding to Sprint's motion for a new trial. But the interests in a strong forfeiture rule are not only Prism's; others, such as the judiciary and jurors and other litigants, also have an interest in rules that prevent waste and duplication of the sort at issue here. Sprint cites no precedent requiring us to overlook its forfeiture just

because Prism did not invoke it when Sprint raised the argument too late, in seeking a new trial.

Sprint cites only *Ringuette v. City of Fall River*, 146 F.3d 1 (1st Cir. 1998), but that case does not help Sprint. There, at the close of evidence, the district court granted JMOL to two defendants on qualified-immunity grounds. Both defendants had presented the qualified-immunity argument in the JMOL motion, but on appeal, the plaintiff faulted one of the defendants for not having included the defense in his answer. The First Circuit, noting that the plaintiff had not raised that pleading deficiency in the district court, explained that the deficiency did not prejudice the plaintiff because the answer could easily have been amended, and the qualified-immunity “issue, in short, was presented to the court without objection and decided on the merits.” *Id.* at 4. For that reason, the First Circuit refused to allow the plaintiff’s untimely-raised argument to disturb the district court’s judgment on the properly adjudicated issue of qualified immunity, a judgment that the First Circuit then affirmed.

That is not precedent for compelling us to overlook Sprint’s forfeiture. Here, Sprint seeks to upset, not preserve, the district court’s judgment, and to require a new trial, based on an issue not timely raised in the district court. *Ringuette* does not support disregard of Sprint’s forfeiture in these circumstances.

C

Sprint argues that, in denying Sprint’s motion for a new trial, the district court considered only whether the weight of the evidence supported the jury’s verdict and ignored Sprint’s allegations of legal error. We do not infer failure to consider Sprint’s legal-error arguments from the district court’s opinion, which we read as reflecting only a choice about what to discuss, not a choice about what to consider. *See Hartman v. Nicholson*, 483 F.3d 1311, 1315 (Fed. Cir. 2007) (“That the court did not specifically

mention the [argument] in its opinion forms no basis for an assumption that it did not consider [it]’ The court may have merely concluded, for various reasons, that discussion of the issue was neither necessary nor appropriate.” (alterations in original) (citations omitted)). In any event, Sprint has not shown harmful error. *See* 28 U.S.C. § 2111. We have reviewed all the alleged errors Sprint has presented on appeal, and we have been given insufficient details about other allegations of error to suggest harmfulness.

D

Finally, Sprint argues that the district court erred in admitting Prism’s principal damages evidence, which was based on estimating costs that Sprint avoided by infringing. At trial, Prism presented evidence that a reasonable royalty would reflect Sprint’s willingness, in a hypothetical negotiation, to pay an amount calculated by reference to the costs that Sprint, in order to provide its customers the kind of service it wanted to offer them, would have incurred if it had chosen not to infringe—in this case, the costs of building a private backhaul network instead of leasing backhaul services from third-party providers. Prism’s expert Mr. Malackowski estimated that Sprint’s cost savings, *i.e.*, the difference between Sprint’s building costs and leasing costs, would be at least equal to Sprint’s leasing costs. Sprint argues that Prism’s approach was insufficiently tied to the “footprint” of the invention because Prism did not “invent” backhaul networks. Sprint also argues that Prism did not prove that Sprint’s leasing costs were an appropriate basis for estimating cost savings. We reject these challenges.

1

Sprint’s argument that Prism’s damages model was not sufficiently tied to the “footprint” of the invention misapprehends the relevant legal principles. The hypothetical-negotiation approach to calculating reasonable-

royalty damages “attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began.” *Lucent Techs.*, 580 F.3d at 1324. Although a patentee “must carefully tie proof of damages to the claimed invention’s footprint in the market place,” *Uniloc*, 632 F.3d at 1317 (quoting *ResQNet.com*, 594 F.3d at 869), that requirement for valuing the patented technology can be met if the patentee adequately shows that the defendant’s infringement allowed it to avoid taking a different, more costly course of action. A price for a hypothetical license may appropriately be based on consideration of the “costs and availability of non-infringing alternatives” and the potential infringer’s “cost savings.” *Aqua Shield*, 774 F.3d at 771–72; see also *Hanson*, 718 F.2d at 1080–81 (“Reliance upon estimated cost savings from use of the infringing product is a well-settled method of determining a reasonable royalty.”); *Powell v. Home Depot, U.S.A., Inc.*, 663 F.3d 1221, 1240–41 (Fed. Cir. 2011); *Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 932 F.2d 1453, 1458–59 (Fed. Cir. 1991).

