UNITED STATES DISTRICT COURT

DISTRICT OF NEVADA

Signify North America Corporation, et al.,

Plaintiffs

v.

Lepro Innovation Inc., et al.,

Defendants

Case No.: 2:22-cv-02095-JAD-EJY

Order Granting in Part Plaintiffs' Motion for Partial Summary Judgment and Denying Defendants' Motion for Partial Summary Judgment

[ECF Nos. 159, 160, 163]

This is a patent-infringement suit over LED lighting products. Plaintiffs Signify North America Corporation and Signify Holding B.V. (collectively, "Signify") allege that defendants Lepro Innovation Inc., LE Innovation Inc., Innovation Rules Inc., Home Ever Inc., and Letianlighting, Inc. (collectively, "Lepro") infringed six of the plaintiffs' patents covering various LED technologies. Both parties now move for partial summary judgment. I grant Signify's motion in part because Lepro doesn't oppose some of it and fails to raise a genuine issue of material fact concerning other portions that it does resist. And Lepro's partial-summary-judgment motion, which focuses on actual notice, is denied because a reasonable jury could conclude that Signify provided actual notice of infringement earlier than Lepro contends.

Background

Signify alleges in this suit that Lepro's products infringe certain claims of the U.S. Patent Nos. 7,014,336, 7,038,399, 7,348,604, 7,352,138, 8,063,577, and RE 49,320.[1] This court has already issued a claim-construction order construing the meaning of some contested terms,

[1] ECF No. 6. The complaint initially also alleged infringement of U.S. Patent No. 9,709,253, but Signify withdrew that cause of action. ECF No. 130.

holding that the term "background noise" is not indefinite, and finding that other relevant terms were not means-plus-function terms subject to 35 U.S.C. § 112(f).[2] Both parties now move for partial summary judgment.[3]

Signify seeks judgment on its claims that Lepro infringed the '138, '399, and '577 patents and also on Lepro's 35 U.S.C. § 112 invalidity defenses and its prior-art invalidity defenses to the '138 and '399 patents, which are brought as a 35 U.S.C. § 102 anticipation defense and a 35 U.S.C. § 103 obviousness defense.[4] Lepro opposes summary-judgment findings of infringement on the '577 patent, against its invalidity defenses to the '399 and '138 patents, and against its obviousness defense to the '138 and '399 patents, but it concedes the remainder of Signify's points.[5]

Lepro also brings its own motion for partial summary judgment, seeking a ruling that it didn't receive actual notice before April 6, 2021, that its WiFi Smart LED products allegedly infringe the '336 patent or that its "Ceiling Light," "LED High Bay," and "UFO High Bay" products allegedly infringe on the '604 patent.[6] And it moves for a summary-judgment ruling that it did not receive actual notice for "LED Shoe Box," "LED Street Lamp," and "LED Wall Pack" products for the '604 patent until Signify filed its complaint.[7] Signify opposes the entirety of Lepro's motion.[8]

---

[2] ECF No. 91.

[3] ECF Nos. 159, 160, 163. ECF No. 163 is the unsealed version of ECF No. 160.

[4] ECF No. 159 at 9–10.

[5] ECF No. 166 at 3.

[6] ECF No. 163 at 3.

[7] *Id.*

[8] ECF No. 165.

Discussion

Summary judgment is appropriate when the pleadings and admissible evidence "show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law."[9] If the moving party does not bear the burden of proof on the dispositive issue at trial, it is not required to produce evidence to negate the opponent's claim—its burden is merely to point out the evidence showing the absence of a genuine material factual issue.[10] The movant need only defeat one element of a claim to garner summary judgment on it because "a complete failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial."[11] The court must view all facts and draw all inferences in the light most favorable to the nonmoving party.[12]

A. Signify's motion for partial summary judgment is granted in part.

1. The unopposed portions of the motion are granted.

Lepro consents to some of the summary-judgment rulings that Signify seeks. It doesn't oppose a finding that it infringed the '138 and '399 patents, conceding that the accused products infringe those patents as they have been construed by this court.[13] Nor does Lepro oppose summary judgment on its affirmative defenses to the '339, '604, '138, '577, and '253 patents under 35 U.S.C. § 112.[14] Lepro also consents to summary disposition of its prior-art invalidity

[9] *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) (citing Fed. R. Civ. P. 56(c)).

