

NOTE: This disposition is nonprecedential.

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

**CHRIMAR HOLDING COMPANY, LLC, CHRIMAR
SYSTEMS, INC., DBA CMS TECHNOLOGIES, INC.,**
Plaintiffs-Cross-Appellants

v.

**ALE USA INC., FKA ALCATEL-LUCENT
ENTERPRISE USA, INC.,**
Defendant-Appellant

2017-1848, 2017-1911

Appeals from the United States District Court for the
Eastern District of Texas in No. 6:15-cv-00163-JDL,
Magistrate Judge John D. Love.

Decided: May 8, 2018

JUSTIN S. COHEN, Thompson & Knight LLP, Dallas,
TX, argued for plaintiffs-cross-appellants. Also repre-
sented by ADRIENNE E. DOMINGUEZ, J. MICHAEL HEINLEN,
RICHARD L. WYNNE, JR.; RICHARD W. HOFFMANN, Reising
Ethington PC, Troy, MI.

CHRISTOPHER N. CRAVEY, Jackson Walker LLP, Hou-
ston, TX, argued for defendant-appellant. Also represent-

ed by BRIAN K. BUSS, LEISA T. PESCHEL, DAVID K. WOOTEN.

Before PROST, *Chief Judge*, WALLACH and TARANTO,
Circuit Judges.

TARANTO, *Circuit Judge*.

Chrimar Systems, Inc., filed a patent infringement suit against ALE USA Inc. (formerly known as Alcatel-Lucent Enterprise USA Inc.). In response, ALE asserted numerous defenses and counterclaims, including a claim of fraud under Texas law. As relevant here, a jury found infringement by ALE and awarded damages to Chrimar, and it rejected ALE's fraud claim. The court entered judgment in favor of Chrimar on those issues. The court also denied Chrimar's post-trial motion for attorney fees under 35 U.S.C. § 285. Both parties appeal. We reject one of the claim constructions adopted by the district court, but we affirm the damages award, the judgment on ALE's fraud claim, and the denial of fees.

I

A

Chrimar owns four related patents—U.S. Patent Nos. 8,155,012; 8,942,107; 8,902,760; and 9,019,838—whose specifications are materially the same for present purposes. We treat the '012 patent's specification as representative. The specification describes the use of devices that connect to a wired network, such as Ethernet, and that manage or track remote electronic equipment, such as a personal computer, on that network. '012 patent, col. 1, lines 23–26, 37–39. In the arrangement described, such equipment, called an “asset,” has a tracking device, called a “remote module,” attached internally or externally to it. *Id.*, col. 1, line 66 through col. 2, line 2. The asset can be managed, tracked, or identified by using the remote

module to communicate a unique identification number, port identification, or wall jack location to the network monitoring equipment, or “central module.” *Id.*, col. 3, lines 22–27; *see id.*, col. 8, line 58 through col. 9, line 23; *see also id.*, col. 6, lines 48–67 & Fig. 4. Asset identification may be done without using existing network bandwidth, because the remote module can convey information about the asset to the central module through the same wiring or cables that convey the high-frequency data on the network, without adversely affecting the high-frequency data. *See id.*, col. 3, lines 10–12; *id.*, col. 11, line 64 through col. 12, line 1 (“The system transmits a signal over preexisting network wiring or cables without disturbing network communications by coupling a signal that does not have substantial frequency components within the frequency band of network communications.”). And asset identification does not require that the asset be powered on. *Id.*, col. 4, lines 65–67; *id.*, col. 12, lines 48–50.

According to Chrimar, all four patents are standard-essential patents in that they cover features required by the Institute of Electrical and Electronics Engineers (IEEE) Power over Ethernet (PoE) 802.3af standard (ratified in 2003) and 802.3at amendments to the IEEE PoE 802.3 standard (ratified in 2009). Those standards address detection, classification, power-on, operating power, and removal of power. Chrimar’s patents cover the first three features (detection, classification, and power-on).

A Power over Ethernet controller chip controls the activities addressed in the standard relevant here. Products with such a controller chip interact with other products to enable the safe delivery of power from power-sourcing equipment (*e.g.*, switches) to powered devices (*e.g.*, wireless access points and voice over internet protocol (VoIP) phones). ALE sells VoIP phones, wireless access points,

and switches that implement the IEEE PoE 802.3af/at standard.

B

The IEEE ratified the PoE 802.3af standard in 2003. That ratification followed a series of meetings convened by the IEEE regarding adoption of the standard. John Austermann, Chrimar’s Chief Executive Officer and listed inventor on the patents, participated in several such meetings in 2000.

