

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

EIDOS DISPLAY, LLC, EIDOS III, §
LLC, §

CIVIL ACTION NO. 6:11-CV-00201-JRG

Plaintiffs, §

v. §

CHI MEI INNOLUX CORPORATION, §
CHI MEI OPTOELECTRONICS USA, §
INC., CHUNGHWA PICTURE TUBES, §
LTD., HANNSTAR DISPLAY §
CORPORATION, HANNSPREE §
NORTH AMERICA, INC., §

Defendants.

MEMORANDUM OPINION AND ORDER

Before the Court is Defendants’ Motion to Exclude the Opinions and Testimony of Plaintiffs’ Expert Arthur Cobb. (Doc. No. 682.) Plaintiffs have filed a response. (Doc. No. 697), and Defendants have filed a reply (Doc. No. 709). Upon consideration, Defendants’ Motion (Doc. No. 682) is **GRANTED-IN-PART** and **DENIED-IN-PART** as set forth herein.

BACKGROUND

On April 25, 2011, Plaintiffs filed suit against AU Optronics Corporation, AU Optronics Corporation America, Chunghwa Picture Tubes, Ltd., HannStar Display Corporation, Hannspree North America, Inc., Chi Mei Innolux Corporation, and Chi Mei Optoelectronics USA, Inc., alleging infringement of U.S. Patent No. 5,879,958 (“the ’958 Patent”). (Doc. No. 1.) The ’958 Patent is titled “Method of Producing an Electro-Optical Device” and relates to the process of forming circuitry used in controlling liquid crystal displays (“LCD”). Specifically, the ’958

Patent relates to the process for forming an array of thin film transistors (“TFT”) and pixel electrodes that are used to control the light emission of an LCD product. Notably, the ’958 Patent contains 17 embodiments (identified as A-S) providing various manufacturing processes that reduce the number of photolithographic steps. See ’958 Patent at 4:50–14:18 (describing processes with four or five lithographic steps as opposed to seven).

Claim 1 is the only issued claim in the ’958 Patent. Claim 1 recites as follows:

1. A method for producing an electro-optical device in which an electro-optical material is put between a pair of substrates opposed to each other, at least a portion of opposing surfaces of the substrates is insulative, a plurality of source wirings and a plurality of gate wirings are formed crossing each other on the surface of one of said pair of substrates and a transparent pixel electrode and a thin film transistor are formed at each of the crossing points between the source wirings and the gate wirings, wherein the method comprises:
 - a step G1 of forming a first metal film on the surface of said one substrate,
 - a first photolithographic step G2 of patterning the first metal film to form a gate electrode and a gate wiring,
 - a step G3 of forming a first insulator film, a semiconductor film and an ohmic contact film on the surface of said one substrate after the first photolithographic step,
 - a second photolithographic step G4 of patterning the semiconductor active film and the ohmic contact film to form a semiconductor portion above the gate electrode in a state isolated from other portions,
 - a step G5 of forming a second metal film on the surface of said one substrate after the second photolithographic step,
 - a third photolithographic step G6 of patterning the second metal film

- and the ohmic contact film to form a source electrode, a drain electrode and a channel portion,
- a step G7 of forming a passivation film on the surface of said one substrate after the third photolithographic step, and
- a fourth photolithographic step G8 of patterning the passivation film to form a contact hole reaching the gate wiring, a contact hole reaching the drain electrode and a contact hole for source wiring and gate wiring connection terminals,
- a step G9 of forming a transparent conductive film on the surface of said one substrate after the fourth photolithographic step, and
- a fifth photolithographic step G10 of patterning the transparent conductive film to form a transparent pixel electrode.

'958 Patent at 58: 5–47.

On March 6, 2017, Defendants brought the instant Daubert Motion to exclude certain of Mr. Cobb's damages opinions. (Doc. No. 682.)

LEGAL STANDARD

Rule 702 provides that an expert witness may offer opinion testimony if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case. Fed.R.Evid. 702.