[10] *Id.* at 323.

[11] *Id.* at 322.

[12] *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

[13] ECF No. 166 at 3.

[14] *Id.* at 9.

defense to the '320 patent.[15] And it doesn't oppose summary judgment on its 35 U.S.C. § 102 anticipation defense to the '138 and '399 patents.

I grant these unopposed portions of Signify's motion for partial summary judgment because Lepro's concessions eliminate any genuine dispute and Signify is entitled to summary judgment on these issues as a matter of law. That leaves me to decide whether Signify has shown without dispute and as a matter of law that Lepro has infringed the '577 patent, can maintain affirmative defenses against the '336 and '320 patents under § 112, and can employ obviousness defenses against the '138 and '399 patents under 35 U.S.C. § 103.

2. Summary judgment is granted in Signify's favor on Lepro's infringement of the '577 patent because Lepro offers only attorney argument to rebut Signify's evidence of infringement.

Signify moves for a summary ruling that Lepro infringed the '577 patent, relying on an in-depth infringement analysis by its expert, Dr. Jonathan Wood, and asserting that Lepro has failed to provide "any competent and admissible evidence of noninfringement."[16] Lepro argues that summary judgment is precluded because a "reasonable jury could conclude that the value of the inductor is not 'selected to provide a substantially constant current through the LED' as required by the claims."[17] Signify dismisses Lepro's argument as all but meaningless because it isn't based on "any actual evidence."[18]

"Summary judgment is appropriate when it is apparent that only one conclusion as to infringement could be reached by a reasonable jury."[19] "Victory in an infringement suit requires

---

[15] *Id.* at 12.

[16] ECF No. 159 at 11–14.

[17] ECF No. 166 at 4.

[18] ECF No. 167 at 3.

[19] *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1323 (Fed. Cir. 2001). I find that the issues raised by these motions are unique to patent law and thus governed by Federal

a finding that the patent claim covers the alleged infringer's product or process, which in turn necessitates a determination of what the words in the claim mean."[20] Courts follow two steps to analyze patent infringement: (1) claim construction and (2) applying that claim construction to the accused product.[21] Having already issued a claim-construction order, this court must now apply the construction to determine whether infringement is the only finding that could be reached by a reasonable jury.

Although the party moving for summary judgment bears the burden of showing that there is no genuine dispute of material fact, "once the moving party has met its initial evidentiary burden, the non-moving party can no longer rest on mere allegations, but must set forth by affidavit or other evidence specific facts."[22] And "there must be sufficient substance, other than attorney argument, to show that the issue requires trial."[23] As the Federal Circuit has articulated, "[u]nsubstantiated attorney argument regarding the meaning of technical evidence is no substitute for competent, substantiated expert testimony."[24]

As evidence that the accused products infringe the '577 patent, Signify submits an expert report and claim charts.[25] In that report, Dr. Jonathan Wood recounts personally inspecting three of the accused products and their LED drivers, reviewing pictures and schematics for all four,

---

Circuit law rather than the law of the Ninth Circuit. *See, e.g.*, *In re ZTE (USA) Inc.*, 890 F.3d 1008, 1012 (Fed. Cir. 2018).

[20] *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 374 (1996).

[21] *Telemac Cellular Corp.*, 247 F.3d at 1323.

[22] *Science Applications Int'l Corp. v. United States*, 169 Fed. Cl. 643, 697 (Fed. Cl. 2024) (citing *FastShip, LLC v. United States*, 892 F.3d 1298, 1307–08 (Fed. Cir. 2018)).

[23] *Glaverbel Societe Anonyme v. Northlake Mktg. & Supply, Inc.*, 45 F.3d 1550, 1562 (Fed. Cir. 1995) (cleaned up).

[24] *Invitrogen Corp. v. Clontech Laboratories, Inc.*, 429 F.3d 1052, 1068 (Fed. Cir. 2005).

[25] ECF No. 159-5 (Dr. Jonathan Wood report); ECF No. 159-6 (Dr. Wood claim charts).

and creating simulations of all the driver circuits.[26] He concludes that the accused products infringe the asserted claims of the '577 patent, providing a 14-part analysis of the products' design and extensive claim charts.[27] Dr. Wood's analysis, applied to the claims as construed by this court, supports a finding of infringement.