Under the then-applicable bylaws of the IEEE Standards Association Board (2000)—which have since been changed—if the IEEE knew of an essential patent, the IEEE could adopt a standard that includes the known use of that patent or patent application “if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license under reasonable terms and conditions for the purpose of implementing the standard.” J.A. 10548. The bylaws also stated that the letter of assurance “shall be provided without coercion,” J.A. 10548; and the IEEE Standards Association operations manual required that the working group “shall request that known patent holders submit statements” but that the working group refrain from coercing the patent holders to do so, J.A. 6711. According to Chrimar’s expert Clyde Camp, who served as Chair of the IEEE Patent Committee, the IEEE’s patent policy at the time was one of “request and encourage,” J.A. 6706, consisting of sending letters to owners of patents that may be essential and requesting (without requiring) that the patent owner return a “Letter of Assurance,” J.A. 6705–09; *see also* J.A. 6713–14 (IEEE 2002 statement submitted to FTC: “Disclosure of patents is based on the willingness of the individual participants to disclose any known patents whose use would be required in the practice of the standard.”). Mr. Camp also testified that patent holders did not

always provide a letter of assurance in response to such requests. J.A. 6712.¹

In October 2001, while the relevant IEEE component was considering the adoption of the PoE 802.3af standard, Chrimar expressed its belief to the IEEE that the Chrimar-owned U.S. Patent No. 5,406,260—not asserted in this case—was an essential patent for that standard. Chrimar submitted a “letter of assurance” agreeing to license the ’260 patent upon request “to all applicants at royalty rates that [Chrimar] deems reasonable in light of the specific circumstances of this particular situation.” J.A. 10559. The IEEE never requested, and Chrimar did not submit, any similar letter regarding the four patents asserted in this case.

C

In 2015, Chrimar sued ALE in the Eastern District of Texas for direct and indirect infringement of the ’012, ’107, ’838, and ’760 patents under 35 U.S.C. §§ 271(a), (b). ALE asserted defenses of, *inter alia*, noninfringement, invalidity (including anticipation, obviousness, lack of enablement, lack of sufficient written description, and lack of proper inventorship), unenforceability based on unclean hands and inequitable conduct, prosecution laches, equitable estoppel, waiver, and implied license. ALE also asserted counterclaims of, *inter alia*, breach of contract with the IEEE (with ALE as a third-party beneficiary), fraud, and violation of section 2 of the Sherman Act, as well as declaratory judgment counterclaims corresponding to several of ALE’s affirmative defenses.

The court issued a claim construction order in late March 2016. *Chrimar Sys., Inc. v. Alcatel-Lucent USA, Inc.*, No. 6:15-cv-163, 2016 WL 1228767 (E.D. Tex. Mar.

¹ In 2004, the IEEE changed its policy to require the submission of letters of assurance.

28, 2016) (*Claim Construction Order I*). Two weeks before trial, on September 20, 2016, ALE stipulated to infringement of claims 1, 5, 72, and 103 of the '107 patent and claims 1, 7, and 26 of the '838 patent under the governing claim construction order; and ALE requested further construction of the claim terms “adapted” and “physically connect” in the asserted claims of the '012 and '760 patents. A week later, the court issued a second claim construction order construing those terms. *Chrimar Sys., Inc. v. Alcatel-Lucent USA, Inc.*, No. 6:15-cv-163, 2016 WL 5393853 (E.D. Tex. Sept. 27, 2016) (*Claim Construction Order II*). In light of that order, ALE, on September 30, 2016, stipulated to infringement of claims 31, 35, 43, and 60 of the '012 patent and claims 1, 59, 69, 72, and 145 of the '760 patent.²

In late June 2016, ALE moved to strike the expert report and exclude the testimony of Chrimar’s damages expert, Robert Mills, arguing that, in his damages calculation, he did not properly limit compensation to the value of the patented features of ALE’s products, *i.e.*, he did not adequately separate the value of the patented features

² The claims of the '107, '838, '012, and '760 patents to which ALE stipulated infringement in this case were all determined to be unpatentable by the Patent Trial and Appeal Board in four final written decisions. Appeals from the final written decisions for the first three patents have been filed with this court. Notice of Appeal, *Chrimar Sys., Inc. v. Juniper Networks, Inc.*, No. 18-1499 (Fed. Cir. Feb. 1, 2018), ECF No. 1; Notice of Appeal, *Chrimar Sys., Inc. v. Juniper Networks, Inc.*, No. 18-1500 (Fed. Cir. Feb. 1, 2018), ECF No. 1; Notice of Appeal, *Chrimar Sys., Inc. v. Juniper Networks, Inc.*, No. 18-1503 (Fed. Cir. Feb. 1, 2018), ECF No. 1. ALE has not yet appealed the final written decision regarding the '760 patent, entered by the Board on April 26, 2018.

from the value of nonpatented features and the value associated with the IEEE standardization. In August 2016, the court granted the motion only in part. The court concluded that, for admissibility, Mr. Mills had adequately separated patented from nonpatented features. But the court concluded that Mr. Mills improperly stated in his report that there was no need even to assess the value of standardization because, when the IEEE standard was adopted, there were no noninfringing alternatives to the features at issue; the court struck that statement. Mr. Mills then submitted a supplemental report, as authorized, addressing the value of standardization. When ALE again moved to strike and exclude, the court again granted ALE's motion only in part, striking from the supplemental report one sentence about the lack of noninfringing alternatives at the time the standard was adopted.

A jury trial was held in early October 2016. ALE dropped many of its defenses and counterclaims shortly before or during trial and, as mentioned previously, stipulated to infringement under the governing claim constructions shortly before trial. The issues submitted to the jury were infringement damages, invalidity based on improper inventorship, fraud, and breach of contract. On October 7, 2016, the jury returned a verdict in favor of Chrimar on all issues and awarded Chrimar a royalty of \$324,558.34. The defenses of equitable estoppel, waiver, prosecution laches, and inequitable conduct were left to the court, which ruled for Chrimar on all issues.

