

United States Court of Appeals for the Federal Circuit

**JIAXING SUPER LIGHTING ELECTRIC
APPLIANCE, CO., LTD., OBERT, INC.,**
Plaintiffs-Appellees

v.

**CH LIGHTING TECHNOLOGY CO., LTD., ELLIOTT
ELECTRIC SUPPLY, INC., SHAOXING RUISING
LIGHTING CO., LTD.,**
Defendants-Appellants

2023-1715

Appeal from the United States District Court for the
Western District of Texas in No. 6:20-cv-00018-ADA, Judge
Alan D. Albright.

Decided: July 28, 2025

MATTHEW COOK BERNSTEIN, Perkins Coie LLP, San Diego, CA, argued for plaintiffs-appellees. Also represented by EVAN SKINNER DAY, ABIGAIL A. GARDNER, JOSEPH P. REID; DAN L. BAGATELL, Hanover, NH.

JEFFREY A. LAMKEN, MoloLamken LLP, Washington, DC, argued for defendants-appellants. Also represented by CALEB HAYES-DEATS, LUCAS M. WALKER; ALEXANDRA C. EYNON, SWARA SARAIYA, New York, NY.

Before DYK, CHEN, and HUGHES, *Circuit Judges*.

DYK, *Circuit Judge*.

Jiaxing Super Lighting Electric Appliance Co., Ltd. and its North American affiliate Obert, Inc. (collectively, “Super Lighting”) brought suit against CH Lighting Technology Co., Ltd., Elliott Electric Supply, Inc., and Shaoxing Ruising Lighting Co., Ltd. (collectively, “CH Lighting”) for infringement of U.S. Patent Nos. 10,295,125 (the “’125 patent”), 10,352,540 (the “’540 patent”), and 9,939,140 (the “’140 patent”). Before trial, CH Lighting conceded infringement of the ’125 and ’540 patents. At trial, the district court granted Super Lighting’s motions to exclude evidence relating to the validity of the asserted claims of the ’125 and ’540 patents and subsequently granted Super Lighting’s motion for judgment as a matter of law (“JMOL”) that the ’125 and ’540 patents were not invalid on the ground of an on-sale bar. A jury found the ’140 patent infringed and not invalid and awarded damages for infringement of claims of the three patents. CH Lighting appeals.

We conclude as follows. First, the district court erred in granting JMOL that the ’125 and ’540 patents were not invalid because it erroneously prevented CH Lighting from presenting evidence of their invalidity; the district court was required to hold a new trial as to the invalidity of the ’125 and ’540 patents. Second, with respect to the ’140 patent, substantial evidence supports the jury’s verdicts of infringement and no invalidity. Third, the district court should assess the reliability of Ms. Kindler’s testimony consistent with this court’s recent en banc decision in *EcoFactor* and under Rule 702 of the Federal Rules of Evidence. Accordingly, a new trial is required as to the validity of the ’125 and ’540 patents and as to damages for infringement of all three patents. We accordingly affirm-in-part,

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

3

reverse-in-part, vacate-in-part, and remand for further proceedings consistent with this opinion.

BACKGROUND

I

Super Lighting owns the three asserted patents, which relate generally to light-emitting diode (“LED”) tube lamps. LED tube lamps resemble traditional incandescent and fluorescent tube lamps and can operate in fluorescent light fixtures. LED tube lamps typically comprise a lamp tube, an LED light strip, two end caps, and a power source that supplies external electricity to one or both of the end caps. LED tube lamps are more energy efficient and last longer than their incandescent and fluorescent counterparts.