Rather than countering with its own evidence, Lepro entirely relies on attorney argument. Lepro has produced an expert report from Dr. John Curran, but that report—which concerns non-infringement of the patents at issue in this case—expressly states that Dr. Curran was asked "to not spend any time responding to Dr. Wood's Expert Report regarding the '577 Patent" and thus would not provide an opinion in response.[28] Dr. Curran confirmed in his deposition that he had not formed an opinion rebutting Dr. Wood's "element-by-element analysis" finding that the accused products infringe the asserted claims '577 patent.[29] So Lepro doesn't provide expert evidence rebutting Dr. Wood's infringement analysis.

Lepro's argument largely focuses on alleged shortcomings in Dr. Wood's circuit modelling, and its opposition includes a few illustrative charts to challenge Dr. Wood's indicator-current analysis.[30] Some are pulled from Dr. Wood's expert report to illustrate his methods, while two others are offered to show the fallibility of those methods.[31] Given that the charts offered to disprove Dr. Wood's circuit-modelling methods don't appear to be pulled from Dr. Curran's expert materials and don't cite to other evidence in the record, it appears that they

---

[26] ECF No. 159-5 at 23–25.

[27] *Id.* at 26–32; ECF No. 159-6.

[28] ECF No. 159-7 at 3, ¶ 83 (rebuttal expert report from Dr. John Curran).

[29] ECF No. 159-8 at 13:12–14:15.

[30] ECF No. 166 at 5–9.

[31] *See id.* at 6, 8.

were created by counsel for the sole purpose of opposing summary judgment, and I thus view them as a form of attorney argument rather than evidence. And I do not evaluate the merits of Lepro's circuit-modelling arguments because they cannot preclude summary judgment without evidentiary support. Because attorney argument alone cannot defeat an adequately supported motion for summary judgment, I find that Signify is entitled to a summary-judgment ruling that Lepro infringed the '577 patent.

3. Summary judgment is granted in Signify's favor on Lepro's § 112 invalidity defenses.

In its answer to Signify's complaint, Lepro asserts that "[t]he claims of the '336, '339, '604, '138, '577, '253 and RE320 patents are invalid for failure satisfy the conditions set forth in 35 U.S.C. § 112, including lack of written description, lack of enablement, and claim indefiniteness."[32] Signify moves for summary judgment in its favor on these § 112 defenses, arguing that Lepro has offered no evidence to support them.[33] Lepro opposes that effort as to its § 112 defenses concerning the '336 and '320 patents, but not with respect to the other patents.[34] Signify discounts this partial opposition as a repackaged attempt at arguments already rejected in my claim-construction order or as impermissible new theories that were not disclosed in Lepro's invalidity contentions.[35]

A patent and each of its claims are presumed to be valid.[36] But § 112 requires a patent applicant to "conclude the specification with 'one or more claims particularly pointing out and

---

[32] ECF No. 26 at 21.

[33] ECF No. 159 at 15–17.

[34] ECF No. 166 at 9.

[35] ECF No. 167 at 5–9.

[36] 35 U.S.C. § 282(a).

distinctly claiming the subject matter which the applicant regards as his invention'" and renders "the patent or any claim in suit" invalid if it fails to meet this definiteness requirement.[37] A claim is indefinite under § 112 if its language "fails to apprise a skilled artisan with reasonable certainty."[38] Other validity requirements, like enablement, are also encapsulated by § 112 but are analytically distinct.[39]

"Challenges to a patent's invalidity, including invalidity based on indefiniteness, may be addressed at the summary-judgment phase."[40] Although invalidity can be addressed at the summary-judgment phase, the District of Nevada's local rules also require that parties opposing claims of patent infringement serve, within 45 days of being served with infringement contentions, a "detailed description of the factual and legal grounds for contentions of invalidity."[41] These invalidity contentions must include a "detailed statement of any grounds of invalidity," including indefiniteness, lack of enablement, and failing written-description requirements.[42] The Federal Circuit has found "nothing in the Federal Rules that is inconsistent with local rules requiring the early disclosure of infringement and invalidity contentions and requiring amendments to contentions to be filed with diligence."[43]

---

[37] *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 902 (2014) (quoting 35 U.S.C. § 112).