After the jury trial, Chrimar filed a motion for attorney fees under 35 U.S.C. § 285, and ALE moved for judgment as a matter of law or a new trial. The court denied both motions. *Chrimar Sys., Inc. v. Alcatel-Lucent Enter. USA Inc.*, No. 6:15-cv-163, 2017 WL 568712 (E.D. Tex. Feb. 13, 2017) (*JMOL Order*); Mem. Op. & Order, *Chrimar Sys., Inc. v. Alcatel-Lucent Enter. USA Inc.*, No. 6:15-cv-163 (E.D. Tex. Jan. 23, 2017), ECF No. 412 (*Fees*

Order), J.A. 20001–05. On February 27, 2017, the court entered final judgment.

ALE timely appealed. Chrimar timely cross-appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II

ALE appeals three of the district court’s claim constructions, the denial of its motion to exclude Mr. Mills’s damages testimony, and the jury instruction on ALE’s state-law fraud claim.

A

We review *de novo* a district court’s claim construction, while reviewing for clear error any underlying factual findings. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 840–42 (2015). ALE challenges the district court’s construction of (1) “adapted,” as used in the relevant claims of the ’012 patent; (2) a series of infinitive phrases in the relevant claims of the ’107, ’760, and ’838 patents; and (3) “physically connect,” as used in the relevant claims of the ’760 patent. We agree on the first issue, not the others.

1

ALE objects to the court’s construction of “adapted” in claim 31 of the ’012 patent (on which claims 35, 43, and 60 directly or indirectly depend). That claim reads:

31. An ***adapted*** piece of Ethernet data terminal equipment comprising:

an Ethernet connector comprising a plurality of contacts; and

at least one path coupled across selected contacts, the selected contacts comprising at least one of the plurality of contacts of the Ethernet connector and at least another one of the plurality of contacts of the Ethernet connector,

wherein distinguishing information about the piece of Ethernet data terminal equipment is associated to impedance within the at least one path.

'012 patent, col. 18, line 62 through col. 19, line 5 (emphasis added).

In this case, the district court, at the parties' request, adopted the construction of "[a]n adapted piece of Ethernet data terminal equipment" from an earlier case in which the same court construed the preamble in claim 31 of the '012 patent. *See Claim Construction Order II*, 2016 WL 5393853, at *1, *3 (referring to *ChriMar Sys., Inc. v. Alcatel-Lucent, Inc.*, No. 6:13-cv-880, 2015 WL 233433, at *7–9 (E.D. Tex. Jan. 8, 2015) (*6:13-cv-880 Claim Construction Order*)). In the claim construction order entered in the earlier case, the court construed the preamble as "limiting" and stated that its "plain and ordinary meaning" should govern its scope, a construction with which both parties to that case agreed.³ *6:13-cv-880 Claim Construction Order*, 2015 WL 233433, at *9. While acknowledging that the parties continued to dispute the meaning of the term "adapt," *id.*, the court in that order reasoned:

The "adapting" requirement in the claims of the '012 Patent is essential to address the problem confronted by the inventors taking existing networks and adapting them to make equipment dis-

³ That case, filed in 2013, involved Chrimar and Alcatel-Lucent. (The present case involves Chrimar and ALE USA Inc., which was spun off from Alcatel-Lucent in 2014.) With the parties' agreement, the 2013 case was dismissed without prejudice in June 2015. *Chrimar Sys., Inc. v. Alcatel-Lucent, Inc.*, No. 6:13-cv-880 (E.D. Tex. Jan. 8, 2015), ECF No. 140.

tinguishable. Thus, the word “adapting” must have some meaning.

Id. The court did not say more about what that “meaning” is. *See id.*

Two weeks before trial in the present case, ALE asked for further claim construction of the term “adapted.” *Claim Construction Order II*, 2016 WL 5393853, at *1. According to ALE, the term should be construed as a “modification of preexisting equipment.” *See id.* at *3. The court disagreed with that narrowing construction. *Id.* at *4. Instead, the court construed the term “consistently with its plain and ordinary meaning to mean ‘designed, configured, or made.’” *Id.* at *3–4.

In light of the parties’ agreement in this case that the preamble is limiting, both before the district court and on appeal, *see* ALE Br. 12; Chrimar Br. 18 n.5, we disagree with the district court’s claim construction. Generally, every apparatus may be described as “designed, configured, or made,” and Chrimar has not explained how that construction in any way limits the scope of claim 31. Chrimar also contends that “piece of Ethernet data terminal equipment,” rather than “adapted,” is the limiting term in the preamble, but it does not explain *how* the former is limiting. Chrimar Br. 20–21. The district court did not adopt that position. *See Claim Construction Order II*, 2016 WL 5393853, at *3–4; *see also* 6:13-cv-880 *Claim Construction Order*, 2015 WL 233433, at *9 (assuming that “the word ‘adapting’ must have some meaning”).

