United States Court of Appeals for the Federal Circuit

ASETEK DANMARK A/S,

Plaintiff-Appellee

 \mathbf{v} .

CMI USA INC., FKA COOLER MASTER USA, INC., COOLER MASTER CO., LTD.,

 $Defendants ext{-}Appellants$

2016-1026, 2016-1183

Appeals from the United States District Court for the Northern District of California in No. 3:13-cv-00457-JST, Judge Jon S. Tigar.

Decided: April 3, 2017

ERIK R. PUKNYS, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Palo Alto, CA, argued for plaintiff-appellee. Also represented by ROBERT F. MCCAULEY, JEFFREY DANIEL SMYTH; ARPITA BHATTACHARYYA, Boston, MA.

KYLE DAKAI CHEN, Cooley LLP, Palo Alto, CA, argued for defendants-appellants. Defendant-appellant CMI USA Inc. also represented by REUBEN HO-YEN CHEN.

Before Prost, *Chief Judge*, Newman, and Taranto, *Circuit Judges*.

TARANTO, Circuit Judge.

In January 2013, Asetek Danmark A/S sued two parties—Cooler Master USA, Inc., which a month later became CMI USA Inc.; and Cooler Master Co., Ltd., a Taiwanese company—in the Northern District of California, asserting infringement of two of Asetek's patents, All of the U.S. Patent Nos. 8,240,362 and 8,245,764. accused products are branded "Cooler Master." months before trial, by stipulation, Asetek dismissed with prejudice its claims against the Taiwanese company (hereafter "Cooler Master"). Asetek's claims of infringement by CMI USA (hereafter "CMI"), and CMI's invalidity counterclaims, were tried partly to a jury and partly to the court. Asetek prevailed and received a judgment of infringement, and of no invalidity, plus a damages award against CMI of \$404,941, based on a 14.5% royalty rate. The district court also entered an injunction covering the specific "Cooler Master" products found to infringe. The injunction runs not only against CMI but also against Cooler Master—which was not then a party (though it later intervened and became one) and which was not adjudicated liable for infringement.

We affirm the district court's rulings on infringement, invalidity, and damages. We remand as to part of the injunction, *i.e.*, insofar as the injunction reaches conduct by Cooler Master (regarding the covered products) that goes beyond abetting a new violation by CMI. The governing standards for reaching such conduct by persons not adjudicated liable for the underlying wrong, reflected in Federal Rule of Civil Procedure 65(d), are highly fact-specific. In this case, a determination of the propriety of the injunction's reach would benefit from further findings and, if sought and needed, further record development.

T

The '362 and '764 patents describe and claim systems and methods for cooling the "central processing unit (CPU) or other processing unit of a computer system" using cooling liquid. '362 patent, col. 1, lines 12-14; '764 patent, col. 1, lines 11–13. According to the patents, which have similar specifications, liquid-cooling systems in the prior art consisted of "many components," which were "coupled together," increasing "total installation time" and causing "leakage." '362 patent col. 1, lines 34-49; '764 patent, col. 1, lines 32–37. By contrast, the '362 and '764 patents describe systems that combine multiple components—a "heat-exchanging interface," a "reservoir," and a "pump"—into a single "integrate element." patent, col. 2, lines 9–11; '764 patent, col. 2 lines 5–6. As recited in the asserted claims, the "reservoir" includes two "vertically" separated chambers, referred to as the "upper chamber" and "lower chamber," '362 patent, col. 18, lines 56-65, or "pump chamber" and "thermal exchange chamber," '764 patent, col. 27, lines 49–57.

Claim 1 of the '764 patent is representative:

- 1. A cooling system for a heat-generating component, comprising:
 - a double-sided chassis adapted to mount a pump configured to circulate a cooling liquid, the pump comprising a stator and an impeller, the impeller being positioned on the underside of the chassis and the stator being positioned on the upper side of the chassis and isolated from the cooling liquid;
 - a reservoir adapted to pass the cooling liquid therethrough, the reservoir including:
 - a pump chamber including the impeller and formed below the chassis, the pump chamber being defined by at least

an impeller cover having one or more passages for the cooling liquid to pass through;

a thermal exchange chamber formed below the pump chamber and vertically spaced apart from the pump chamber, the pump chamber and the thermal exchange chamber being separate chambers that are fluidly coupled together by the one or more passages; and

a heat-exchanging interface, the heatexchanging interface forming a boundary wall of the thermal exchange chamber, and configured to be placed in thermal contact with a surface of the heatgenerating component; and

a heat radiator fluidly coupled to the reservoir and configured to dissipate heat from the cooling liquid.

'764 patent, col. 27, lines 39–65. The asserted claims of the '362 patent are similar, but additionally require the "heat-exchanging interface" to be "removably attached" or "removably coupled" to the "reservoir." '362 patent, col. 20, lines 3–6; *id.* col. 20, lines 40–44.

"Cooler Master is a Taiwanese supplier of computer components, including cooling devices for heat generating components" of computers. Appellants' Br. 24. Its products include the "Cooler Master"-branded Seidon 120M, Seidon 120XL, Seidon 240M, Seidon 120V, Seidon 120V Plus, Glacer 240L, Nepton 140XL, and Nepton 280L liquid-cooling products at issue in this case. CMI is a U.S. company that—as reflected in its name ("Cooler Master USA, Inc.") until February 2013, a month after this suit began, ECF Nos. 60, 61 (May 2014 change of caption)—collaborates with Cooler Master in designing and selling

"Cooler Master"-branded products in the United States. J.A. 3562–63. CMI also "assists" Cooler Master "in setting the manufacturer's suggested retail price of the accused products sold in the United States." J.A. 3563. The evidence, seemingly undisputed, is that, by oral agreement, CMI was Cooler Master's exclusive U.S. distributor of Cooler Master products. J.A. 7848–49; Transcript of Proceedings at 1069, 1106–07, Asetek Danmark A/S v. CMI USA, Inc., 00457-JST (N.D. Cal. Dec. 10, 2014), ECF No. 243. Between 2012 and 2013, CMI began selling specified Seidon, Glacer, and Nepton models of "Cooler Master"-branded products in the United States.