[38] *Haddad v. United States*, 164 Fed. Cl. 28, 40 (Fed. Cl. 2023).

[39] *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1358 n.2 (Fed. Cir. 1999).

[40] *Science Applications Int'l*, 169 Fed. Cl. at 679 (cleaned up).

[41] L.P.R. 1-8(b).

[42] L.P.R. 1-8(e).

[43] *O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355, 1366 (Fed. Cir. 2006).

a. Lepro's § 112 invalidity defense to the '336 patent fails as a matter of law because it is based on arguments that are either previously rejected by this court or barred by the local patent rules.

Lepro largely relies in its opposition on what Dr. Curran "will testify" to regarding its § 112 invalidity defense to the '336 patent.[44] Lepro insists that, though I have already rejected its indefiniteness-based invalidity argument as to the '336 patent, its position is correct and will be supported by Dr. Curran's testimony that the '336 patent doesn't adequately explain background noise and that Signify expert Dr. Morgan Pattison's methods are "inadequate to prove infringement even under the Court's construction of the 'background noise' limitation."[45] Lepro argues that this testimony will support indefiniteness or, alternatively, invalidity for lack of written description or enablement.[46] Signify responds that Lepro's indefiniteness argument was already considered and rejected by this court, and the alternative theories are barred because they weren't included in Lepro's invalidity contentions as required by the local rules.[47]

As Lepro recognizes, I rejected its background-noise indefiniteness argument in the claim-construction order.[48] Lepro can't set aside that ruling for the purpose of opposing summary judgment. "The district court's claim construction [is] law of the case for purposes of the trial,"[49] so Lepro's previously rejected indefiniteness argument concerning the '336 patent is out of play. Lepro's contention that "Dr. Curran is not the only source of evidence" because Lepro can cross-examine Dr. Pattison at trial to show that his methods are unreliable is no

[44] ECF No. 166 at 10.

[45] *Id.*

[46] *Id.* at 11.

[47] ECF No. 167 at 5.

[48] ECF No. 54 at 3–6.

[49] *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1371 n.2 (Fed. Cir. 2007).

obstacle to summary judgment either.[50] The Federal Circuit has found that allowing the general possibility of future cross-examination to preclude summary judgment would "improperly empower cross-examination with the ability to defeat nearly all motions for summary judgment."[51] So Lepro's future opportunity to cross-examine Dr. Pattison doesn't raise a genuine issue of material fact that precludes summary judgment.

As for the alternative invalidity grounds of written description and enablement, they are nowhere to be found in Lepro's invalidity-contentions disclosure.[52] Local Patent Rule (L.P.R.) 1-8 expressly requires that disclosure to provide "a detailed statement of any grounds of invalidity" including "failure of enablement . . . or written description requirements" under § 112. So raising those exact theories for the first time at the summary-judgment stage violates this district's local rules; I consequently don't consider those alternative theories.[53] With nothing left to raise a genuine issue of material fact, I grant summary judgment in Signify's favor on Lepro's § 112 defense against the '336 patent.

b. Lepro supports its § 112 defense to the '320 patent with new theories that are barred by the local patent rules, so that defense also fails as a matter of law.

Lepro concedes that it can't prove its prior-art defense to the '320 patent, so it doesn't oppose Signify's summary-judgment motion on that defense theory.[54] But it argues that a "reasonable juror could conclude that all claims of the '320 patent except claim 12 lack written

---

[50] ECF No. 166 at 11.

[51] *Suffolk Techs., LLC v. AOL Inc.*, 752 F.3d 1358, 1367 (Fed Cir. 2014).

[52] *See* ECF No. 167-1.

[53] The Federal Circuit has found that courts can "impose any 'just' sanction" for failure to comply with such local rules. *O2 Micro Int'l Ltd.*, 467 F.3d at 1363. In this case, I find that that the just sanction is to simply disregard invalidity contentions that weren't properly disclosed.