Here, Prism’s damages evidence complied with those principles. Prism’s experts Mr. Minor and Mr. Malackowski testified that, in the absence of a license, Sprint would have attempted to design around the patented invention by building its own private backhaul network. As discussed in greater detail below, that testimony was reasonably based on Mr. Minor’s considerable experience and on relevant industry publications. See *infra* pp. 25–26. Given that Sprint stipulated not to introduce argument or evidence of a different non-infringing alternative, Sprint cannot complain that the jury credited the only theory presented to it. See J.A. A20965 (“Sprint will not present testimony, argument, evidence or expert opinion regarding a non-infringing alternative.”).

Riles v. Shell Exploration & Production Co., 298 F.3d 1302 (Fed. Cir. 2002), does not show Prism’s evidence to

be legally deficient. In *Riles*, the patentee of a method of installing drilling platforms that used temporary pilings rather than mud mats argued that a reasonable royalty would include the entire cost of the defendant's drilling platform. We rejected that argument, explaining that "the market would pay [the patentee] only for his product." *Id.* at 1312. Here, in contrast, the uncontroverted evidence showed that Sprint would have chosen to build its own backhaul network in the absence of a license.

2

Sprint's argument that leasing costs are an unreliable basis for estimating cost savings is also unavailing. Prism's expert Mr. Malackowski testified that Sprint's leasing costs were an appropriate basis for estimating cost savings because Sprint's building costs, like its leasing costs, would be based on its particular technical requirements (as opposed to those of a generic wireless communications provider). For example, if Sprint required a premium "Cadillac" backhaul, rather than a less-expensive "Chevy" backhaul, in order to guarantee higher quality service to its customers, its leasing costs would incorporate the extra expense. J.A. 27286–87. Sprint argues that leasing costs are unreliable because they also include technological and business-related factors, *e.g.*, repair costs, which have nothing to do with Sprint's technical requirements. But that observation means only that the ultimate evidentiary use of leasing costs to estimate cost savings should account for such factors. Sprint has not shown why the jury could not reasonably find that Prism's evidence did so. *See Finjan*, 626 F.3d at 1212.

To the contrary, sufficient evidence supports Mr. Malackowski's testimony that Sprint's cost savings would be at least equal to its leasing costs. In particular, Mr. Malackowski reasonably relied on Mr. Minor's estimate that Sprint's cost savings would actually be "no less than

two to three times” its leasing costs and “would potentially be more than five times” those costs. J.A. 27231. To develop that estimate, Mr. Minor relied on his decades of experience building and leasing backhaul infrastructure. That experience adequately qualified him to opine on the relationship between Sprint’s building and leasing costs. *See Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 148–49, 156 (1999) (recognizing that expert testimony may be based on “specialized experience” (quoting Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv. L. Rev. 40, 54 (1901))).

Mr. Malackowski also found support for the conclusion that Sprint’s cost savings would be at least equal to its leasing costs in industry studies and Sprint testimony. In particular, the Senza Fili Report concludes that, for a wireless-communications provider to switch from a legacy backhaul system, the cost of building a fiber network would be approximately \$140 million, compared with a cost of \$60 million for leasing an equivalent network, after adjusting for net present value. Sprint’s own witnesses also testified to the high costs that Sprint would incur in building a backhaul network. We conclude that the jury could reasonably rest its reasonable-royalty determination on the evidence presented.