The Rules also "assign to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharms. Inc.*, 509 U.S. 579, 594, 597 (1993). "The relevance prong [of Daubert] requires the

proponent [of the expert testimony] to demonstrate that the expert’s ‘reasoning or methodology can be properly applied to the facts in issue.’” *Johnson v. Arkema, Inc.*, 685 F.3d 452, 459 (5th Cir. 2012) (quoting *Curtis v. M & S Petroleum, Inc.*, 174 F.3d 661, 668 (5th Cir. 1999)). “The reliability prong [of Daubert] mandates that expert opinion ‘be grounded in the methods and procedures of science and . . . be more than unsupported speculation or subjective belief.’” *Johnson*, 685 F.3d at 459 (quoting *Curtis*, 174 F.3d at 668).

In assessing the “reliability” of an expert’s opinion, the trial court may consider a list of factors including: “whether a theory or technique . . . can be (and has been) tested,” “whether the theory or technique has been subjected to peer review and publication,” “the known or potential rate of error,” “the existence and maintenance of standards,” and “general acceptance” of a theory in the “relevant scientific community.” *Daubert*, 509 U.S. at 593–94; see also *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 150 (1999) (“*Daubert* makes clear that the factors it mentions do not constitute a ‘definitive checklist or test.’”); *U.S. v. Valencia*, 600 F.3d 389, 424 (5th Cir. 2010). “The proponent need not prove to the judge that the expert’s testimony is correct, but she must prove by a preponderance of the evidence that the testimony is reliable.” *Johnson*, 685 F.3d at 459 (quoting *Moore v. Ashland Chem., Inc.*, 151 F.3d 269, 276 (5th Cir. 1998) (en banc)). At base, “the question of whether the expert is credible or the opinion is correct is generally a question for the fact finder, not the court.” *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015).

DISCUSSION

Defendants move to exclude Mr. Cobb’s damages opinions on 5 bases: (1) Mr. Cobb’s opinions violate the Entire Market Value Rule (“EMVR”); (2) Mr. Cobb does not assess the economic footprint of Claim 1; (3) Mr. Cobb attempts to correct his over-inclusive royalty base

by lowering his rate; (4) Mr. Cobb calculates damages on “indirect sales” not linked to an act of infringement; and (5) Mr. Cobb uses an incorrect hypothetical negotiation date. (Doc. No. 682.)

a. EMVR

Defendants argue that Mr. Cobb admits the smallest saleable unit is the LCD panel but improperly uses LCD modules as his base. (Doc. No. 682, at 9, citing Doc. No. 682-4, 222:7–11.) Defendants contend that therefore in order to use the LCD modules as his base, Mr. Cobb must meet the requirements of the EMVR—that is that the process covered by claim 1 is the basis for consumer demand. *Id.* Defendants contend Mr. Cobb fails to do so and instead only opines that the technology in claim 1 reduces manufacturing costs for TFT arrays and the cost reductions are the basis for consumer demand. *Id.* at 10. Therefore, Defendants argue that Mr. Cobb should not be able to base his opinions on the billions of dollars in accused sales because it will only skew the damage horizon for the jury. *Id.* at 11.

Eidos argues that Mr. Cobb’s royalty base “comports with consistent industry practice to include module and panel sales in LCD patent license agreements.” (Doc. No. 697, at 15.) Eidos argues that numerous LCD patent licenses confirm the standard approach is to pay a royalty on all LCD products sold under the license, including modules and panels. *Id.* at 16. Eidos argues that even if EMVR applies, there is a question for the jury because claim 1 creates price reductions that drive the sales of accused products. *Id.* at 17–18.