[54] ECF No. 166 at 12.

description and enablement," which are defenses under 35 U.S.C. § 112.[55] Signify retorts that this is an entirely new theory that was not raised in Lepro's invalidity contentions and "contorts the written description and enablement standards beyond recognition."[56] Lepro's invalidity contentions don't mention the '320 patent in the section devoted to invalidity under § 112, nor does it argue elsewhere in the document that the patent is invalid for lack of written description or enablement.[57] This newly raised invalidity theory skirts L.P.R. 1-8, so it is now unavailable to Lepro. I thus grant summary judgment in favor of Signify on Lepro's § 112 defense to the '320 patent.

4. Signify's motion for summary judgment on Lepro's anticipation and obviousness defenses to the '138 and '399 patents is granted in part.

Signify seeks summary judgment against Lepro's prior-art invalidity defenses to the '138 and '399 patents, which are brought as 35 U.S.C. § 102 anticipation defenses and 35 U.S.C. § 103 obviousness defenses, arguing that the defense relies on prior art that "does not enable one of skill in the art to make and use the claimed invention."[58] Signify insists that Dr. Curran conceded in his deposition testimony that a person of skill in the art couldn't make and use critical aspects or implement non-enabled features, such as "the PWM circuit 52 of Timmermans,"[59] under the chief reference that Lepro relies on for anticipation and obviousness.[60] Lepro doesn't oppose summary judgment on its anticipation defense; it instead

---

[55] *Id.*

[56] ECF No. 167 at 9.

[57] *See* ECF No. 167-1.

[58] ECF No. 159 at 32.

[59] "Timmermans" is the parties' shorthand reference to U.S. Patent No. 7,049,761, which forms part of Dr. Curran's proposed obviousness combination.

[60] *Id.* at 32–33.

repudiates any plan to rely on Timmermans as an anticipation reference and withdraws the defense.[61] But Lepro opposes summary judgment on its obviousness defense, insisting that Signify makes a "straw man" argument by focusing on a component that is not included in the combination of references at the basis of the defense.[62] Signify characterizes Lepro's opposition as a blatant attempt to avoid summary judgment by misrepresenting the basis of its own defense.[63]

Lepro's § 103 defense rests on Dr. Curran's opinion that "the asserted claims would have been obvious based on a combination of two references: Hui and Timmermans (U.S. Patent Nos. 6,545,431 and 7,049,761)."[64] Lepro seeks to undercut Signify's summary-judgment argument against this defense by asserting that Signify is focused on a component (the PWM Switch Circuit 52) that isn't actually part of Dr. Curran's obviousness combination.[65] Signify counters that Dr. Curran's deposition testimony confirming that the PWM Switch Circuit 52 is part of the obviousness combination.[66] But the transcript only shows Dr. Curran being asked to verify a list of components in his "combination," including "52, the PWM switch," and Dr. Curran confirming that the list is correct.[67]

Signify attempts to shift its burden to Lepro, arguing that summary judgment is appropriate because Lepro hasn't provided "actual evidence" that Dr. Curran didn't rely on the

---

[61] ECF No. 166 at 13, 16.

[62] *Id.* at 15–16.

[63] ECF No. 167 at 11–15.

[64] ECF No. 166 at 13–14; ECF No. 167-1 at 22.

[65] *Id.* at 13–16.

[66] ECF No. 167 at 13.

[67] ECF No. 167-3 at 11:12–17 (Dr. Curran deposition).

PWM Switch Circuit 52 when forming his obviousness opinion.[68] But the burden is on Signify, as the moving party, to establish that no genuine issues of material fact preclude summary judgment. And this one deposition answer alone doesn't settle the complex factual question of whether the PWM circuit 52 is necessarily part of Dr. Curran's obviousness combination. This uncertainty precludes summary judgment, so I deny Signify's motion for summary judgment on Lepro's obviousness defenses to the '138 and '399 patents.

B. Lepro's summary-judgment motion is denied because a reasonable jury could conclude that Lepro received actual notice of infringement earlier than it contends.

In the years leading up to this lawsuit's filing, Signify sent several communications warning that Lepro's products were, in Signify's opinion, infringing its patented technologies. In an effort to limit recoverable damages, Lepro now seeks to establish on summary judgment that some of Signify's notice letters didn't provide actual notice of infringement for certain patent claims.[69] For the purposes of arguing actual notice, Lepro assumes that all defendants received all notice letters.[70]

1. Signify sent Lepro several notice letters in the years preceding this suit.

a. The June 2017 letter

On June 1, 2017, Philips Lighting attorney Aaron Rugh sent a letter to Lighting Ever titled "Lighting Ever's LED-based Lights."[71] Rugh identified himself as an attorney responsible for patent licensing and stated that "we believe some of Lighting Ever's LED-based Lights . . .