The ’125 and ’540 patents (together, the “tube patents”) both relate to purported structural improvements in LED tube lamps. The ’125 patent discloses an LED tube lamp in which a flexible printed circuit board is mounted directly onto the tube’s inner surface.¹ Claim 1 is the only claim of the ’125 patent that is the subject of this appeal and recites:

1. An LED tube lamp, comprising:
a lamp tube;

¹ This is in contrast to LED tube lamps’ usual structural configuration, in which the lamp’s circuit board is supported on aluminum rails encased in plastic insulating sleeves. This configuration apparently has several drawbacks, since the plastic sleeves may change color as they age—thereby affecting lighting quality—and the rails can block transmission of light in certain directions. According to the ’125 patent’s specification, relocating the circuit board to the tube’s inner circumference improves brightness and light quality.

two end caps, each of the two end caps coupled to a respective end of the lamp tube;

a power supply disposed in one or two end caps;

an LED light strip disposed on an inner circumferential surface of the lamp tube, the LED light strip comprising a mounting region and a connecting region, the mounting region for mounting a plurality of LED light sources, the connecting region having at least two soldering pads, and the mounting region and the connecting region being electrically connected to the plurality of LED light sources and the power supply; and

a protective layer disposed on a surface of the LED light strip, the protective layer having a plurality of first openings to accommodate the plurality of LED light sources and at least two second openings to accommodate the at least two soldering pads.

'125 patent, col. 99 ll. 7–24.

The '540 patent builds on the '125 patent by including a diffusion film that can be placed on the tube lamp to provide a uniform glow.² Claims 13 and 14 are the only claims

² Since LEDs are spot light sources, the light emitted by them does not necessarily contribute to uniform illuminance of the entire tube lamp without optical manipulation. The '540 patent's specification states that using a diffusion film is a useful measure "to avoid grainy visual effects." '540 patent col. 2 l. 15.

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

5

of the '540 patent that are the subject of this appeal and recite:

13. An LED tube lamp, comprising:

a tube, comprising:

a main body; and

two rear end regions respectively at
two ends of the main body;

two end caps respectively sleeving the two
rear end regions, each of the end caps comprising:

a lateral wall substantially coaxial
with the tube, the lateral wall
sleeving the respective rear end region;

an end wall substantially perpendicular to the axial direction of the tube; and

two pins on the end wall for receiving an external driving signal;

an LED light strip disposed on an inner circumferential surface of the main body with a plurality of LED light sources mounted thereon;

a power supply comprising a circuit board and configured to drive the plurality of LED light sources, the circuit board disposed inside one of the rear end regions and one of the end caps;

an adhesive disposed between each of the lateral wall and each of the rear end regions; and

a diffusion film disposed on the glass lamp tube so that light emitted from the LED light sources passing through the inner surface of the glass lamp tube and then passing through the diffusion film on the glass lamp tube.

14. The LED tube lamp of claim 13, wherein a portion of the circuit board, one of the rear end regions, the adhesive and one of the lateral wall are stacked sequentially in a radial direction of the LED tube lamp.

'540 patent, col. 18 ll. 19–49.

The '140 patent relates to a shock-prevention system for use while installing LED tube lamps. Because many LED tube lamps have metallic pins at both ends, a person installing an LED lamp could receive a potentially lethal electric shock by touching the pins on the opposite end of the lamp when one end of the tube is inserted into a live outlet. The '140 patent discloses a system that controls the flow of current in the lamp using a pulse generating circuit and detection determining circuit. The pulse generating circuit produces a pulse signal, and the detection determining circuit determines that a person is touching the lamp if it senses high impedance. Both the detection determining circuit and the pulse signals can control the switch circuit to turn off or on. Claim 1 of the '140 patent is exemplary³ and recites:

1. An installation detection circuit configured in a light-emitting diode (LED) tube lamp configured to receive an external driving signal, the installation detection circuit comprising:

³ CH Lighting was found to infringe claims 1, 4, 5, 24, 28, and 31 of the '140 patent.

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

7

a pulse generating circuit configured to output one or more pulse signals; wherein the installation detection circuit is configured to detect during at least one of the one or more pulse signals whether the LED tube lamp is properly installed on a lamp socket, based on detecting a signal generated from the external driving signal; and

a switch circuit coupled to the pulse generating circuit, wherein the one or more pulse signals control turning on and off of the switch circuit;

wherein the installation detection circuit is further configured to:

when it is detected during one of the one or more pulse signals that the LED tube lamp is not properly installed on the lamp socket, control the switch circuit to remain in an off state to cause a power loop of the LED tube lamp to be open; and

when it is detected during one of the one or more pulse signals that the LED tube lamp is properly installed on the lamp socket, control the switch circuit to remain in a conducting state to cause the power loop of the LED tube lamp to maintain a conducting state,

wherein the signal generated from the external driving signal is a sampling signal on the power loop, the installation detection circuit further comprises a detection determining circuit configured to detect the sampling signal for determining whether the LED tube lamp is properly installed on the lamp socket, and the power loop

includes the switch circuit and the detection determining circuit, and

wherein the pulse generating circuit is configured to output one or more pulse signals independent of whether the detection determining circuit detects the sampling signal.