In its January 2013 suit against CMI and Cooler Master, Asetek asserted that they were infringing claims 14–15 and 17–19 of the '362 patent and claims 1–15 and 17–18 of the '764 patent by selling, offering to sell, and importing the Seidon, Glacer, and Nepton products.¹ Discovery proceeded, and infringement and invalidity contentions were filed. By September 5, 2014, the litigation was far enough along that CMI moved for summary judgment of invalidity. Cooler Master did not join that motion, however, because, the day before, it and Asetek stipulated to Cooler Master's dismissal with prejudice—a dismissal entered on September 5, 2014. Asetek agreed to that dismissal after CMI and Cooler Master witnesses testified, in discovery, to Cooler Master's exclusive-

Asetek's complaint did not identify the Seidon 120V Plus, and the jury did not specifically find that the '362 and '764 patents covered that product. But the district court's injunction identified the Seidon 120V Plus as an infringing device because Asetek and CMI stipulated that it has the same pump head design as the Seidon 120V, which was specifically considered by the jury. On appeal, neither CMI nor Cooler Master challenges the inclusion of the Seidon 120V Plus in the injunction.

distribution arrangement with CMI for the accused products in the United States.

The case went to trial a few months later, in December 2014. At trial, CMI argued that the '362 patent was not infringed, that the '764 patent was anticipated by U.S. Patent No. 7,544,049 (Koga), and that the '362 and '764 patents were obvious over Koga and Korean Utility Model No. 20-0314041 (Ryu). The district court granted Asetek's motion for judgment as a matter of law that Koga did not anticipate claim 4 of the '764 patent, and the jury returned a verdict for Asetek on the remaining issues. The iury found that CMI infringed, directly and contributorily. the asserted claims of the '362 patent and rejected CMI's Koga-based anticipation challenge to the remaining claims of the '764 patent. Additionally, the jury made specific findings, related to obviousness, about the level of ordinary skill in the relevant art, the scope and content of the prior art, differences between the prior art and the inventions claimed by the '362 and '764 patents, and objective indicia of non-obviousness. For example, the jury found that the claimed liquid-cooling systems differ from the prior art because they combine a "pump" and a "reservoir" "into a single unit" and because the "reservoir" is a "single receptacle that is divided into an upper chamber and a lower chamber." The jury also found six objective indicia of non-obviousness. The jury found Asetek entitled to a 14.5% reasonable-royalty rate and awarded \$404,941 in damages.

In April 2015, the district court entered its findings of fact and conclusions of law on various matters the parties had reserved to it. Asetek Danmark A/S v. CMI USA, Inc., 100 F. Supp. 3d 871 (N.D. Cal. 2015). The court concluded that CMI failed to prove that the '362 and '764 patents were invalid for obviousness, lack of written description, or indefiniteness. In September 2015, the district court denied CMI's motions for judgment as a matter of law or a new trial on infringement and damages

as well as for a new trial on obviousness. *Asetek Danmark A/S v. CMI USA*, *Inc.*, No. 3:13-cv-00457-JST, 2015 WL 5568360, at *3–12 (N.D. Cal. Sept. 22, 2015).

At the same time, the district court granted Asetek's motion for an injunction against both CMI and Cooler Master, the latter not then a party. *Id.* at *12–21. After identifying the "Infringing Products" covered (specified Seiden, Nepton, and Glacer models), the injunction states:

- (2) CMI USA, Inc. and its subsidiaries and affiliated companies (collectively defined as "CMI"), as well as CMI's successors, assigns, officers, directors, agents, servants, employees, representatives and attorneys, and those persons in active concert or participation with them who receive notice of the order are hereby immediately and permanently restrained and enjoined, pursuant to 35 U.S.C. § 283 and Fed. R. Civ. P. 65(d), from making, using, offering for sale or selling in the United States, or importing into the United States, or causing to be made, used, offered for sale, or sold in the United States, the Infringing Products.
- (3) Cooler Master Co., Ltd. and its subsidiaries and affiliated companies (collectively defined as "Cooler Master"), as well as Cooler Master's successors, assigns, officers, directors, agents, servants, employees, representatives and attorneys, and those persons in active concert or participation with them who receive notice of the order are hereby immediately and permanently restrained and enjoined, pursuant to 35 U.S.C. § 283 and Fed. R. Civ. P. 65(d), from making, using, offering for sale or selling in the United States, or importing into the United States, or causing to be made, used, offered for sale, or sold in the United States,

or imported into the United States, the Infringing Products.

- (4) Within 14 days of issuance of this order, CMI and Cooler Master shall provide written notice of this judgment and order, and the injunction ordered herein, to: their officers, directors, agents, servants, representatives, attorneys, employees, subsidiaries and affiliates, and those persons in active concert or participation with them. CMI and Cooler Master shall take whatever means are necessary or appropriate to ensure that this order is properly complied with.
- (5) CMI and Cooler Master shall include a copy of this Order and the written notice in paragraph (6) below [stating that the product is affected by a permanent injunction, infringes the '362 and '764 patents, and "may not be sold, offered for sale," "used," or "imported into the United States"] along with every bill of sale for the Infringing Products and in the boxes in which the Infringing Products are shipped or sold, regardless of where they are sold, indicating that they infringe the patents-insuit, are subject to an injunction in the United States, and thus cannot be sold, offered for sale, imported, or used in the United States.