The specification is consistent with giving “adapted” a meaning tied to existing equipment to avoid stripping the concededly limiting claim language of meaning. The specification describes the invention generally as designed to operate on a preexisting network connected to pieces of networked terminal equipment. *See* ’012 patent, col. 3, lines 18–22 (“In accordance with the teachings of the present invention, a communication system is provided

for generating and monitoring data over a pre-existing wiring or cables that connect pieces of networked computer equipment to a network.”); *id.*, col. 1, line 67 through col. 2, line 2 (“[A] method for permanently identifying an asset by attaching an external or internal device to the asset and communicating with that device using existing network wiring or cabling is desirable.”). As the district court noted, moreover, the specification states that “[t]his invention is particularly adapted to be used with an existing Ethernet communications link or equivalents thereof,” ’012 patent, col. 3, lines 35–37, and that “[t]he communication system 15 and 16 described herein is particularly adapted to be easily implemented in conjunction with an existing computer network 17 while realizing minimal interference to the computer network,” *id.*, col. 4, lines 56–60. *Claim Construction Order II*, 2016 WL 5393853, at *3; *see also 6:13-cv-880 Claim Construction Order*, 2015 WL 233433, at *9 (stating that “[t]he ‘adapting’ requirement in the claims of the ’012 Patent is essential to address the problem confronted by the inventors taking existing networks and adapting them to make equipment distinguishable” and therefore “must have some meaning”).

Chrimar does not dispute that the specification describes embodiments that require modification of a pre-existing piece of Ethernet data terminal equipment. Nor does it dispute that “adapted” appears only in the claims of the ’012 patent, not the other patents involving essentially the same specification, suggesting that the claim scope chosen for the asserted claims in *this* patent is only a subset of what the specification may support.⁴ It is

⁴ The district court noted that the patent describes at least one embodiment in which the invention is implemented at the manufacturing stage, rather than through a modification of already-manufactured equipment.

hardly unknown for one set of claims to use language that picks out one among several embodiments, especially where other claims (perhaps in the same or related patents) claim more broadly or focus on other embodiments. *E.g.*, *Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc.*, 265 F.3d 1294, 1305–06 (Fed. Cir. 2001) (refusing to apply limitations expressed in prosecution histories of related patents where relevant claim term was not included in claims of the asserted patent and “[t]he patentee’s whole point in filing the application that resulted in the [asserted patent] was to secure broader claims”); *see also, e.g.*, *Haemonetics Corp. v. Baxter Healthcare Corp.*, 607 F.3d 776, 782 (Fed. Cir. 2010) (construing term “centrifugal unit” differently in two separate claims in the same patent where language in each claim tracked different embodiments described in the specification). The claim language here, to be meaningful, requires such a construction of “adapted.” We therefore adopt ALE’s proposed construction of “adapted” to mean “modified.”

2

ALE also objects to the constructions of the infinitive phrases “to detect,” “to control,” “to provide,” and “to distinguish” in the relevant claims of the ’838 patent; “to draw,” “to result,” and “to convey” in the relevant claims of the ’107 patent; and “to draw,” “to detect,” “to control,” and “to distinguish” in the relevant claims of the ’760 patent. *E.g.*, ’838 patent, col. 17, lines 17, 19–20; ’107 patent, col. 17, lines 18, 20, 23; ’760 patent, col. 17, lines 28, 33–35. ALE argues that those terms should have been

Claim Construction Order II, 2016 WL 5393853, at *4 (citing ’012 patent, col. 11, lines 16–19 (“It is also envisioned that the electronics of the network identification circuitry can be placed on a motherboard within the computer or as part of the circuitry on the NIC [network interface controller] card.”)).

construed as means-plus-function elements subject to 35 U.S.C. § 112, ¶ 6 because they do not recite sufficient structure to perform the required function.⁵ The district court rejected that argument. So do we.

The district court properly recognized the presumption against application of § 112, ¶ 6 where, as here, the word “means” is not used in the claim and properly asked whether the terms preceding the infinitive phrases—“central piece of equipment,” “Ethernet terminal equipment” (or “BaseT Ethernet terminal equipment”), and “end device”—identify structures or instead are, like “means,” essentially place-holder nonce words. *Claim Construction Order I*, 2016 WL 1228767, at *5; see *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (en banc) (For functional terms lacking the word “means,” the challenger arguing for the application of § 112, ¶ 6 must satisfy “[t]he standard[, which] is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.”). ALE did not dispute before the district court, and has not disputed on appeal, that those terms refer to known structures in the art. *Claim Construction Order I*, 2016 WL 1228767, at *5–6; see also *id.* at *5 n.2 (noting that ALE’s “expert repeatedly discusses the ‘Ethernet terminal equipment’ and ‘end device’ interchangeably and without any question as to the understanding of these terms in the art”). ALE therefore has not met its burden to overcome the presumption against applying § 112, ¶ 6 for those infini-

⁵ Paragraph 6 of 35 U.S.C. § 112 was replaced with 35 U.S.C. § 112(f) when the Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284 (2011), took effect on September 16, 2012. Because the applications resulting in the asserted patents were filed before that date, we refer to the pre-AIA version of § 112.

tives. A claim term that has an understood meaning in the art as reciting structure is not a nonce word triggering § 112, ¶ 6. *Williamson*, 792 F.3d at 1349; *see, e.g., Skky, Inc. v. MindGeek, s.a.r.l.*, 859 F.3d 1014, 1019–20 (Fed. Cir. 2017) (even including use of the word “means,” “wireless device means” was not a means-plus-function term because “‘wireless device’ is used in common parlance . . . to designate structure”) (ellipsis in original).