'140 patent, col. 58 l. 61–col. 59 l. 32.

II

On January 10, 2020, Super Lighting brought suit against CH Lighting for infringement of the three asserted patents in the U.S. District Court for the Western District of Texas. Before trial, CH Lighting stipulated to infringement for all accused products except the “LT2600 chips,” which it contended did not infringe the '140 patent's claims. At trial, the parties disputed the validity of the tube patents (the '125 and '540 patents); CH Lighting argued that the America Invents Act's (“AIA”) on-sale bar provision rendered the tube patents invalid. The district court excluded evidence offered by CH Lighting to show that three LED tube lamp products (the “prior art tubes”) were on sale before the effective filing dates of the tube patents. Nonetheless, CH Lighting's invalidity expert Dr. Lebby testified that the prior art tubes embodied the tube patents' claims and were on sale before the tube patents' effective filing dates.

After the presentation of CH Lighting's invalidity defense, the district court granted Super Lighting's Rule 50(a) motion for JMOL that the tube patents were not invalid on the ground of an on-sale bar, holding that Dr. Lebby's testimony alone did not constitute sufficient evidence upon which a reasonable jury could find that the prior art tubes embodying the claimed inventions were on sale prior to the tube patents' 2015 effective filing dates. The district court also denied CH Lighting's Rule 50(a)

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

9

motion for JMOL that the claims of the asserted patents were invalid. On November 4, 2021, the jury returned a verdict finding that the '140 patent was infringed and not shown to be invalid, ultimately awarding \$13,872,872 to Super Lighting for infringement of the three asserted patents.

After trial, CH Lighting filed a renewed Rule 50(b) motion for JMOL that the three patents were invalid and that the LT2600 chips did not infringe the '140 patent. CH Lighting also filed a Rule 59(a) motion for a new trial, arguing that a new trial was warranted as to the validity of the tube patents because the district court erred in excluding evidence showing that the prior art tubes were on sale before the tube patents' effective filing dates. CH Lighting additionally argued in its Rule 59(a) motion that a new trial was warranted for damages because the district court improperly admitted the testimony of Super Lighting's damages expert Ms. Kindler over CH Lighting's *Daubert* objection and because her testimony was legally insufficient to prove damages. The district court denied both of CH Lighting's motions and also granted Super Lighting's motion for enhanced damages, doubling the jury's damages verdict. CH Lighting now appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review the grant of JMOL de novo. *ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1311 (Fed. Cir. 2007). We review the denial of a motion for a new trial for abuse of discretion. *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1406 (Fed. Cir. 2004). Evidentiary rulings are reviewed for abuse of discretion. *Seigler v. Wal-Mart Stores Texas, L.L.C.*, 30 F.4th 472, 476 (5th Cir. 2022). We review a district court's decision on the admission of expert testimony for abuse of discretion. *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1225 (Fed. Cir.

2014). A district court necessarily abuses its discretion if its decision rests on an erroneous view of the law. *Gensetix, Inc. v. Bd. of Regents of Univ. of Tex. Sys.*, 966 F.3d 1316, 1324 (Fed. Cir. 2020).