Id. at *20. The injunction lasts until the '362 and '764 patents expire, except that either party may seek modification if either patent is finally adjudged invalid in another proceeding. *Id.* at *21.

In January 2016, Cooler Master appealed the injunction, paragraphs (3)–(5) of which impose obligations on it. Cooler Master then intervened, becoming a party again, even though in similar circumstances non-parties have been permitted to appeal. See, e.g., Class Plaintiffs v. City of Seattle, 955 F.2d 1268, 1277 (9th Cir. 1992) ("a non-party who is enjoined or otherwise directly aggrieved by a

judgment has standing to appeal the judgment without having intervened in the district court"). The district court subsequently denied Cooler Master's motion to stay the injunction.

CMI and Cooler Master appeal. CMI and Cooler Master present challenges to the district court's post-trial rulings on infringement and obviousness and to the injunction. CMI also presents challenges to the district court's post-trial rulings on damages. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

П

We review a denial of a motion for judgment of a matter of law de novo and must affirm unless "the evidence, construed in the light most favorable to the nonmoving party, permits only one reasonable conclusion, and that conclusion is contrary to the jury's verdict." *Pavao v. Pagay*, 307 F.3d 915, 918 (9th Cir. 2002). We review a denial of a motion for new trial for abuse of discretion. *Incalza v. Fendi N. Am., Inc.*, 479 F.3d 1005, 1013 (9th Cir. 2007). We review a grant of a permanent injunction for an abuse of discretion, with underlying legal conclusions reviewed de novo. *S.E.C. v. Goldfield Deep Mines Co. of Nev.*, 758 F.2d 459, 465 (9th Cir. 1985).

A

Appellants argue that the jury was required to find the '362 patent not infringed as a matter of law. Specifically, they contend that the alleged "heat exchanging interfaces" in the accused products are not "removably attached" or "removably coupled" to "reservoirs," as the asserted claims require. The reason, appellants say, is that removing the "heat exchanging interfaces" in the accused products would "damage the products or otherwise render them nonfunctional." Appellants' Br. 37.

We reject appellants' non-infringement argument. "[W]here the parties and the district court elect to provide

the jury only with the claim language itself, and do not provide an interpretation of the language in the light of the specification and the prosecution history," the jury's findings "must be tested by the charge actually given and by giving the ordinary meaning of the language of the jury instruction," and the only question is one of substantial evidence. Hewlett-Packard Co. v. Mustek Sys., Inc., 340 F.3d 1314, 1321 (Fed. Cir. 2003). That rule applies here, because the parties did not request a construction of the claim terms "removably attached" or "removably coupled," and they did not object to the district court's jury instructions. Applying the ordinary meaning, then, we conclude that substantial evidence supports the finding of infringement.

The jury was entitled to find that the "heat exchanging interfaces" in the accused products were "removably attached" or "removably coupled." Asetek's expert, Dr. Tilton, narrated videos about the Seidon 120M, Seidon 120V, Glacer 240L, and Nepton 140XL products and testified that the "heat exchanging interfaces" in those products could be removed by unscrewing the trianglehead safety screws that secured them. Dr. Tilton explained that he had removed the screws in each of the accused devices using commercially available screwdriv-CMI's expert, Dr. Carman, agreed that the "heat exchanging interfaces" could be removed, but testified that they were not "removably attached" or "removably coupled" because the screws were not intended to be removed. The jury could reasonably reject Dr. Carman's opinion about whether unscrewing was intended, or his opinion about whether unscrewing was needed to meet the "removably attached" or "removably coupled" requirements, or both.

Likewise, the jury could reasonably find the requirements met even though removing the "heat exchanging interfaces" from the accused products would cause coolant to leak. There is nothing unreasonable about finding a

component "removably attached" if it can be detached in such a way that the device would function again if the component were reattached. And contrary to appellants' contention, the patent specification here does not require functionality upon detachment with no further steps: the cited passage describes an embodiment in which, if the "heat exchanging interface" is "excluded" from the embodiment, "sealing" must be provided to prevent "cooling liquid" from "leaking" from the "reservoir." '362 patent, col. 8, lines 66–67, and col. 9, lines 13–19.

Dorel Juvenile Group, Inc. v. Graco Children's Products. Inc., 429 F.3d 1043 (Fed. Cir. 2005), which interpreted superficially similar claim terms, does not establish non-infringement here. In *Dorel*, which involved a patent on a child's car seat, the asserted claims recited a "base," which was "removably attached" and "removably secured" to a "seat." Id. at 1044-45. We upheld a claim construction, relying on the specification for context, that "removably attached" in that case implied that the "seat" and "base" were "affixed together in a manner that contemplates that the seat may be removed from the base such that the seat remains functional." *Id.* at 1045. present case involves no claim construction, but instead claim application, and the context is quite different, e.g., there is no requirement here that each component was meant to function separately (unlike the seat in *Dorel*).