3

ALE argues that the district court erred in construing “physically connect”—as used in claim 1 of the ’760 patent (on which claims 59, 69, and 72 depend) and claim 73 of the ’760 patent (on which claim 145 depends). Claim 1 reads:

1. A BaseT Ethernet system comprising:
 - a piece of central BaseT Ethernet equipment;
 - a piece of BaseT Ethernet terminal equipment; and
 - data signaling pairs of conductors comprising first and second pairs used to carry BaseT Ethernet communication signals between the piece of central Ethernet BaseT Ethernet equipment and the piece of BaseT Ethernet terminal equipment, the first and second pairs ***physically connect*** between the piece of BaseT Ethernet terminal equipment and the piece of central BaseT Ethernet equipment having at least one DC supply, the piece of BaseT Ethernet terminal equipment having at least one path to draw different magnitudes of current flow from the at least one DC supply through a loop formed over at least one of the conductors of the first pair and at least one of the conductors of the second pair, the piece of central BaseT Ethernet equipment to detect at least two different magnitudes of the current flow through

the loop and to control the application of at least one electrical condition to at least two of the conductors.

'760 patent, col. 17, lines 15–36 (emphasis added).

The district court considered dependent claim 71 (not asserted in this case), in which the only additional limitation is that “the first and second pairs ***are physically connected*** between the piece of BaseT Ethernet terminal equipment and the piece of central BaseT Ethernet equipment.” *Id.*, col. 21, lines 28–30 (emphasis added). In light of that dependent claim and the presumption of claim differentiation, the court stated that the term “physically connect” in claim 1 requires only that the components be *configured* (have the *ability*) to physically connect, rather than actually be physically connected (as in claim 71). *Claim Construction Order II*, 2016 WL 5393853, at *4–5.

On appeal, ALE argues that the district court’s construction renders the term “physically connect” meaningless and that, without an actual physical connection, the system would be inoperable. But requiring that a system be configured to physically connect is a meaningful limitation (it imports a meaningful capability), and such a system is operable (upon action by a user, the system makes the physical connection needed for actual operation). Not surprisingly, it is hardly uncommon for an apparatus or system claim, as a claim to a product rather than a process (or a forbidden mix), to be directed to capability, instead of actual operation. *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204 (Fed. Cir. 2010) (“[W]e have held that, to infringe a claim that recites capability and not actual operation, an accused device need only be capable of operating in the described mode.” (citation and quotation marks omitted)); *see, e.g., Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1217 (Fed. Cir. 2014) (affirming infringement verdict based on

claims directed to components “reasonably capable of ‘arranging information for transmission . . . which identifies a type of payload information’” (quoting U.S. Patent No. 6,466,568, col. 13, lines 12–18)); *Finjan*, 626 F.3d at 1204–05 (affirming infringement verdict for “non-method claims describ[ing] capabilities without requiring that any software components be ‘active’ or ‘enabled’” because “software for performing the claimed functions existed in the products when sold—in the same way that an automobile engine for propulsion exists in a car even when the car is turned off”). Chrimar cites no authority barring a claim to a component “configured to” work and capable of operation by a user, where the user’s actual operation is unclaimed. *See Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1262–63 (Fed. Cir. 2013) (affirming infringement verdict based on evidence that the system would operate in an infringing manner if a user followed the accused infringer’s instructions, and explaining that “[w]hile a device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim, . . . an accused product may be found to infringe if it is reasonably capable of satisfying the claim limitation” (citation and quotation marks omitted)). Thus, ALE has not provided any reason that overcomes the presumption in favor of claim differentiation. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc).

4

We affirm the judgment of infringement of the ’107, ’838, and ’760 patents. Because we agree with ALE as to the term “adapted” in the ’012 patent, we vacate the district court’s claim construction order as to that term. We remand for further proceedings on infringement of the ’012 patent under the proper construction of “adapted.”

That result does not call for a new trial on damages. ALE did not ask for a new trial on damages based on our

adoption of its construction of “adapted.” *See* ALE Br. 21 (requesting only reversal of the infringement judgment); ALE Reply Br. 11 (requesting that the court either “reverse or vacate the infringement judgment . . . so that the fact finder may assess whether the accused products infringe the asserted claims of the ’012 patent under a proper construction”). And a new trial on damages is not warranted on that basis. Chrimar’s technical expert Dr. Vijay Madisetti testified that all four patents “cover the PSE [power sourcing equipment] and the PD [power device] aspects of classification, detection, and controlling the power,” J.A. 5892—a proposition that ALE agrees with on appeal, ALE Br. 8. Dr. Madisetti also testified that the smallest saleable patent-practicing units are ALE’s power sourcing equipment, which infringe the ’760 and ’838 patents, and ALE’s power devices, which infringe the ’012, ’107, and ’760 patents, J.A. 5921—a proposition ALE does not dispute on appeal. Given the (affirmed) judgment of infringement of the ’107 and ’760 patents, the absence of an infringement judgment on the ’012 patent is immaterial to damages because any damages that would result from the alleged infringement of the ’012 patent also results from the infringement of the ’107 and ’760 patents. We therefore proceed to consider ALE’s independent arguments directed to damages.

B

ALE challenges the damages award by attacking the testimony of Mr. Mills, Chrimar’s damages expert. According to ALE, Mr. Mills, in calculating a reasonable royalty, (1) relied on licenses not comparable to the hypothetical negotiation for the present case; (2) did not adequately separate the value of patented features from the value of standardization and the value of nonpatented features; and (3) prejudicially referred to ALE’s total net revenue and profit. The challenge is most naturally viewed as a challenge to the admission of Mr. Mills’s testimony, reviewable for abuse of discretion. *See Gen.*

Elec. Co. v. Joiner, 522 U.S. 136, 138–39 (1997); *Versata*, 717 F.3d at 1261 (applying Fifth Circuit law); *Snap-Drape, Inc. v. Comm’r*, 98 F.3d 194, 197 (5th Cir. 1996). Our conclusion would not change even if we viewed ALE’s argument as challenging the denial of judgment as a matter of law, reviewed de novo for compliance with the deferential standard for such challenges to jury verdicts, see *Mirror Worlds, LLC v. Apple Inc.*, 692 F.3d 1351, 1356–57 (Fed. Cir. 2012) (applying Fifth Circuit law), or the denial of a new trial, reviewed for an abuse of discretion, see *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 66 (Fed. Cir. 2012) (applying Fifth Circuit law).

1

There is no reversible error based on Mr. Mills’s reliance on certain licenses to come to a range for a reasonable royalty rate and his selection of a rate in the low end of that range—*i.e.*, \$2.50 per PoE port. See J.A. 6223–28 (Mills’s trial testimony); see also J.A. 6164–89 (testimony of Chrimar CEO Austermann going through 30 licenses). To the extent that ALE argues that those licenses were not sufficiently comparable to be reliable indicators of what would have occurred in a hypothetical negotiation between it and Chrimar, ALE failed to make that challenge when seeking to exclude Mr. Mills’s testimony or when that testimony was presented at trial. See *JMOL Order*, 2017 WL 568712, at *6 & n.7. In addition, ALE was able to—and did—attack any discrepancies in the license-comparison approach by presenting extensive contrary testimony from its expert. J.A. 6807–27. This court has approved reliance on licenses, which often will not be in identical circumstances, as long as reasonable adjustments for differences in contexts are made. See, *e.g.*, *Prism Techs. LLC v. Sprint Spectrum L.P.*, 849 F.3d 1360, 1368–70 (Fed. Cir. 2017) (citing cases). ALE has not persuasively shown either an unrea-

sonable methodology or prejudicial error under that standard.

2

Nor has ALE shown reversible error regarding Mr. Mills's testimony as to apportionment—separating the patented features' value from other elements of value in the accused products. Mr. Mills explained at trial that he accounted for the products' non-PoE functionality (non-patented functionality outside the PoE standard), the products' nonpatented PoE functionality (two nonpatented features of the PoE standard: operating power and removal of power), and the value of standardization (generally requiring practice of a standard-essential patent rather than noninfringing alternatives). J.A. 6239. For the first, he calculated the “profit premium” of the PoE functionality, comparing ALE's products that differ only in the addition of that functionality. *See* J.A. 6240–42. In apportioning the value of that profit premium to each of the nonpatented and patented features of the PoE standard, Mr. Mills relied on the testimony of the technical expert, Dr. Madisetti, who stated that the patents “are fundamental to the provision of PoE under the standards” and “relate to the majority and the most critical aspects of the standard”; that “the standards would not be successful without Chrimar's inventions”; and that “the standards would not have gained widespread adoption without Chrimar's patented inventions.” J.A. 6243–44; *see also* J.A. 4642–43 (Mills expert report relying on Dr. Madisetti's explanation); J.A. 5878, 5887–88, 5892 (Madisetti testimony). Mr. Mills also testified that, although there was some value attributable to the nonpatented features of the PoE standard and to standardization, he adopted a conservative estimate of the profit premium attributable to the patented features (\$2.50 per PoE port), which did not include those values. J.A. 6244–45 (relying on Dr. Madisetti's testimony regarding the value of standardization and the nonpatented

features of the PoE standard, and stating that the testimony “ultimately tells me that \$2.50 per port is inherently reasonable”).

Mr. Mills’s opinion that his conservative estimate of the portion of the profit premium attributable to the patented features did not encompass the value of standardization and nonpatented features does not flunk standards of reliability and reasonableness. *See Aqua Shield v. Inter Pool Cover Team*, 774 F.3d 766, 771 (Fed. Cir. 2014) (noting that royalty calculations often involve “approximation and uncertainty”); *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1328 (Fed. Cir. 2014) (stating that “absolute precision” is not required in the task of apportionment, as “it is well-understood that this process may involve some degree of approximation and uncertainty”). Nor is unreliability or unreasonableness established by the fact that Mr. Mills’s proposed royalty rate did not change in his supplemental report, after he was directed to take into account the value of noninfringing alternatives. Mr. Mills assumed, based on Dr. Madisetti’s testimony, that the value of nonpatented features of the PoE standard and the value of standardization were not large, and he selected a figure toward the low end of the range of royalty rates from comparable licenses, *see* J.A. 6223–28, including a license that covered comparable technology and in which ALE was the licensee, J.A. 6227–28, to reach a royalty rate for the patented features. In light of those assumptions and his initially conservative estimate, the unchanged royalty rate does not prove his method unreliable or unreasonable.