---

[68] ECF No. 167 at 14.

[69] ECF No. 163.

[70] *Id.* at 7 n.9, 8 nn. 11 & 15.

[71] ECF No. 163-4 (2017 notice letter).

use Philips' patented technologies."[72] The letter identifies ten Lighting Ever products and 12 Philips patents, with one or two specific claims listed for each patent.[73] It concludes by expressing interest in further discussion with Lighting Ever concerning its "LED-based products and the Philips Lighting SSL patent portfolio and license program."[74]

b. The 2018 email

Another communication at issue is Linda Dai's November 23, 2018, email regarding "patent concerns" to Ji Wu in his capacity as general manager of Shenzhen Brighter Lighting Co., Ltd.[75] Dai, who is intellectual-property counsel for Signify, warned that Signify had obtained several Lighting Ever-branded products and concluded that they used Signify's patented technologies.[76] One of the three named products was the "'LE Lighting Ever'-brand wireless ceiling light with [B]luetooth speaker," which Dai suggests is "read on" at least four Signify patents, including the '336 patent.[77]

c. The 2021 letter

Rugh sent another letter on April 6, 2021, warning that patent-infringement damages were accruing and that he was offering "a final chance to engage Signify in licensing discussions in earnest."[78] This letter identifies eight Lighting Ever products, including three smart bulbs and

---

[72] *Id.* at 1.

[73] *Id.*

[74] *Id.*

[75] ECF No. 163-5 at 1 (2018 notice email).

[76] *Id.*

[77] *Id.*

[78] ECF No. 163-6 at 2 (2021 notice letter).

two high bays, and lists the patents and claims that each infringes upon.[79] The allegedly infringed patents include the '336 and '604 patents.[80]

2. Lepro's partial-summary-judgment motion is denied because there is still genuine factual dispute about when Lepro received actual notice.

Infringement damages accrue from the date of actual notice of infringement.[81] "Actual notice requires the affirmative communication of a specific charge of infringement by a specific accused product or device."[82] To constitute actual notice, a letter must be specific enough "to support an objective understanding that the recipient may be an infringer."[83] But the Federal Circuit has held that "when the threshold specificity is met, the ensuing discovery of other models and related products may bring those products within the scope of the notice."[84] Compliance with statutory actual-notice requirements is "properly decided upon summary judgment when no reasonable jury could find that the patentee either has or has not provided actual notice to the particular defendants by informing them of his patent and of their infringement of it."[85]

The parties agree that 35 U.S.C. § 287 requires actual notice of infringement, but they dispute the level of specificity required to effectuate that notice. Lepro suggests that "notice about one product does not extend to different products," so Signify's communications before

---

[79] *Id.* at 2–3.

[80] *See id.*

[81] 35 U.S.C. § 287(a) (for unmarked products). It is undisputed that the Signify products at issue here are not marked.

[82] *Amsted Indus. Inc. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 187 (Fed. Cir. 1994).

[83] *Funai Elec. Co., Ltd. v. Daewoo Elecs. Corp.*, 616 F.3d 1357, 1373 (Fed. Cir. 2010).

[84] *Id.*

[85] *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1339 (Fed. Cir. 2001) (cleaned up).

April 6, 2021, did not provide actual notice for the '336 patent or the ceiling-light and high-bay products that allegedly infringe the '604 patent.[86] Nor, according to Lepro, did it receive actual notice of infringement for LED shoe-box, street-lamp, and wall-pack products under the '604 patent until Signify filed its complaint.[87] Signify responds that it "has never been the law that a notice letter must identify every single model possible of infringement" because that would be " both impossible and impractical."[88]

Signify relies on *Funai Electric Company, Ltd. v. Daewoo Electronics Corp.* and *K-TEC, Inc. v. Vita-Mix Corp.* to support its argument that notice as to one infringing product also covers substantially similar products.[89] Both are Federal Circuit decisions holding that "if a patentee's initial notice is sufficiently specific to accuse one product of infringement, 'ensuing discovery of other models and related products may bring those products within the scope of the notice.'"[90] As another district court eloquently summarized:

> In *Funai* and *K-TEC,* the Federal Circuit made clear that a notice letter is not required to specifically identify every allegedly infringing product, and that notice may be found for unidentified products if the scope of the alleged infringement described by the patent holder is sufficient to cover the unidentified products. Thus, the inquiry is not whether an accused product is identified by name, but rather whether notice to the alleged infringer provided information sufficient to apprise the infringer of the patent(s) in issue and the nature of the alleged infringement of it.[91]

---

[86] ECF No. 163 at 5, 9–13.