I. The On-Sale Bar as to the '125 and '540 Patents

We first address the invalidity issue with respect to the tube patents. Under the AIA's on-sale bar provision, which governs here, "[a] person shall be entitled to a patent unless[] . . . the claimed invention was . . . on sale[] . . . before the effective filing date of the claimed invention." 35 U.S.C. § 102(a). The effective filing date for the '125 patent is September 25, 2015, and the effective filing date for the '540 patent is December 5, 2015. To trigger the on-sale bar provision, the offer for sale must embody the claims of the asserted patent. *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 855 F.3d 1356, 1370 (Fed. Cir. 2017), *aff'd*, 586 U.S. 123 (2019). The invention must be the subject of a commercial offer for sale and be ready for patenting. *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998). Whether an invention was on sale is a question of law that we review de novo based on underlying facts. *Crown Packaging Tech., Inc. v. Belvac Prod. Mach., Inc.*, 122 F.4th 919, 924 (Fed. Cir. 2024).

A

CH Lighting argues that the district court erred in granting JMOL that the tube patents were not invalid under the on-sale bar. Based on photographs of teardowns of the tubes, the tubes' specification sheets, and related documentation, Dr. Lebby testified as to the prior art tubes: (1) Cree LED T8-48-21L-40K ("Cree tube"), (2) MaxLite G Series L18T8DF440-G ("MaxLite tube"), and (3) Philips InstantFit LED T816.5W/48-3500 ("Philips tube"). For each relevant prior art tube, Dr. Lebby testified that the

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

11

tube satisfied the tube patents' claim limitations,⁴ that the tube patents' effective filing dates were in 2015, and that "from the evidence [he had] seen so far in this case" the prior art tubes were "on sale in 2014." J.A. 10178 (282:19–23) (Cree tube); *accord* J.A. 10179 (285:20–24) (MaxLite tube), J.A. 10180 (289:18–23) (Philips tube).

Super Lighting did not dispute that Dr. Lebby's testimony was sufficient to establish that the prior art tubes embodied the claimed inventions, and there is also no contention that the prior art tubes were not ready for patenting.⁵ But Super Lighting contended before the district court that Dr. Lebby did not have personal knowledge that the prior art tubes were on sale before the tube patents' effective filing dates and that his conclusory testimony was thus not supported by record evidence. The district court agreed, as do we, that CH Lighting was required to present competent evidence that the tubes were on sale, and the district court did not err in concluding that Dr. Lebby's testimony alone did not suffice to establish that the prior art tubes were on sale before the tube patents' effective filing

⁴ The Cree and Philips tubes were asserted only against the '125 patent, while the MaxLite tube was asserted against both tube patents.

⁵ The district court appears to have taken issue with CH Lighting's failure to properly authenticate the prior art tubes' photographs, but even a lay witness authenticating a photograph need not "see the picture taken" so long as the witness "recognizes and identifies the object depicted." *United States v. Okulaja*, 21 F.4th 338, 345 (5th Cir. 2021). While the district court also appears to have faulted CH Lighting for failing to secure admission of the prior art tubes' photographs into evidence, this, too, would fail to support JMOL because Dr. Lebby testified without objection that he relied on these photographs and what they depicted.

dates. *See Wi-LAN Inc. v. Sharp Elecs. Corp.*, 992 F.3d 1366, 1376 (Fed. Cir. 2021) (affirming a district court’s exclusion of expert testimony that was not based on evidence in the record upon which experts would reasonably rely).

B

CH Lighting alternatively argues that the district court’s JMOL decision as to the tube patents’ validity should be vacated and that a new trial on this issue is required because the district court abused its discretion in excluding relevant evidence that was sufficient to establish that the prior art tubes were on sale before the tube patents’ effective filing dates. CH Lighting’s argument is two-fold.

First, CH Lighting argues that the district court abused its discretion in granting Super Lighting’s motion to exclude MaxLite representative Mr. Marsh, who would have authenticated the “MaxLite documents.” The MaxLite documents purportedly showed that the MaxLite tube was on sale prior to the tube patents’ 2015 effective filing dates. On their face, the MaxLite documents appear to be offers for sale, disclosing the MaxLite tube’s specifications and providing ordering codes. *See* J.A. 1189–90. Dr. Lebby relied on the MaxLite documents in his expert report in support of his finding that the MaxLite tube was on sale prior to the tube patents’ effective filing dates.