В

Appellants argue that the subject matter of the asserted claims of the '764 patent would have been obvious over Koga and Ryu. Specifically, they argue that, as a matter of law, Koga's "sucking channel" is a "thermal exchange chamber" (a requirement of all asserted claims of the '764 patent) because the "sucking channel" "exchanges *some* heat." Appellants' Br. 45. The district court found that Koga did not teach this claim element, a factual component of the obviousness analysis. *Asetek*,

100 F. Supp. 3d at 886–88. That finding is not clear error. Specifically, the fact that Koga's "sucking channel" exchanges *some* heat, no matter how minimal and inevitable, does not entail that it is properly considered a "thermal exchange chamber."²

No ordinary meaning or claim construction requires appellants' conclusion that Koga's "sucking channel" is a "thermal exchange chamber" simply because it exchanges some heat. No meaning of the claim phrase precludes its limitation only to devices with certain device-defining characteristics such as purpose and principal use, excluding other structures that occasionally or in minor ways produce the same result—any more than a bedside plugin radio must be considered a room radiator because it unavoidably gives off some heat. As the district court noted, accepting appellants' conclusion courts draining any meaning from "thermal exchange" in the "thermal exchange chamber" phrase. Asetek, 2015 WL 5568360, at *10. Under appellants' theory, any chamber would seem to count as a "thermal exchange chamber" because, as Dr. Tilton testified, "[h]eat transfer will always happen between any two bodies that are at . . . different temperatures." Transcript of Proceedings at 1558, Asetek Danmark A/S v. CMI USA, Inc., No. 3:13-cv-00457-JST (N.D. Cal. Dec. 16, 2014) ("Dec. 16 Tr."), ECF No. 215. That would appear true even for an insulated chamber, because

² Asetek argues that a substantial-evidence standard applies, because the jury implicitly found that Koga's "sucking chamber" was not a "thermal exchange chamber" in rejecting anticipation. We need not scrutinize the jury verdict or otherwise address that contention. Any difference between "clear error" and "substantial evidence" makes no difference to our conclusion about Koga and the claim element at issue.

imperfections in the insulation would result in some heat transfer. It was proper to reject appellants' theory.

Moreover, sufficient evidence supports the district court's finding that a person of ordinary skill in the art would not consider Koga's "sucking channel" to be a "thermal exchange chamber." Dr. Tilton testified that the purpose of Koga's "sucking channel" was to deliver fluid to Koga's "pump room," not to transfer heat; that any heat transferred by the "sucking channel" would be inconsequential because of its small surface area and the high rate of flow through it; and that Koga positively teaches away from placing the "sucking channel" on top of, and in thermal contact with, Koga's "heat generating component," as the '764 patent requires. Transcript of Proceedings at 1417–18, Asetek, 3:13-cv-00457-JST (N.D. Cal. Dec. 15, 2014), ECF No. 213. Dr. Carman, CMI's expert, testified that heat exchange was not the purpose of Koga's "sucking channel." Dec. 16 Tr. at 1645. On the evidence, the district court could reasonably find that Koga's "sucking channel" was not a "thermal exchange chamber."

This is a claim-specific finding about what characterizes some devices as a "thermal exchange chamber" and Koga's "sucking channel" not having those characteristics. As a result, appellants are wrong in suggesting that the finding is contrary to various precedents. Those precedents all involve situations where a reference or device does come within a claim term. See Abbott Labs. v. Sandoz, Inc., 566 F.3d 1282, 1299 (Fed. Cir. 2009) (where a claim term covers an accused product or process, there is infringement even if de minimis); Embrex, Inc. v. Service Eng'g Corp., 216 F.3d 1343, 1349 (Fed. Cir. 2000) (same); Verdegaal Bros., Inc. v. Union Oil Co. of Cal., 814 F.2d 628, 630, 632 (Fed. Cir. 1987) (claim element of "making a concentrated liquid fertilizer by reacting sulfuric acid and urea" taught by reference requiring the sulfuric acid to be "added slowly"). That is enough to distinguish those precedents from this case.

C

We also reject CMI's challenge to the damages award. CMI argues that, in calculating the 14.5% royalty award, Asetek's damages expert, Dr. Mody, improperly relied on Asetek's per-unit profit margin under its licensing agreement with another company, Corsair. According to CMI, Dr. Mody's approach circumvented the requirement, applicable when lost-profits damages are sought, that a patent owner prove that it would have made the infringer's sales "but for" the infringement—a requirement not applicable to reasonable-royalty damages. See BIC Leisure Prods., Inc. v. Windsurfing Int'l, Inc., 1 F.3d 1214, 1218 (Fed. Cir. 1993); Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1156 (6th Cir. 1978). Additionally, CMI argues that the royalty award is not supported by substantial evidence because the Asetek-Corsair license included a maximum royalty rate of 7%. We reject both arguments.

35 U.S.C. § 284 guarantees to a patent holder damages "adequate to compensate for the infringement, but in no event less than a reasonable royalty." A patent owner, having prevailed on liability, may receive a reasonable royalty or lost profits, but not both for the same infringing units. See SmithKline Diagnostics, Inc. v. Helena Labs. Corp., 926 F.2d 1161, 1164 (Fed. Cir. 1991). There is no dispute here about the propriety of using the common hypothetical-negotiation approach to calculating a reasonable royalty, under which the finder of fact "attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began." Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1324 (Fed. Cir. 2009). The amount of damages presents a fact question, reviewed for substantial evidence in a jury-tried case, and the underlying methodology is reviewed for an abuse of discretion, including consistency with governing legal principles. See Aqua Shield v. Inter Pool Cover Team, 774 F.3d 766, 770 (Fed. Cir. 2014); *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1394 (Fed. Cir. 2003).

To the extent that Dr. Mody's analysis referred to Asetek's per-unit profit on its cooling units, CMI's legal objection lacks merit. As we have recognized, a patent owner participating in a hypothetical negotiation would consider the profits on sales it might lose as a result of granting a license. Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1554–55 (Fed. Cir. 1995) (en banc).³ The fact that a royalty calculation relies in part on the patent owner's per-unit profits does "not make it an unreasonable award." Id. at 1555. We have explained that a patent owner would be "unlikely" to be "interested in" accepting a royalty rate lower than its profit margin on the patented products. See Mitutoyo Corp. v. Cent. Purchasing, LLC, 499 F.3d 1284, 1292 (Fed. Cir. 2007) (stating that the patent owner would be "unlikely [to] have been interested in less than a 29.2% [reasonable-royalty] rate," equal to the patent owner's profit margin). Negotiating for a perunit payment equal to its per-unit profit can be a logical approach for a patent owner that is uncertain of how many sales might be lost by granting the license at issue or is just using its own experience to place a value on the right to use the technology at issue.