In determining a reasonable royalty for a multi-component product, it is generally required that “royalties be based not on the entire product, but instead on the ‘smallest salable patent-practicing unit.’” *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012). The entire market value rule is an exception to this rule, and “allows a patentee to assess damages based on the entire market value of the accused product only where the patented

feature creates the ‘basis for customer demand’ or ‘substantially create[s] the value of the component parts.’” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed. Cir. 2011) (quoting *Lucent Techs. V. Gateway, Inc.*, 580 F.3d 1301, 1336 (Fed. Cir. 2009); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1549–50 (Fed. Cir. 1995)).

Here, Eidos does not dispute that its royalty base includes LCD modules that are beyond the smallest saleable patent-practicing unit. While the Court agrees there is no firm rule that requires the royalty base to be comprised of the smallest saleable patent-practicing unit, Mr. Cobb’s royalty base necessarily implicates the EMVR where he ultimately opines on a royalty based on the entire market value of the LCD module. Notably, Eidos has not shown that claim 1 of the ’958 Patent is the basis for consumer demand of the LCD modules. Eidos only contends that the benefits of claim 1 resulted in more competitive prices and price reductions that drove the sale of the accused products. The fact that the claimed process reduced costs—even if true—does not show it was the basis for consumer demand of the products themselves. Put simply, Eidos provides no evidence of the requisite consumer demand.

Moreover, Eidos is incorrect in suggesting that this question could be presented to the jury because there is no evidence on which the jury could reach a conclusion that claim 1 drove the consumer demand for LCD modules. Rather, posing the sales of the entire product to the jury where there is no evidence of consumer demand based on the patented feature would only work to improperly inflate damages for the jury. See *LaserDynamics*, 694 F.3d at 68 (“Admission of such overall revenues, which have no demonstrated correlation to the value of the patented feature alone, only serve to make a patentee’s proffered damages amount appear modest by comparison, and to artificially inflate the jury’s damages calculation beyond that which is ‘adequate to compensate for the infringement.’”) (quoting 35 U.S.C. § 284).

Similarly, Eidos's argument that it is the typical practice to license LCD patents this way is unavailing. While comparable licenses can serve to inform what might have occurred during a hypothetical negotiation, they cannot expand a royalty beyond the economic demand for the claimed invention.

Here, the parties agree that the smallest saleable unit is the LCD panel. Mr. Cobb will not be permitted to include the LCD modules in his royalty base. Moreover, as will be discussed further herein, Mr. Cobb must further apportion the value of the patented process even where using the LCD panel as the royalty base. Accordingly, Defendants' Motion is **GRANTED** as to Mr. Cobb's use of LCD modules in his royalty base.

b. Apportionment

Defendants argue that Mr. Cobb admits that claim 1 relates solely to the manufacture of the TFT array and that he must therefore apportion his base down to the sales of TFT arrays or use the TFT array as his base. (Doc. No. 682, at 11.) Defendants contend that Mr. Cobb did no such apportionment. *Id.* at 12. Instead, Defendants argue that Mr. Cobb opines that the “[c]ost reduction allowed by the technologies of the ‘958 Patent create substantial economic value by allowing the LCD manufacturer to compete on the basis of price in the highly competitive market.” *Id.* at 13, citing Ex. A at 76. Defendants contend that even if this is true, it says nothing about the value of claim 1 over methods described in the prior art. *Id.*

Eidos argues that Mr. Cobb properly ties his analysis to the “economic footprint” of claim 1 as his primary consideration. (Doc. No. 697, at 12.) Eidos cites to the following deposition testimony as evidence of Mr. Cobb's apportionment:

- A. So what I – I've looked at is the '958 patent. I understand from my reading that it reduces the number of steps, improving yield, as compared to prior method by production methods in prior art.

Q. I'm asking you about –

A. And then I understand through discussions with -- with Dr. Smith that there are significant cost savings, significant yield savings. So I have one claim in the patent. I have the -- the patent reducing the number of steps, increasing yield and reducing costs. So what I've done is made considerations of such reductions, that such reductions exist, and then have conducted an analysis of a licensing of that patent, with the understanding that the patent has a single claim and that the patent improves yield and improves cost performance.