Because Dr. Lebby himself could not authenticate the MaxLite documents, CH Lighting originally listed Mr. Baheti and an unnamed “MaxLite Representative” as witnesses, but Mr. Baheti was later unable to attend trial due to a conflict. CH Lighting then identified Mr. Marsh as the MaxLite representative who would authenticate the MaxLite documents. Despite the district court’s initial statement that it “[did] not have an issue with the introduction of [Mr. Marsh] for the sole purpose of authenticating a pre-identified set of documents . . . [absent] real and

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

13

substantial prejudice . . . by the substitution of this witness,” J.A. 1200, the court later changed course and, at Super Lighting’s urging, refused to allow Mr. Marsh to authenticate the documents because CH Lighting “did not give sufficient notice to [Super Lighting] that [Mr. Baheti] would be performing this task,” J.A. 1212 (27:25–28:1), of authenticating the MaxLite documents. Because Mr. Marsh was the substitute witness for Mr. Baheti, the district court excluded him from testifying as to the MaxLite documents.

In excluding Mr. Marsh from authenticating the MaxLite documents, the district court did not identify any rule or order requiring parties to identify in advance which witnesses would authenticate documents. This is unsurprising, as no Federal Rule or local rule requires such identification. Because there is no such requirement, we conclude that the exclusion of Mr. Marsh’s testimony was an abuse of discretion. Although we recognize that district courts have wide latitude to make determinations about the admissibility of evidence at trial, we perceive no reasonable basis for the district court’s decision here to exclude a competent witness from authenticating documents previously identified as trial exhibits. The district court’s exclusion of Mr. Marsh’s authenticating testimony resulted in the exclusion from evidence of the MaxLite documents relied upon by Dr. Lebby. This error was prejudicial because Dr. Lebby relied on the MaxLite documents in his expert report for his finding that the MaxLite tube was on sale prior to the tube patents’ effective filing dates. *See* J.A. 11143 ¶ 783; J.A. 11200 ¶ 1004.

Second, CH Lighting also argues that the district court abused its discretion by excluding an internal Super Lighting presentation (“DX-41”), which it argued showed that Super Lighting had acquired the Cree and Philips tubes before the effective filing dates of the ’125 patent, showing that these prior art tubes were already on sale. The district

court granted Super Lighting’s motion to exclude DX-41, agreeing with Super Lighting that the presentation was directed to CH Lighting’s inequitable conduct defense (which CH Lighting dropped prior to trial). However, CH Lighting’s counsel stated that they “[did not] offer this document for any inequitable conduct purpose,” J.A. 10113 (22:23–24), and intended to use the presentation only to demonstrate that “these third-party products of Cree, as well as Philips, were available on the market because Super Lighting was able to have” them in its possession, J.A. 10114 (25:7–9). Dr. Lebby’s expert report only addressed invalidity (and not inequitable conduct), and in a portion of his expert report entitled “Plaintiff’s Awareness of the Prior Art,” Dr. Lebby attached slides from DX-41 depicting tubes from Cree and Philips, stating that “the arrangement of electronic components set forth in . . . the ’125 patent[] [were] apparent in the circuit diagram[s] and photos.” J.A. 11253; J.A. 11255 ¶ 1185 (Cree); J.A. 11257 ¶ 1192 (Philips). Dr. Lebby was thus prepared to testify that Super Lighting “was in possession” of the tubes “prior to the priority date[] asserted for . . . the ’125 patent,” suggesting that they were on sale. J.A. 11255 ¶ 1183 (Cree); J.A. 11257 ¶ 1190 (Philips).

We agree with CH Lighting that the district court’s exclusion of DX-41 was also an abuse of discretion. The district court’s initial justification that DX-41 “only deal[t] with inequitable conduct,” J.A. 10050 (7:12–14), is contradicted by the record. Both Dr. Lebby in his expert report and CH Lighting’s counsel before the district court represented that DX-41 was relevant to the on-sale bar. Dr. Lebby’s report expressly discussed DX-41 with regard to the public availability of the prior art tubes. Because Dr. Lebby’s expert report clearly identified the slides in his invalidity findings and stated that the ’125 patent’s claims were “apparent in the circuit diagram and photos,” J.A. 11255 ¶ 1185; J.A. 11257 ¶ 1192, we conclude that the

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

15

district court's exclusion constitutes reversible error. *See Meyer Intell. Properties Ltd. v. Bodum, Inc.*, 690 F.3d 1354, 1376 (Fed. Cir. 2012) (concluding that an exclusion was not harmless "because it impaired [the party's] ability to present its [invalidity] defense").

The district court later adopted an alternative rationale for DX-41's exclusion, crediting Super Lighting's new argument that it should be excluded because the tubes included in DX-41 were of a different wattage from the Cree and Philips tubes analyzed by Dr. Lebby. This justification fares no better. Dr. Lebby was prepared to testify that the tubes whose circuit diagrams were depicted in DX-41 embodied the claimed invention. Nothing in the record suggests that a difference in wattage would have any bearing on the application of the on-sale bar to the '125 patent. We agree with CH Lighting that the fact that the tubes described in the Super Lighting presentation were of a different wattage from the prior art tubes did not preclude DX-41's admissibility; it was for the jury to determine whether to credit Dr. Lebby's testimony.

We accordingly reverse the district court's grant of JMOL to Super Lighting and remand for a new trial on the invalidity of the tube patents because of the district court's erroneous exclusion of Mr. Marsh's authenticating testimony, the MaxLite documents, and DX-41.⁶

⁶ CH Lighting also argues that the trial court abused its discretion in refusing to admit into evidence the physical prior art tubes on which Dr. Lebby based his opinions, on the ground that he did not actually examine the physical tubes in formulating his report. Because Dr. Lebby based his expert report only on photographs of the tubes, we see no error in the exclusion of the physical tubes, which in any case would not prove the applicability of the on-sale bar.

II. Anticipation and Infringement of the '140 Patent

We next address CH Lighting's argument that International Patent Application WO 2012/066822 ("Ono") anticipates the asserted claims of the '140 patent or that, in the alternative, the LT2600 chips do not infringe the '140 patent's claims. A patent claim is anticipated only "if each and every limitation is found either expressly or inherently in a single prior art reference." *Celeritas Techs., Ltd. v. Rockwell Int'l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998). Anticipation must be proven by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011). "Anticipation is a question of fact, reviewed for substantial evidence when tried to a jury." *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008). The jury's determination of infringement is reviewed for substantial evidence. *Omega Pats., LLC v. CalAmp Corp.*, 920 F.3d 1337, 1344 (Fed. Cir. 2019).

At trial, both parties agreed that Ono is a prior-art shock prevention system that functions similarly to the '140 patent's invention in most respects. The jury concluded that Ono did not anticipate the claims of the '140 patent. On the issue of invalidity, both CH Lighting's invalidity expert Dr. Zane and Super Lighting's invalidity expert Dr. Phinney acknowledged that the only issue for the jury to resolve was whether Ono discloses "pulse signals [that] control turning [the switch circuit] on and off," as required by the '140 patent's claims. '140 patent, col. 59 ll. 6–7.

Dr. Zane testified that the pulses in Ono controlled the switch because Ono's "pulse generating circuit generates the signal, which is what the detection circuit directly responds to, which is what controls the on and off of the switch." J.A. 10158 (203:14–17). Dr. Phinney testified that the pulses did not control the switch because Ono "provid[es] pulses that . . . detect the impedance . . . of the

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

17

installation[,] [and that] it's really the . . . response of that pulse . . . that determines whether or not the switch turns on." J.A. 10221 (91:13–19) (emphasis added). As the district court concluded, the jury was free to credit Dr. Phinney's testimony that Ono's pulses did not control turning the switch on and off because the pulse signals did not do so directly. Accordingly, its verdict of no invalidity is supported by substantial evidence.

We also disagree with CH Lighting's argument that the jury's verdict of no invalidity is incompatible with its verdict of infringement. CH Lighting urges that the LT2600 chips cannot infringe because, as in Ono, the LT2600 chips control turning the switch on and off in response to detecting impedance during the pulse generation step. The problem with CH Lighting's argument is that Super Lighting's expert Dr. Phinney testified that, unlike in Ono, the LT2600 chips' pulses do also control the switch as required by the '140 patent's claims. The jury was also free to credit Super Lighting's other expert Dr. D'Andrade's un rebutted testimony that the switches disclosed "pulses . . . that turn on and off a semiconductor switch." J.A. 10094 (181:1–2). The jury's finding of infringement is thus supported by substantial evidence and is not inconsistent with its finding of no invalidity.

III. Super Lighting's Failure to Present Competent Damages Evidence

CH Lighting argues that the district court abused its discretion in denying its *Daubert* motion and its motion for a new damages trial because Ms. Kindler's expert testimony violated Rule 702 of the Federal Rules of Evidence.

As a preliminary matter, having reversed the district court's grant of JMOL as to invalidity of the tube patents and ordering a new trial on this issue, a new trial as to damages is appropriate because "the jury rendered a single verdict on damages, without breaking down the damages

attributable to each patent.” *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1310 (Fed. Cir. 2007). We briefly address CH Lighting’s arguments regarding Ms. Kindler’s testimony because this legal issue is likely to reoccur on remand. *See, e.g., LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 78 (Fed. Cir. 2012); *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552, 1566 (Fed. Cir. 1984).

The admissibility of expert testimony is governed by the Federal Rules of Evidence and the principles laid out by the Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). The proponent of expert testimony must demonstrate to the court that it is more likely than not that the testimony “is based on sufficient facts or data,” “is the product of reliable principles and methods,” and “reflects a reliable application of the principles and methods to the facts of the case.” Fed. R. Evid. 702. The trial court must responsibly exercise its gatekeeping role to “ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” *Daubert*, 509 U.S. at 589.

At trial, Ms. Kindler relied on Super Lighting’s previous portfolio licenses with Technical Consumer Products (“TCP license”) and Lunera Lightning, Inc. (“Lunera license”)—along with evidence from Super Lighting—to propose a per-unit royalty based on a hypothetical negotiation. The TCP licensing agreement involved a 30-cent per-unit royalty, and the Lunera license involved a flat 5% fee (which she calculated would translate to a per-unit royalty fee between 35 and 45 cents). Although the Lunera and TCP licenses granted a license to Super Lighting’s entire patent portfolio, Ms. Kindler opined that three particular patents comparable to the asserted patents drove the negotiations. Specifically, Ms. Kindler observed that a “subset of patents” comparable to the three asserted patents “drove th[e] negotiation” with TCP, *see* J.A. 10121 (54:11–12),

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

19

based solely on a document sent from Super Lighting to TCP alleging that TCP might be infringing 15 of Super Lighting's patents, *see* J.A. 10121 (54:20–21); J.A. 21732–33, and similarly, that patents comparable to the asserted patents were “very important patents to Super Lighting's portfolio” during the Lunera negotiation, *see* J.A. 10123 (61:2–3), based solely on discussions with Super Lighting personnel.

In its pretrial *Daubert* motion and motion for a new trial, CH Lighting argued that Ms. Kindler's testimony was not reliable and that she failed to apportion the license fees to account for licensed patents that were not asserted. The district court denied CH Lighting's *Daubert* motion without explanation. Our recent en banc decision in *EcoFactor, Inc. v. Google LLC*, 137 F.4th 1333 (Fed. Cir. 2025), noted that “[a]n absence of reviewable reasoning may be sufficient grounds for this court to conclude the district court abused its discretion.” *Id.* at 1338. Though the district court briefly elaborated in its decision denying a new trial, it should have conducted a more exacting analysis of Ms. Kindler's testimony.