In its Reply Brief, CMI acknowledges "that profits may be considered as a factor in the reasonable royalty calculation," but it argues error in the damages verdict on the

³ We have also explained that a patent owner in a hypothetical negotiation would rationally consider not only its own potential losses from licensing but those of parent, sister, or similarly related companies. See Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co., 425 F.3d 1366, 1378 (Fed. Cir. 2005), overruled on another issue, Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 576 F.3d 1348 (Fed. Cir. 2009) (en banc in part).

ground that this factor "predominated and virtually subsumed Asetek's entire damages case." Reply Br. 24. But CMI identifies no legal principle about predominance that would somehow bar a damages analysis that takes reasonable account of all the evidence relevant to the hypothetical negotiation—as Dr. Mody's analysis did. As Dr. Mody testified, she adjusted her hypotheticalnegotiation model to account for numerous considerations other than Asetek's per-unit profits, including "the nature and the scope of the license" at issue, Transcript of Proceedings at 866. Asetek. No. 3:13-cv-00457-JST (N.D. Cal. Dec. 9, 2014) ("Dec. 9 Tr."), ECF No. 242; see id. at 855, Asetek's "established policy and marketing program," id. at 867, the "commercial relationship" between Asetek and CMI, id. at 855, and the extent to which CMI's profits under the license would "be attributable to the patented invention," id. CMI has not shown that the resulting damages verdict rests on a legally improper methodology.

Nor has CMI shown, as it suggests, that the use of Asetek's per-unit profit in the royalty analysis makes lostprofits damages no longer worth pursuing by patent owners. There are obvious reasons for some patent owners to pursue lost profits. In some circumstances, e.g., where the patent owner is a strong economic monopolist, proof of lost sales caused by the infringement and the profits on those lost sales (as well as loss of profits from sales made at prices lowered by the infringement) may be less uncertain than proof of a reasonable royalty under the standards applicable to the latter. And a lost-profit award can be higher. A hypothetical-negotiation analysis for a royalty considers not only the patent owner's interests, but also the other side of the negotiation table under the particular conditions of the hypothetical negotiation. See Agua Shield, 774 F.3d at 770–72 & n.1. A lost-profits analysis is different, because as a general matter, the patent owner is entitled to be made whole, upon proper proof, for its loss of profits caused by the infringement,

without discounting for the rational interests limiting willingness to pay on the infringer's side. Not surprisingly, a leading commentary observes that "[l]ost profits damages frequently bring the patent owner much more than royalty awards" and are sought "in nearly every case in which the patent owner manufactures or sells *something* that could reasonably be interpreted as competing with an infringer's product." John Skenyon, Christopher Marchese & John Land, Patent Damages Law and Practice § 2:1, at 64 (2015 ed.) (footnote omitted).

Finally, substantial evidence supports the jury's finding that a hypothetical negotiation between Asetek and CMI would have resulted in a 14.5% reasonable royalty rate, even though one portion of the Corsair license included a maximum royalty rate of 7%. First, as Dr. Mody testified, the Corsair license included an effective royalty rate of between 10% and 19% based on two components: (1) the actual royalty rate of between 2% and 7% and (2) the minimum-purchase requirement. Using that range, Dr. Mody concluded that Asetek and CMI would have agreed to a royalty rate of about 16%. Second, Dr. Mody testified that Asetek would have sought a higher royalty rate from CMI than from Corsair because Asetek would have treated CMI as a "competitor," rather than a valued "customer" (like Corsair). See Dec. 9 Tr. at 855, 858, 868– 71. Although CMI's general manager, Mr. Chen, testified that Asetek was willing to license its products to CMI and Cooler Master, that assumption, even if credited, hardly means that Asetek would have treated them the same as Corsair. We conclude that the jury's adoption of a 14.5% royalty rate must be affirmed.

D

Cooler Master and CMI together challenge the injunction on two grounds. *See* Appellants' Br. 6 (injunction challenge presented for both appellants). First, they argue that Cooler Master's September 2014 dismissal

from the case with prejudice precluded the district court from subjecting Cooler Master to the injunction's obligations. Second, they argue that the injunction is too broad in scope insofar as the injunction reaches Cooler Master's conduct (sale, importation, etc., involving the identified "Cooler Master"-branded products) other than conduct that abets a new violation by CMI, the only party adjudicated liable for infringement.

The latter argument invokes the standards that define the limited circumstances in which injunctive obligations may be imposed on persons who have not been adjudicated liable for the wrong for which the injunction is a remedy. It is worth noting the limited scope of the argument appellants have made on appeal in this regard—which does not include arguments that, in certain circumstances in other cases, persons not held liable have made and may make against being subjected to injunctive obligations. Thus, appellants do not argue that the district court lacked personal jurisdiction over Cooler Master. They do not argue that Cooler Master lacked notice or an opportunity to be heard on the issues related to the injunction. Nor do they argue that the injunction is improper under eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006), or because Cooler Master does not sufficiently threaten to engage in the covered conduct. addition, appellants do not argue that naming Cooler Master in the injunction is independently improper, but only that the challenged obligations imposed on Cooler Master here are improper for reasons it could invoke if they were imposed through contempt. See Aevoe Corp. v. AE Tech Co., Ltd., 727 F.3d 1375, 1383-84 (Fed. Cir. 2013) (because S&F Defendants were privies of the originally enjoined party AE Tech, and not acting independently, naming them in modification of injunction merely made explicit what was already implicit). Moreover, in challenging certain injunctive coverage of Cooler Master, appellants do not separately challenge the language reaching the "successors, assigns," etc. of Cooler Master if Cooler Master itself is properly covered. And appellants do not dispute that Cooler Master is properly subject to injunctive obligations to avoid actions that would abet a new violation by CMI. See Reply Br. 26.

We address appellants' two appellate arguments in turn. The first argument, based on the agreed-to dismissal of Cooler Master shortly before trial, we reject. The second, narrower argument we think warrants a remand for further proceedings, given the fact-specificity of the relevant standards in this delicate area.

1

Appellants contend that, even if an injunction against Cooler Master would be proper had no claim ever been filed against it in this case, it cannot be enjoined because it was initially a defendant and the claims against it were dismissed with prejudice. Appellants rest that contention on the premise that dismissal is an adjudication that has claim-preclusive effect. But, while the premise is correct, the inference appellants urge—that claim preclusion bars relief as to future conduct—is not.

Appellants' argument assumes that the "claim" covered by the dismissal, which concerned Cooler Master's pre-dismissal conduct, is the same as a "claim" covering conduct subject to the injunction, which is Cooler Master's future conduct—not just post-dismissal, but post-trial and post-injunction-issuance. It is well established, however, that the difference in timing means that the two situations do not involve the same "claim" for claim-preclusion purposes, even if all the conduct is alleged to be unlawful for the same reason. See Dow Chems. Corp. v. NOVA Chems. Corp. (Can.), 803 F.3d 620, 626–27 (Fed. Cir. 2015); Aspex Eyewear, Inc. v. Marchon Eyewear, Inc., 672 F.3d 1335, 1343 (Fed. Cir. 2012); 18 Charles Alan Wright, Arthur R. Miller & Edward H. Cooper, Federal Practice and Procedure § 4409 (2d ed. 2002). As we have explained, "a party who sues a tortfeasor is ordinarily not barred by a prior judgment from seeking relief for discrete tortious action by the same tortfeasor that occurs subsequent to the original action." *Aspex Eyewear*, 672 F.3d at 1342. The rationale is simple: claim preclusion "requires a party to assert all claims that the party could have asserted in the earlier lawsuit"; and a party cannot assert claims based on "tortious conduct" that "had not occurred at that time—those claims could not have been asserted and therefore are not barred." *Id*.

Appellants cite nothing to the contrary. The cited decisions establish only that a stipulated dismissal "generally constitutes a final judgment on the merits" that "precludes a party from reasserting the same claims" or "same cause," *Headwaters Inc. v. U.S. Forest Service*, 399 F.3d 1047, 1051–52 (9th Cir. 2005); *In re Marino*, 181 F.3d 1142, 1144 (9th Cir. 1999), or from challenging "acts [that] fell within the scope of the pleadings" of the dismissed action, *Esquire*, *Inc. v. Varga Enters.*, *Inc.*, 185 F.2d 14, 17 (7th Cir. 1950). They do not address future conduct like that covered by the injunction at issue here.

2

The fundamental principle relevant to appellants' narrower, scope objection to the injunction here is that an injunction may not "make punishable the conduct of persons who act independently and whose rights have not been adjudged according to law." Regal Knitwear Co. v. NLRB, 324 U.S. 9, 13 (1945) (citing Chase Nat'l Bank v. City of Norwalk, 291 U.S. 431, 436–37 (1934), and other decisions). But as that formulation suggests, an injunction may reach certain conduct by persons not held liable for the underlying wrong where the conduct is not undertaken "independently" of the persons who have been held liable. Federal Rule of Civil Procedure 65(d) reflects the standards when it declares that an injunction "binds only" "the parties," "the parties' officers, agents, servants,

employees, and attorneys," and "other persons who are in active concert or participation" with them "who receive actual notice of [the injunction] by personal service or otherwise."

In this case, the injunction imposes two sorts of obligations on Cooler Master—it restricts conduct by Cooler Master that abets a new violation by CMI; and it also restricts conduct by Cooler Master that does not abet a new violation by CMI. Putting aside the dismissal-based contention, which we have rejected, appellants object here only to the latter obligations. Those are found explicitly in paragraphs 3, 4, and 5 of the injunction. And they are found implicitly in paragraph 2, because, under wellestablished law, that paragraph's "active concert or participation" coverage includes some conduct not abetting a new violation by the liable person—such as might occur, under certain circumstances, if a liable person (like CMI here) turned over the wrongful operations to another person or even simply ceased operating or existing altogether, to be succeeded by another. As the parties made clear at oral argument, there is a current live dispute about the permissibility of barring Cooler Master from engaging in U.S.-focused activities involving the infringing products other than through CMI, and that substantive dispute arises under paragraph 2 as well as paragraphs 3, 4, and 5.

Different terminology has been used for the two categories of enjoinable conduct by persons not held liable. Judge Learned Hand wrote, for the Second Circuit, that the non-liable party "must either abet the [liable party], or must be legally identified with him." Alemite Mfg. Corp. v. Staff, 42 F.2d 832, 833 (2d Cir. 1930), quoted in Additive Controls & Measurement Sys., Inc. v. Flowdata, Inc., 96 F.3d 1390, 1395 (Fed. Cir. 1996) (Additive Controls I). Sometimes "privity" is used for the "legally identified" category, which covers a number of bases for binding a non-liable person to obligations imposed on a

liable person; but whatever the labels, both categories are well established in the law and recognized as within the "active concert or participation" standard of Rule 65(d). See Golden State Bottling Co. v. NLRB, 414 U.S. 168, 179–80 (1973); Regal Knitwear, 324 U.S. at 13–14; Merial Ltd. v. Cipla Ltd., 681 F.3d 1283, 1304–05 (Fed. Cir. 2012); Aevoe, 727 F.3d at 1384 ("Active concert or participation' has been interpreted to include both aiders and abettors of, and privies of, an enjoined party."); Additive Controls I, 96 F.3d at 1394–95, 1397; Rockwell Graphic Sys., Inc. v. DEV Indus., Inc., 91 F.3d 914, 919–20 (7th Cir. 1996); G. & C. Merriam Co. v. Webster Dictionary Co., 639 F.2d 29, 35 (1st Cir. 1980).

The second category, which is the only one at issue in this appeal, is less well defined than the first. And its implementation by the courts has reflected a fact-specific approach and particular caution so as to protect the strong, underlying background principle shared with the related area of preclusion law: "everyone should have his own day in court." *Taylor v. Sturgell*, 553 U.S. 880, 893 (2008) (quoting *Richards v. Jefferson County*, 517 U.S. 793, 798 (1996)).⁴ But this category, included within the

The Court in *Taylor* described recognized exceptions to that principle in the preclusion context, such as where a person in the later suit sufficiently controlled the litigant in the earlier suit, 553 U.S. at 893–95, and rejected a broad "virtual representation" exception, *id.* at 895–904. We do not suggest that the analysis in the preclusion context is on all fours with the injunction-scope analysis, but the two areas share some underlying principles. *See Nat'l Spiritual Assembly of the Baha'is of the U.S. Under the Hereditary Guardianship, Inc. v. Nat'l Spiritual Assembly of the Baha'is of the U.S., Inc.*, 628 F.3d 837, 847–54 (7th Cir. 2010) (borrowing from *Taylor* and preclusion law to resolve Rule 65(d) issue).

"active concert or participation" standard, embraces at least two types of situations of potential relevance here.

Thus, the "legally identified" category has long covered at least some situations in which the non-liable person is a successor of the liable person in a relevant respect. See Golden State, 414 U.S. at 180 (explaining in the employer context that Rule 65(d)'s policy is consistent with imposing a predecessor's obligation on a successor "[A] bona fide purchaser, acquiring, with enterprise: knowledge that the wrong remains unremedied, the employing enterprise which was the locus of the unfair labor practice, may be considered in privity with its predecessor for purposes of Rule 65(d). ... The tie between the offending employer and the bona fide purchaser of the business, supplied by a [National Labor Relations] Board finding of a continuing business enterprise, establishes the requisite relationship of dependence" of the successor's conduct on the liable person.); Regal Knitwear, 324 U.S. at 14 (discussing successors and assigns and recognizing enjoinability "in appropriate circumstances" of "those to whom the business may have been transferred, whether as a means of evading the judgment or for other reasons" (quoting Walling v. James V. Reuter, Inc., 321 U.S. 671, 674 (1944)).⁵ This court so recognized in Additive Controls I, explaining that certain "successor" situations, involving evasive intent, are covered by the "active concert or participation" standard of Rule 65(d). 96 F.3d at 1397; see Merial, 681 F.3d at 1304, 1305 (similar); Additive Controls & Measurement Sys., Inc. v. Flowdata, Inc., 154 F.3d 1345, 1355 (Fed. Cir. 1998) (Additive Controls II) (test of "substantial continuity of identity,"

⁵ As *Golden State*'s "dependence" language confirms, where that standard is met, the non-liable person's conduct is not "wholly independent" of the liable person. *Golden State*, 414 U.S. at 180.

originating in "labor relations context," "has been adopted as a general expression of the degree of closeness that Rule 65(d) requires for a non-party successor to be subject to the injunction").6

Another subcategory recognized in various cases involves situations in which a party's litigation of a case is sufficiently controlled by another person that the latter may be said to have had its day in court and on that ground be subject to the injunctive obligations. The First Circuit in G. & C. Merriam recognized that a nonparty is "legally identified" with a liable party, and may therefore itself be enjoined, if the nonparty "had such a key role in the [party's] participation in the injunction proceedings that it can be fairly said that he has had his day in court in relation to the validity of the injunction." 639 F.2d at We recognized the point in Additive Controls II, 37. quoting G. & C. Merriam in explaining that the officer of a corporation is legally identified with a corporation if the officer had just such control over the corporation's litigation. 154 F.3d at 1352. The Seventh Circuit made the same point in National Spiritual Assembly, relating G. &

⁶ Additive Controls I cites Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 1582–83 (Fed. Cir. 1986) (acquirer of assets of liable person), overruled in unrelated respect, Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337 (Fed. Cir. 2009), and New York v. Operation Rescue National, 80 F.3d 64, 70–71 (2d Cir. 1996) ("successors" may include organizations through which "similarly constituted groups of individuals move fluidly between multiple unincorporated associations that share the same basic leadership and goals"). We note that, in Travelhost, Inc. v. Blandford, 68 F.3d 958, 961–65 (5th Cir. 1995), the Fifth Circuit rejected a particular injunction's coverage of an arms-length purchaser of a liable person's assets.

C. Merriam's holding to the established principle that a nonparty may be "bound by a judgment if she assumed control over the litigation in which that judgment was rendered." 628 F.3d at 852 n.4 (quoting Taylor, 553 U.S. at 895; citing Montana v. United States, 440 U.S. 147, 153–54 (1979)).