IV

In its cross-appeal, Prism argues that the district court erred in denying its motion for an accounting and ongoing royalties to award additional monetary relief covering infringement by Sprint past the period (ending in 2014) to which Prism says the jury verdict was limited. The district court concluded that such an award would be inappropriate because, it found, the jury’s damages award included royalties for Sprint’s “past, present, and ongoing infringement.” J.A. 12. We affirm, finding an inadequate basis to disturb the district court’s characterization of the jury verdict. *See Telcordia Techs., Inc. v. Cisco Sys., Inc.*,

612 F.3d 1365, 1378 (Fed. Cir. 2010) (relying on a district court's "broad discretion to interpret an ambiguous verdict form").

35 U.S.C. § 283 provides that a court may grant an injunction "to prevent the violation of any right secured by patent, on such terms as the court deems reasonable." We have interpreted that provision to permit a court to award "an ongoing royalty for patent infringement in lieu of an injunction" barring the infringing conduct. *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1314 (Fed. Cir. 2007). If the court determines that a conduct-barring injunction is not warranted, it may instruct the parties to try to negotiate an ongoing royalty and, if the parties cannot agree, award a royalty. *Id.*

Here, the evidence presented by the parties is consistent with the district court's finding that the jury awarded damages for past, present, and future infringement. In particular, the evidence can be understood as suggesting that a hypothetical negotiation would likely have resulted in a one-time payment for a life-of-patent license. As discussed above, Mr. Malackowski testified that the parties would have valued the '345 and '155 patents based on Sprint's expected cost savings from avoiding the need to build its own backhaul network. Because those cost savings consisted, in large part, of Sprint's initial capital costs, the jury could have reasonably found that the parties would have structured the agreement as a fully paid license. And it could have found support for that finding in Prism's licensing practices. At oral argument in this court, Prism's counsel agreed that such a finding would have been reasonable on the evidence. Oral Arg. at 28:54–29:01.

None of the trial documents contradict the district court's characterization of the jury verdict as awarding damages for "future" and "ongoing" infringement. Although the verdict form included the terms "infringed,"

“compensate,” and “damages,” none of those terms exclude compensation for future infringement in the form of a fully paid license. Similarly, although the jury instructions included the terms “damages” and “reasonable royalty,” those terms are consistent with a fully paid license.

In arguing for the contrary conclusion, Prism ultimately relies on the district court’s response to a jury question, which it contends the jury necessarily took to mean that a reasonable-royalty award would not cover future infringement. Prism reads too much into the question and answer. The jury asked: “Does Royalty Payment/damages now give Sprint the license to 4 Asserted Patents?” J.A. 23447. The court responded: “The answer is ‘no.’” *Id.* On the record we have, that colloquy is not unequivocal. Even aside from some uncertainty in the meaning of the question, the jury might have simply understood the court to be correcting any misimpression that four patents were at issue, rather than just two. At oral argument in this court, Prism’s counsel asserted that this alternative explanation is inconsistent with Sprint’s oral remarks to the district court about how to respond to the jury’s question. But he acknowledged that the remarks he was relying on are not in the record. Oral Arg. at 30:08–17. We therefore have no basis for disturbing the court’s ruling.

WhitServe, LLC v. Computer Packages, Inc., 694 F.3d 10 (Fed. Cir. 2012), does not require us to hold otherwise. There, we held that the district court abused its discretion in denying the patent owner’s request for an ongoing royalty. *Id.* at 34–36. But in that case, the parties “limited their damages arguments to past infringement,” and the district court did not interpret the jury’s award already to “cover future use of [the asserted] patents.” *Id.* at 35. In both respects, the present case is different. To the extent that Prism reads *WhitServe* to mean that use of the term “damages” always excludes payments for

“future” or “ongoing” infringement, it misreads the opinion. Although “damages” do not include ongoing royalties and other forms of equitable relief, they include fully paid licenses, which cut off the patentee’s claims of entitlement to future compensation. *See Lucent Techs.*, 580 F.3d at 1326. Further, we have found a verdict form to be “ambiguous” even though it included the term “damages.” *Telcordia Techs.*, 612 F.3d at 1378.

Accordingly, we conclude that the district court did not abuse its discretion in finding that the jury’s award included compensation for “future” and “ongoing” infringement and that Prism was therefore not entitled to the additional monetary relief it sought.

CONCLUSION

For the foregoing reasons, we affirm the judgment of the district court.

No costs.

AFFIRMED