We recently considered the issue of patent damages experts' reliability under Rule 702 in *EcoFactor*, in which we explained that testimony as to a hypothetical negotiation that is based on prior licenses must be supported by sufficient facts or data. In *EcoFactor*, the patentee's damages expert, Mr. Kennedy, calculated a reasonable royalty based on nonbinding “whereas” clauses included in three prior lump-sum settlement agreements. *See* 137 F.4th at 1341. Each “whereas” clause recited that the patentee “agreed to the payment set forth in this Agreement based on what [the patentee] believes is a reasonable royalty calculation. *Id.* (emphasis omitted). The only other evidence Mr. Kennedy relied on was the patentee's CEO's testimony stating that those lump sums were calculated based on a per-unit royalty rate. However, “[w]hen asked about the basis for his

understanding of the lump-sum calculations, [patentee's CEO] testified that neither he nor anyone else at EcoFactor had been given access" to the relevant sales data that could be used to determine the agreed-upon lump sums using the purported per-unit royalty rate. *Id.* at 1344.

We held that neither the settlement agreements nor the patentee's CEO's testimony was sufficient to support Mr. Kennedy's conclusions. We explained that the settlement agreements when considered in their entirety could not support his conclusion, since they expressly disavowed any binding effect of the "whereas" clauses and otherwise provided no indication that the licensees agreed to a royalty rate or shared the patentee's belief recited in the whereas clauses. *Id.* at 1343. The patentee's CEO's testimony fared no better, we explained, because it "referenced no evidentiary support" and "relied entirely on his asserted 'general understanding of the space.'" *Id.* at 1344 (citation omitted). We concluded that "[i]n the absence of any evidence, [his] testimony amount[ed] to an unsupported assertion from an interested party." *Id.*

On remand, the district court should consider the reliability of Ms. Kindler's expert testimony in light of *EcoFactor*, with a particular focus on whether "she reasonably rel[ied] on [the] kinds of facts or data in forming an opinion" that would be reasonably relied upon by an expert in her field. Fed. R. Evid. 703. *See, e.g., EcoFactor*, 137 F.4th at 1344 (finding the patentee's CEO's testimony insufficient to sustain Mr. Kennedy's methodology because the CEO "reference[d] no evidentiary support" and because "[his] claim regarding calculation of the lump-sum amounts is not supported by any record evidence").

In the context of patent damages, we have repeatedly explained that the damages expert must apportion among licenses. *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 971 (Fed. Cir. 2022). We have explained that expert testimony

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v. 21
CH LIGHTING TECHNOLOGY CO., LTD.

should be excluded when it fails to allocate license fees among the licensed patents covered by an agreement. *MLC Intell. Prop., LLC v. Micron Tech., Inc.*, 10 F.4th 1358, 1374–75 (Fed. Cir. 2021) (affirming a *Daubert* exclusion of a damages expert who relied on an “agreement grant[ing] a license to a portfolio of forty-one U.S. and international patents and patent applications[] [when] only one of those forty-one patents [was] at issue in the hypothetical negotiation”); *Omega Pats., LLC v. CalAmp Corp.*, 13 F.4th 1361, 1380 (Fed. Cir. 2021) (vacating a damages award when the patentee’s expert “failed to adequately account for substantial distinguishing facts between the proffered licenses and a hypothetical negotiation over a single-patent license to the [asserted] patent” (internal quotation marks and citation omitted)). On remand, the trial court must consider whether Super Lighting properly apportioned damages.

If there is a problem with Ms. Kindler’s damages testimony, her testimony cannot be justified simply because she made a series of blanket upward and downward adjustments based on such factors as the level of competition between the parties and changes in the price of LED tubes. *See* J.A. 10121 (55:12–17) (“[T]here are other differences in the [licenses] that are counterbalancing differences[,] [s]o to the extent that the broader license agreement would have resulted in a higher royalty payment, there’s other counterbalancing factors . . . that would go the other way that we have to take into account.”). *See Apple*, 25 F.4th at 972–74 (concluding that a damages expert’s flat 25% discount for five unasserted patents covered by a previous licensing agreement was unreliable).

In a new trial on damages, these concerns may form the basis for a *Daubert* motion.

CONCLUSION

For the foregoing reasons, we affirm the jury’s verdict of validity and infringement of the ’140 patent. We reverse

22

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE, CO. v.
CH LIGHTING TECHNOLOGY CO., LTD.

the district court's grant of JMOL that the tube patents were not invalid, vacate the jury's award of damages, and remand for a new trial on the tube patents' validity and damages.

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

COSTS

No costs.