(Doc. No. 697, at 13, citing Doc. No. 697-10, at 369:1–18.)

In a reasonable royalty analysis, damages must be tied “to the claimed invention’s footprint in the marketplace.” *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010). Thus, “where multi-component products are involved, the governing rule is that the ultimate combination of royalty base and royalty rate must reflect the value attributable to the infringing features of the product, and no more.” *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014) (citing *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014)). When the accused products have both patented and non-patented features, the damages analysis requires an apportionment analysis in order to determine the value added by such features. *Id.*

Here, the parties’ ultimate dispute is over the novelty of the claimed process—i.e. the incremental benefit of the claimed invention added over the processes already known in the art. This dispute was similarly evidenced in Plaintiffs’ Daubert motion challenging the opinions of Defendants’ damages expert, Mr. Jackson. (Doc. No. 678.) There, Eidos argues that Mr. Jackson improperly focuses his apportionment analysis on step G8 of claim 1 as the incremental benefit and value of the claimed technology. (Doc. No. 678, at 10.) Eidos contends that the “economic footprint” of the claimed process is broader than the G8 step or the TFT arrays. (Doc. No. 697, at 6–7.) Eidos therefore contends that it need not apportion from the LCD panels. See Doc. No.

697, at 14 (“Because LCD panels are closely related to the invention, LCD panels should be included in the royalty base even if apportionment is required, which is disputed.”) As this Court has explained in ruling on Eidos’s Daubert motion (Doc. No. 678), the dispute over the novelty of the claimed invention is a question for the fact finder. However, the question of whether an expert’s opinion comports with the settled principles of apportionment, is for the Court to decide in exercising its gatekeeping authority. *VirnetX*, 767 at 1328 (explaining that a district court must exercise “its gatekeeping authority to ensure that only theories comporting with settled principles of apportionment were allowed to reach the jury”).

Claim 1 of the ’958 Patent is ultimately directed at forming a TFT array. ’958 Patent at 58: 5–47. As Eidos even concedes, “[t]he technical experts agree that the method in Claim 1 covers the entire TFT (or ‘active’) array substrate.” (Doc. No. 697, at 14, citing Doc. No. 697-12 at 493; Doc. No. 697-14, at 28:15–18; Doc. No. 697-15, at 161:08–18.) While the Court does not disagree that the ’958 Patent is generally related to the fabrication of a LCD panel, what is ultimately claimed in claim 1 is a method that creates the TFT array that is used to control the light emission of the LCD panel. ’958 Patent at 58: 5–47. Here, what is claimed is indisputably not an LCD panel, and the LCD panel indisputably has features not attributable to the claimed invention. Therefore, the Court finds that apportionment must be done to value the claimed invention. While Eidos may provide its evidence that the claimed process is integral to the development of the LCD panels, Mr. Cobb nonetheless must separate the value of the patented features from the unpatented features of the LCD panels. *CISRO v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015) (“to be admissible, all expert damages opinions must separate the value of the allegedly infringing features from the value of all other features.”) Here, there is no evidence that Mr. Cobb undertook this analysis in rendering his opinions on a reasonable royalty

in this case. Accordingly, Defendants' Motion as to Mr. Cobb's failure to apportion is **GRANTED**.

c. Rate Adjustment Depending on Base

Defendants contend that Mr. Cobb sets forth three royalty base unit scenarios—Module, Panel, and TFT Arrays—and proposes royalty rates specific to each royalty base unit. Doc. No. 682, at 14, citing Doc. No. 682-1, at 3, 97. Defendants contend that as the royalty base goes down from modules to panels and arrays, Mr. Cobb's alleged royalty rate increases. For example, Defendants contend that as the dollar amount of his base decreases from modules to panels to arrays, Mr. Cobb simply increases his alleged running royalty rate from 0.75% to 1% to 2%, without explanation. *Id.* Defendants argue that Mr. Cobb's analysis of the royalty rate is further undermined by his inability to point to a single comparable license on which he relied in reaching his conclusion. *Id.* Eidos argues that Mr. Cobb adjusted his rates based on Georgia-Pacific factors and did not improperly adjust his rates to maintain the same measure of damages for each royalty base. (Doc. No. 697, at 11–12.)