Mr. Mills’s assumptions underlying his damages theory were the subject of cross-examination. ALE used that process to suggest that he had neither adequately appreciated the value of nonpatented features and standardization nor quantified such value. *See, e.g.*, J.A. 6273–84. ALE also provided contrary testimony from its own expert about the value of standardization and noninfringing

alternatives available at the time the standard was adopted (leading to ALE's proposed royalty rate of \$0.05 per PoE port). J.A. 6824–27. The jury was given instructions regarding apportionment (not challenged here), including a specific instruction regarding the need to factor out the value of standardization and of nonpatented features. J.A. 349–50. ALE has not shown reversible error in leaving the damages dispute in this case to that process.

3

ALE's final challenge regarding damages is that the district court improperly allowed Mr. Mills to refer to ALE's total revenue and profit, a reference that, according to ALE, "skewed" the damages inquiry. ALE Br. 62. The district court, however, allowed that testimony only after concluding that ALE had opened the door to it by soliciting testimony from its own witness that relied on ALE's net revenue to estimate the very large amount that would go to Chrimar at ALE's proposed rate of \$0.05 per PoE port. J.A. 6316–18. We have no basis for disturbing the district court's determination that ALE opened the door and that the now-challenged reference was accordingly permissible. *See United States v. Keith*, 582 F. App'x 300, 302 (5th Cir. 2014) (no abuse of discretion in "allow[ing] the government to elaborate more fully on th[e] line of questioning" opened by the defendant) (citing *United States v. Walker*, 613 F.2d 1349, 1353 (5th Cir. 1980)).

C

ALE challenges the district court's instruction to the jury on the law of fraud under Texas law. "[W]e review the district court's determination of state law de novo, though the district court still has 'wide discretion' in formulating the jury charge." *EMJ Corp. v. Hudson Specialty Ins. Co.*, 833 F.3d 544, 550 (5th Cir. 2016).

The jury instruction at issue is as follows (challenged portions emphasized):

To prove fraud, ALE must show by a preponderance of the evidence that Chrimar: (1) made a misrepresentation of material fact **to ALE**, (2) with knowledge of its falsity, (3) with the intent to defraud **ALE**, (4) which induced justifiable reliance by ALE, and (5) which resulted in damage to ALE. . . .

In order to prove fraud by omission, ALE must show by a preponderance of the evidence that: (1) Chrimar concealed or failed to disclose a material fact within its knowledge **from ALE**; (2) Chrimar had a duty to disclose that fact; (3) Chrimar knew that ALE was ignorant of the fact and ALE did not have an equal opportunity to discover the truth; (4) Chrimar intended **to induce ALE** to take some action by concealing or failing to disclose the fact; (5) ALE relied on Chrimar's non-disclosure; and (6) ALE was injured as a result of acting without that knowledge.

J.A. 351–52 (emphases added).

ALE argues that the instruction improperly excluded the possibility that Chrimar's alleged misrepresentations or omissions to the IEEE, in failing to submit a Letter of Assurance regarding the four asserted standard-essential patents, could support ALE's fraud claim.⁶ ALE relies on

⁶ ALE has not disputed Chrimar's contention on appeal that ALE "provided no evidence at trial regarding its predecessor's interest and involvement in the IEEE or the PoE standard-setting process." Chrimar Br. 52 n.19 (emphasis omitted) (quoting *Chrimar Sys., Inc. v. Alcatel-Lucent Enter. USA Inc.*, No. 6:15-cv-163, 2017 WL 345991, at *3 (Jan. 24, 2017)).

Exxon Corp. v. Emerald Oil & Gas Co., 348 S.W.3d 194 (Tex. 2011), for the proposition that common-law fraud under Texas law “does not require proof that the entity committing the fraud—here, Chrimar—intended to defraud the specific party that is making the fraud allegation.” ALE Br. 68. We see no reversible error in the district court’s decision to give the instruction it gave.

The district court’s instruction mirrors a statement of the law in an intermediate Texas court of appeals decision, *7979 Airport Garage, L.L.C. v. Dollar Rent A Car Sys., Inc.*, 245 S.W.3d 488, 507 n.27 (Tex. App. 2007) (reciting elements of a Texas state law fraud claim in materially identical terms). That decision post-dates the Texas Supreme Court’s decision in *Ernst & Young, L.L.P. v. Pac. Mutual Life Ins. Co.*, 51 S.W.3d 573 (Tex. 2001), which announced the fraud standard later applied by *Exxon*, 348 S.W.3d at 218–19. And after *Exxon*, the Fifth Circuit itself recited (in an unpublished decision) that same statement of the elements of a fraud claim from the *7979 Airport Garage* decision. *Shaver v. Barrett Daffin Frappier Turner & Engel, L.L.P.*, 593 F. App’x 265, 271 (5th Cir. 2014). Unless *Exxon* clearly showed those rulings to be incorrect, the district court permissibly followed them.