In the present case the district court specifically invoked the "successor" standards when it cited the abovequoted pages of Golden State and Regal Knitwear. Asetek, 2015 WL 5568360, at *17. And in entering the injunction, the district court relied on certain facts: "CMI is authorized by . . . Cooler Master to sell Cooler Master-branded liquid-cooling devices in the United States"; "CMI and Cooler Master have an exclusivity agreement where CMI is Cooler Master's exclusive U.S. distributor"; and "CMI and Cooler Master jointly developed the infringing products." "Because of Cooler Master's past history in Id.developing the infringing products and its contractual relationship with CMI," the court then concluded, "Cooler Master is an appropriate subject of the injunction under Rule 65(d)(2)." *Id.* at *18.

In drawing that conclusion, the district court relied on this court's decision in *Aevoe*. While that decision is instructive in various ways, it involves different facts from the present case in at least one respect. In *Aevoe*, the non-liable persons (the S&F Defendants) were barred from selling the "infringing products obtained from" the liable person (AE Tech). 727 F.3d at 1379–80. Here, Cooler Master is the supplier; it does not acquire the products at issue from CMI.

We do not decide what ultimate legal significance that distinction may have here. A chain of title to particular units is just one of a number of facts of potential relevance to the inquiry into the proper scope of the injunction here. For example, in *Merial*, we upheld an injunction barring non-party Velcera from making, using, selling, or import-

ing certain products developed, manufactured, or packaged with the assistance or participation of the liable party, Cipla, even if Cipla acted only abroad. 681 F.3d at 1289–92, 1304–05. We relied on the district court's findings that the "multilayered relationships that linked Velcera and Cipla" were structured "to obfuscate illicit and intentional concerted action" by those parties. *Id.* at 1305. Here, besides other facts, Asetek has alleged that, while Cooler Master may not acquire its products from CMI, CMI's cooperation in modifying its exclusivity deal was obtained or needed in order for Cooler Master to engage, other than through CMI, in the U.S.-focused sales and related activities involving the products at issue.

We do not think it advisable to resolve the issue of the proper scope of the injunction here without a fuller picture of the facts described by the district court. Rather, we think, further proceedings are warranted before a final conclusion is drawn about the injunction in this case. Both the delicacy of the injunctive authority at issue and the tradition of narrow fact-dependent determinations whether to invoke it argue for deferring conclusions until the facts about the relationship of Cooler Master and CMI, both in their businesses and in this litigation, are more fully developed and their legal significance more fully explored. See Parker v. Ryan, 960 F.2d 543, 546 (5th Cir. 1992) (identifying need for further inquiry and remanding); cf. United States v. Int'l Bhd. of Teamsters, Chauffeurs, Warehousemen & Helpers, 964 F.2d 180, 184 (2d Cir. 1992) ("Whether any person is bound by a judgment always depends on the precise relationship of that person to the underlying litigation ").

Without prejudging ultimate materiality, and without intending to be complete, we note some facts that either side or both sides of this case may find worthy of further development to form a full picture of whether Cooler Master may be "legally identified" with CMI for present purposes: the nature of the exclusivity relationship

between the firms (e.g., its scope, its terminability); trademarks and other aspects of the two companies' relations at relevant times; the origins of CMI and its relationship to Cooler Master; the details of and intent behind changes in the companies' relations, particularly since liability was found in this case; and the companies' relationship in the conduct of this litigation, in which products made by Cooler Master and carrying its brand name are at stake, both before and after Cooler Master was dismissed. We do not decide the relevance or implications of such facts. Nor do we answer several related. potentially relevant questions: If Cooler Master needs CMI's permission to itself engage in the U.S.-focused acts at issue, would such acts be properly viewed as taken in active concert or participation with CMI? Is CMI's interest in such Cooler Master acts suggested by the fact that CMI itself has joined in Cooler Master's challenges to the injunction's scope on appeal, challenges whose success would free Cooler Master to transfer business away from CMI? Whether or not Cooler Master has plenary freedom to transfer its business away from CMI, was Cooler Master, after leaving this case, still exercising control over CMI's conduct of this litigation, which concerned the future of Cooler Master's products, or did Cooler Master simply leave its products' fate in this litigation in CMI's hands?

Two final, related points. First, the need for further proceedings to determine the proper reach of the injunction in this case leads us to vacate the injunction, effective upon issuance of our mandate, insofar as the injunction reaches conduct by Cooler Master that does not abet new violations by CMI. The district court is to conduct those proceedings in as reasonably prompt a fashion as possible. Our partial vacatur of the injunction does not foreclose Asetek from pursuing reinstatement of the vacated portion of the injunction should there be unjustifiable delay by Cooler Master in completing the proceedings, or from

pursuing any other remedies against Cooler Master, if otherwise authorized by law.

Second, such proceedings might be unnecessary, at all or for a time, if Asetek chooses, in the meantime, to file a new injunctive infringement action against Cooler Master. In such an action, Asetek might seek a preliminary injunction, relying on the judgment reached after full litigation in the present case. We do not prejudge the merits of any such request, or the merits of any such separate suit, including any invocation by Asetek of privity-based issue preclusion against Cooler Master (which is not foreclosed simply by the absence of claim preclusion, *New Hampshire v. Maine*, 532 U.S. 742, 748 (2001)). We note only that such a proceeding might produce rulings that postpone the need to decide, or even moot, the delicate remedial issue that we here remand to the district court.

CONCLUSION

For the foregoing reasons, we affirm the district court's denial of CMI's motions for judgment as a matter of law and for new trial. We affirm the injunction except insofar as it reaches Cooler Master's conduct that does not abet new violations by CMI. Insofar as the injunction reaches such conduct, we vacate the injunction and remand for further consideration in accordance with this opinion.

Costs awarded to Asetek.

AFFIRMED IN PART, VACATED IN PART, REMANDED IN PART