The moving rates for Mr. Cobb's range of bases is entirely unclear. Mr. Cobb does not explain, for example, how the different bases would have impacted the hypothetical negotiation such that the corresponding rates would be increased. Regardless, Mr. Cobb's base including LCD modules will not be permitted for the reasons explained above. Similarly, Mr. Cobb has been directed to conduct an apportionment analysis on his LCD panel base. To the extent Mr. Cobb wishes to maintain his alternative bases and rates between the LCD panels and TFT arrays in supplementing his report, Mr. Cobb must explain why the royalty rate doubles when the base is comprised of LCD panels instead of TFT arrays. Accordingly, Defendants' Motion as to Mr. Cobb's rate adjustment depending on base is **GRANTED**.

d. Indirect Sales

Defendants argue that Mr. Cobb's statistics on indirect sales are not tied to actual purported acts of infringement and therefore must be excluded as unreliable. (Doc. No. 682, at 16.) Eidos argues that Mr. Cobb's royalty calculations for indirect U.S. sales are directly tied to acts of infringement based on a reliable estimate of the number of accused products that have been induced to be imported and sold in the U.S. through Defendants' customers. (Doc. No. 697, at 19–20.)

Defendants rely on *Power Integrations* to exclude Mr. Cobb's opinions on indirect sales. 711 F.3d 1348 (Fed. Cir. 2013). In *Power Integrations*, the Federal Circuit found that the damages expert's testimony was both based on an unreliable data source and employed unreliable methodology. *Id.* at 1373. Specifically, the evidence of worldwide sales came from a source that was unclear and assumed to have come only from the Internet. *Id.* In addition, while the technology accused was found in phone chargers, the damages expert included worldwide sales of mobile phones, assuming that each phone was shipped with a charger. *Id.* The Federal Circuit found that this leap was speculative as well as his assumption that each of the chargers included an infringing power circuit. *Id.* at 1374.

Here, Mr. Cobb relies on general statistics of the number of TFT LCD products sold within the United States. (Doc. No. 697-8, at 9–11.) Mr. Cobb also relies on data from form 10-Ks for Dell, Apple, and HP—customers of Defendants—to show the net revenue for sales of notebook computers and desktop monitors. *Id.* at 10.

As this Court stated in ruling on Defendants' motions for summary judgment, Mr. Cobb is permitted to testify on circumstantial evidence of indirect infringement through the use of general statistics and specific data from each Defendant and their respective customers.

However, Mr. Cobb may not use this data to support damages for Eidos's claims of indirect infringement. If permitted to do so, Mr. Cobb's methodology would suffer from many of the same speculative leaps described in Power Integrations. For example, to rely on this data to establish damages, one would have to assume that each of the LCD products sold within the United States was made using the accused processes. Even if that speculative leap could be made from the data, which it cannot, there is no way to determine what percentage is attributable to any one Defendants' customers or accused products. For example, according to Mr. Cobb's report, the data comes from "six conspiring manufacturers": AU Optronics Corporation, Chunghwa Picture Tubes, Chi Mei Optoelectronics Corp., HannStar Display Corp., Samsung Electronics Corp. and LG Display Co. Id. at 9. The remaining Defendants constitute only 3 of 6 of the listed companies. Moreover, even among the Defendants one would have to speculate as to what percentages each Defendant is responsible for selling through various U.S. customers. Worse yet, even if that speculative leap could be made, there is no way to distinguish which of these sales are the result of Defendants' direct sales or indirect sales.