Exxon does not clearly show those rulings to be incorrect. In *Exxon*, the court addressed the “intent to induce” element of fraud. 348 S.W.3d at 217–18 (affirming principle announced in *Ernst & Young*, 51 S.W.3d at 580–82). Emerald, a lessor of the O’Connor oil well field, presented evidence that Exxon, the previous lessor, filed public plugging reports with the Texas Railroad Commission with false representations regarding the amount of reserves in the oil field, as well as evidence that “the first place subsequent operators turn is to those very filings at the Railroad Commission when deciding whether redevelopment can be economically undertaken.” *Id.* at 216–17. The Texas Supreme Court stated that whether a party

“might or should rely on statements” in such reports “alone is not sufficient to establish an intent to induce reliance.” *Id.* at 218. Rather, as in § 531 of the Restatement (Second) of Torts (1977), “[o]ne who makes a fraudulent misrepresentation is subject to liability to the persons or class of persons whom he intends or has reason to expect to act or to refrain from action in reliance upon the misrepresentation, for pecuniary loss suffered by them through their justifiable reliance in the type of transaction in which he intends or has reason to expect their conduct to be influenced.” *Id.* at 218–19 (quoting Restatement § 531). As explained by the court:

[The] “reason-to-expect standard requires more than mere foreseeability; the claimant’s reliance must be ‘especially likely’ and justifiable, and the transaction sued upon must be the type the defendant contemplated.” *Ernst & Young*, 51 S.W.3d at 580 Even an obvious risk that a misrepresentation might be repeated to a third party is not sufficient to satisfy the reason-to-expect standard. A plaintiff must show that “[t]he maker of the misrepresentation [has] information that would lead a reasonable man to conclude that there is an especial likelihood that it will reach those persons and will influence their conduct.” [Restatement] § 531, cmt. d . . . , quoted in *Ernst & Young*, 51 S.W.3d at 581.

Id. at 219. As a matter of law, the court said, it is not enough that Exxon “knew” that subsequent lessors would rely on its reports; Exxon must have known that there was “an especial likelihood that Emerald specifically would rely on the plugging reports in a transaction being considered at the time [Exxon] filed the plugging reports.” *Id.* The *Exxon* court therefore ruled that the misrepresentation, even in a public filing, must be directed at the defrauded party. That court’s language can fairly be viewed in the terms (intent even with some constructive

aspect) articulated before *Exxon* in *7979 Airport Garage* (adopted after *Exxon* by the Fifth Circuit in *Shaver*).

It is true that Texas law “does not require proof that a misrepresentation be made *to* the defrauded party” in the sense ALE suggests—in substance, *directly to*. ALE Br. 68. But the jury instructions did not require that the misrepresentation or omission be made “directly to” ALE. The instructions permitted liability if the misrepresentation or omission was made to ALE, whether directly or indirectly. See *Neuhaus v. Kain*, 557 S.W.2d 125, 138 (Tex. Civ. App. 1977) (“We recognize the rule that a fraudulent representation may be either direct or indirect”). Perhaps the instruction would have benefited from specifying that the fraudulent statement could be made “directly or indirectly” to ALE; but ALE made no request for inclusion of words to that effect. ALE objected to the instruction on the ground that “[w]e think that the evidence has shown that the – Chrimar has committed fraud on the IEEE in general and that it’s not necessary to show fraud against ALE in this case.” J.A. 6919. The district court could reasonably reject that proposal as incorrectly suggesting that neither a direct nor indirect misrepresentation is required. In these circumstances, ALE lacks a meritorious argument on appeal for vacatur of the fraud verdict based on erroneous instructions.

III

Chrimar cross-appeals the district court’s denial of its motion for attorney fees under 35 U.S.C. § 285, which we review for abuse of discretion. *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1747 (2014).

Chrimar’s argument relies chiefly on the ground that ALE pressed a large number of defenses and counterclaims for years, only to drop most of them (*e.g.*, concerning antitrust, inequitable conduct, and some invalidity grounds) late in the litigation, even during trial. Chrimar does not meaningfully show that those dropped claims

were objectively meritless. It focuses on the contention that ALE never truly intended to try them.

The district court did not abuse its discretion in making what here was a case-specific judgment that it was distinctively well-positioned to make. The court denied summary judgment as to a number of the claims ALE later dropped, allowing them to proceed. And the court determined that ALE's litigation decisions fell within the range of ordinary practices involving the narrowing of claims for trial. *Fees Order*, at 3–4.

We have considered Chrimar's arguments that this was an exceptional case as a matter of law and find them unpersuasive. We therefore affirm the district court's ruling on ALE's § 285 motion.

IV

We vacate in part the district court's second claim construction order—the part adopting a construction of “adapted” in claim 31 of the '012 patent, a construction we reject. We affirm the district court's remaining claim constructions and the infringement damages award and the fraud judgment. We remand for further proceedings consistent with this opinion.

Each party shall bear its own costs.

**AFFIRMED IN PART, VACATED IN PART, AND
REMANDED**