[87] *Id.* at 13–14.

[88] ECF No. 165 at 6.

[89] *See, e.g., id.* at 12.

[90] *K-TEC, Inc. v. Vita-Mix Corp*, 696 F.3d 1364, 1379 (Fed. Cir. 2012) (quoting *Funai*, 616 F.3d at 1373).

[91] *Iron Oak Techs., LLC v. Fujitsu Am., Inc.*, 2018 WL 6593709, at *4 (N.D. Tex. Dec. 14, 2018).

a. A reasonable jury could conclude that Lepro received actual notice that its high-bay and ceiling-light products allegedly infringe the '604 patent before receiving the 2021 letter.

Signify's 2017 letter provides a list of Lepro's LED products that potentially infringe a number of its patents.[92] That list includes the '604 patent and Lepro's "UFO LED High Bays."[93] But Lepro insists that, for the '604 patent, it didn't receive actual notice of infringement for ceiling-light and high-bay products until April 6, 2021.[94] It relies on a number of district-court decisions to argue that listing products and patent claims "without identifying any specific charge of infringement" doesn't provide actual notice.[95] Signify agrees that merely listing patents and products isn't enough, but it insists that its letter "identified ten specific and narrow product categories and alleged infringement by each of those ten product categories with respect to specific claims of each of 12 patents."[96]

A reasonable jury could find that Signify gave Lepro actual notice that its high-bay and ceiling-light products were infringing the '604 patent before April 6, 2021. As Signify points out, Dr. Michael Krames concludes in his expert report that the accused products have similar structural layouts to the LED High Bay Lights sold by Lepro and named in the 2017 letter.[97] Krames states that Lepro was selling five UFO LED High Bay products on its website when the 2017 notice letter was sent. Four of the five, Dr. Krames notes, "all seem to correspond to the

[92] ECF No. 163-4 at 1.

[93] *Id.*

[94] ECF No. 163 at 10–13.

[95] *Id.* at 11–13.

[96] ECF No. 165 at 16.

[97] *Id.* at 9–10 (citing ECF No. 163-3 (Dr. Michael Krames report)).

same basic product, just driven by different wattages."[98] One of those four, with the SKU number 3500013-DW-US, is an accused product in this case and another (3500011-DW-US) is identical to a different accused product (350011-NW-US) with the exception of its color temperature, which Dr. Krames avers is "irrelevant to the application of the '604 Patent to the accused products."[99] He asserts that numerous products accused of infringing the '604 patent in this case are high-bay lights with a "similar structural layout" to the 3500013-DW-US and 350011-NW-US and the rest are structurally similar to Lepro's high-bay lights.[100]

b. There is a genuine factual dispute whether the remaining products accused of infringing the '604 Patent are sufficiently similar to Lepro's high-bay lights to be subject to actual notice before Signify filed its complaint.

Lepro doesn't dispute that the 2021 letter gave actual notice for high-bay and ceiling light products, but it seeks a summary-judgment ruling that it didn't receive actual notice for the other products accused of violating the '604 patent until Signify filed its complaint in December 2022.[101] Signify contends that its 2017 letter provided actual notice for the other accused products, too.[102] It points to the "unrebutted expert testimony" that it can offer from Dr. Krames on the structural similarities between the accused products and those named in 2017 and 2021 letters.[103]

[98] ECF No. 163-3 at 59.

[99] *Id.* at 59–60.

[100] *Id.* at 60.

[101] ECF No. 163 at 13–14.

[102] ECF No. 165 at 18.

[103] *Id.* at 19.

Dr. Krames concludes in his report that all products accused of infringing the '604 patent in this suit are structurally similar to Lepro's high-bay lights.[104] He identifies examples of common elements such as a circuit board mounted with LEDs and "sandwiched between a transparent housing and a heat sink."[105] He also analyzes the structure of the accused products in greater depth when analyzing infringement of the '604 patent.[106] This court must view all facts and draw all inferences in the light most favorable to the nonmoving party, Signify.[107]

Dr. Krames's concrete reasons that the remaining accused products are structurally similar to those named in the notice letters, viewed in the light most favorable to Signify, create genuine issues of fact that preclude summary judgment. Whether all the products accused of infringing the '604 patent are similar enough to the UFO LED High Bays named in the notice letters to be subject to actual notice is thus a question for a jury to decide. So I deny Lepro's motion for a summary-judgment ruling that it didn't receive actual notice that the remaining accused products allegedly infringe the '604 patent until Signify filed its complaint.

c. A reasonable jury could also conclude that Lepro was actually notified of the accused products allegedly infringing the '336 patent before the 2021 notice letter.

For similar reasons, I deny Lepro's summary-judgment motion concerning when it received actual notice that its "WiFi Smart LED Bulb" products allegedly infringe the '336 patent. In that portion of Lepro's motion, it seeks a ruling that it was not actually notified that its WiFi-smart LED bulbs potentially infringed the patent until it received the 2021 notice letter.[108]

---

[104] ECF No. 163-3 at 60.

[105] *Id.*

[106] *Id.* at 29–46.

[107] *Anderson*, 477 U.S. at 255.

[108] ECF No. 163 at 9.

Signify responds that Lepro was actually notified by the 2018 email that accused the "'LE Lighting Ever'-brand wireless ceiling light with [B]luetooth speaker" of infringing the '336 patent.[109]

Signify relies on the expert report of Dr. Morgan Pattison, who opines that the "'LE Lighting Ever'-brand wireless ceiling light with [B]luetooth speaker" identified as infringing the '336 patent in the 2018 email is substantially similar in design to the products accused of infringing the '336 patent in this suit.[110] Dr. Pattison reasons that both the product named in the 2018 letter and those identified in this suit include a mixture of warm and cool white LEDs, allowing for a range of color temperatures and that all have the LEDs "mounted on the same PCB."[111] This expert-opinion evidence is enough to raise a genuine issue as to whether the products accused of infringing the '336 patent in this suit are similar enough to the product identified as infringing the '336 patent in the 2018 email to be subject to actual notice. So I leave the determination of whether and when Lepro received actual notice of infringement for the '336 patent for a jury to decide.[112]

---

[109] ECF No. 165 at 14–15.

[110] *Id.* at 7; ECF No. 163-2 at 28–30 (Dr. Morgan Pattison report).

[111] ECF No. 163-2 at 29.

[112] By denying Lepro's partial-summary-judgment motion, I am not reaching any conclusions about whether the products accused of violating the '336 and '604 patents in this lawsuit really are structurally similar to those named in Signify's earlier notice letters. I find only that Signify has raised a genuine issue of material fact by providing expert conclusions on the products' similarities, so summary judgment is unavailable.

Conclusion

IT IS THEREFORE ORDERED that the plaintiffs' motion for partial summary judgment **[ECF No. 159] is GRANTED in part. Summary judgment is granted in favor of the Signify plaintiffs as to:**

- The defendants' liability for infringement of the '399, '138, and '577 patents;
- The defendants' affirmative defenses brought under 35 U.S.C. § 112;
- The defendants' prior-art invalidity defense to the '320 patent; and
- The defendants' anticipation defenses to the '138 and '399 patents.

It is denied in all other respects.

IT IS FURTHER ORDERED that the defendants' motion for partial summary judgment **[ECF Nos. 160, 163] is DENIED.**

This case proceeds to trial on the plaintiffs' infringement claims concerning the '336, '604, and '320 patents and on the issue of damages for the infringement of the '399, '138, and '577 patents.

IT IS FURTHER ORDERED the **parties must file their joint pretrial order by August 29, 2025.** This **case is REFERRED** to the magistrate judge for a **MANDATORY SETTLEMENT CONFERENCE to be held no more than 30 days after that pretrial order is filed as L.P.R. 1-19(b) dictates.**

U.S. District Judge Jennifer A. Dorsey
July 31, 2025