As such, these statistics cannot be relied upon to expand or infer the damages for indirect sales. Rather, Mr. Cobb must provide damages opinions for Eidos's claims of indirect infringement only where there is specific evidence of importation or sales by a specific customer such that Mr. Cobb can apply reliable principles and methods that are closely tied to the facts of this case. That is, where, at a minimum, Eidos's evidence provides the identity of the third-party infringer and the accused products sold in the United States.

Accordingly, Defendants' Motion is **GRANTED** in so much as Mr. Cobb employs general statistics to estimate damages for indirect infringement.

e. Hypothetical Negotiation Date

Lastly, Defendants argue that Mr. Cobb assumes that a hypothetical negotiation date for Innolux would be April 2002, but that Innolux began using the alleged 5-mask process in 1999. (Doc. No. 682, at 17, citing Doc. No. 682-1, at 82.) Because Mr. Cobb does not use a hypothetical negotiation date of 1999, Defendants argue his opinions are unreliable and should be excluded. Id. Eidos contends that its hypothetical negotiation date is based on evidence of first infringement because Innolux produced no sales information prior to 2002. (Doc. No. 697, at 22.)

“In general, the date of the hypothetical negotiation is the date that the infringement began.” *LaserDynamics*, 694 F.3d at 75; see also *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1363–64 (Fed.Cir.2006) (“[T]he hypothetical negotiation relates to the date of first infringement.”); *State Indus., Inc. v. Mor–Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed.Cir.1989) (“The determination of a reasonable royalty ... [is based] on what a willing licensor and licensee would bargain for at hypothetical negotiations on the date infringement started.”).

Here, Innolux claims that the hypothetical negotiation date is 1999 because Innolux “began using the alleged 5-mask process in 1999” and “produced the first large TGT-LCD display panel to be made from Taiwan-developed technology in July 1999.” (Doc. No. 682, at 13.) But here, as Innolux points out in its own briefing, “the date of first infringement begins when both the patent has issued and accused products have been sold.” (Doc. No. 682, at 17) (emphasis added) (citing *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858, 869 (Fed. Cir. 1993)). The Court agrees that the hypothetical negotiation date should be the “start of infringement, i.e., when both a patent had issued and accused products were sold.” *Wang Labs*, 993 F.2d at 869. Notably, Innolux only argues that it began using the alleged 5-mask process in 1999 and

produced the first large TGT-LCD display in July 1999. But Innolux fails to provide any evidence that it sold an accused product in 1999. Importantly, because the process was carried out abroad, merely using that process, as Innolux contends it did in 1999, would not constitute infringement of the '958 Patent. See *Power Integrations*, 711 F.3d at 1371 (“It is axiomatic that U.S. patent law does not operate extraterritorially to prohibit infringement abroad.”). Similarly producing a prototype abroad fails to establish an act of infringement. *Id.* Therefore, the first act of infringement in this instance must be the first importation or sale within the United States. Here, the evidence in the record indicates that such infringing sales began in 2002.

Accordingly, Mr. Cobb did not err in using a hypothetical negotiation date of April 2002. The Court **DENIES** Defendants’ Motion as to Innolux’s hypothetical negotiation date.

CONCLUSION

Consistent with the rulings set forth herein, Defendants’ Motion (Doc. No. 682) is **GRANTED-IN-PART** and **DENIED-IN-PART**. Within 14 days of the issuance of this Order, Mr. Cobb shall file a supplemental report consistent with the findings herein. Defendants may seek an additional deposition, not to exceed 3 hours, within 14 days of any supplementation by Mr. Cobb. Defendants’ damages expert may also file a rebuttal report to Mr. Cobb’s supplemental report within 14 days of being served, not to exceed 5 pages.

Within seven (7) days of the issuance of this Order, the parties shall file a notice with the Court as to whether this Order can be unsealed, or request appropriate redaction.

So ORDERED and SIGNED this 29th day of March, 2017.



JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE