

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

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

**Plaintiffs,**

**v.**

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

**Defendants.**

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

**MEMORANDUM OPINION AND ORDER**

Before the Court is Defendants’ Motion to Exclude Plaintiffs’ expert Bruce Smith’s opinions relating to his “Benefits of the Claimed Five-Mask BCE Manufacturing Process” Report. (Doc. No. 681.) Plaintiffs have filed a response. (Doc. No. 696.) For the reasons stated herein, Defendants’ Motion (Doc. No. 681) is **DENIED**.

**BACKGROUND**

On April 25, 2011, Eidos 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. 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 Dr. Smith's opinions related to apportionment. (Doc. No. 681.)

## **LEGAL STANDARD**

### ***Federal Rule of Evidence 702***

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).

### ***Apportionment***

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.*

## DISCUSSION

Defendants argue that Dr. Smith’s opinions are unreliable and should be excluded because Dr. Smith describes the benefits of moving from a seven-mask process to a five-mask process, but does not tie the invention to its footprint in the marketplace because it is undisputed that prior art five-mask processes were available before the ’958 Patent. (Doc. No. 681, at 11.) Defendants also argue that Dr. Smith’s opinions should be excluded because he describes the benefits of four structures—ESD structures, parallel wiring on the first and second metal layers, and two types of test structures—that are not disclosed in the ’958 Patent, and because his opinions do not contain any economic analytical data and are therefore purely subjective and unreliable. *Id.* at 13–14.

As to apportionment, Defendants specifically contend that Dr. Smith did not compare any of the prior art five-mask processes to the claimed processes or to any non-infringing alternatives. *Id.* at 11. Therefore, Defendants argue that Dr. Smith “does not attempt to separate the benefits attributable to Claim 1 (e.g., the improvement in the G8 step) from the unpatented features that were known in the prior art...” *Id.* at 12. Defendants contend his opinions are rendered inadmissible on this basis. Eidos argues that this assertion is incorrect and based on the

untenable position that all five-mask processes are interchangeable. (Doc. No. 696, at 10.) Eidos further cites to Dr. Smith’s deposition testimony where he explained the benefits are not simply reducing the number of steps, but carrying out the right steps in the right way so that the benefits can be realized. (Doc. No. 696, at 10, citing Doc. No. 696-2, at 116:18–118:21, 128:4–130:9, 218:21–219:8.) Eidos then further points to the specific advantages of claim 1, including the use of back channel etch instead of an etch stop and the creation of four separate contact holes in one photolithographic step, and argues that these advantages would not be realized by just any five-mask process. *Id.* at 11. Eidos argues that these are the benefits that Dr. Smith describes. *Id.* citing Doc. No. 696-1, at ¶¶ 18, 66, 69, 17, 50–61.

The Court disagrees with Defendants. Dr. Smith may provide opinions based on his technical knowledge and expertise as to the technical advantages of the claimed process. The fact that five-mask processes were known in the prior art does not render these opinions unreliable. As Eidos has points out, there are specific advantages to these claimed steps that Dr. Smith has opined on, including the order of the claimed steps, the back channel etch (as opposed to etch stop), and the creation of multiple contact holes in the fourth lithographic step. Doc. No. 696-2, at 116:18–118:21, 128:4–130:9, 218:21–219:8; Doc. No. 696-1, at ¶¶ 17, 18, 50–69. Thus, Dr. Smith considered claim 1 of the ’958 Patent and the facts of this case in asserting his opinions on the alleged benefits of the invention. Whether Dr. Smith considered alternatives or compared other five-mask processes is simply a matter for cross-examination as it goes to the correctness of his methodology, not the reliability. *See Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015) (“where the methodology is reasonable and its data or evidence are sufficiently tied to the facts of the case, the gatekeeping role of the court is satisfied, and the inquiry on the correctness of the methodology...belongs to the factfinder.”)

Dr. Smith's discussion of structures allegedly not disclosed in the '958 Patent similarly does not provide a basis to exclude his opinions. In paragraph 70 of Dr. Smith's report cited by Defendants, he is describing the advantages to the designer of a TFT substrate using the claimed method. (Doc. No. 696-1, at ¶ 70.) This discussion is not improper for apportionment purposes as it discusses the claimed method and the real world benefits tied to that method. *Id.* Whether Dr. Smith's opinions explore unintended advantages of the claimed subject matter, or advantages not sufficiently tied to the claimed method, is a question for the factfinder. *See Summit 6*, 802 F.3d at 1296 (“[T]he question of whether the expert is credible or the opinion is correct is generally a question for the fact finder, not the court.”).

Finally, the contention that Dr. Smith's opinions are purely subjective because he did not conduct an analytical economic analysis also does not provide a basis to exclude his opinions. As discussed above, Dr. Smith is Eidos's technical expert and has provided opinions regarding the technical advantages and benefits of the claimed technology. The ultimate apportionment value for the accused products, including the economic analysis, must rest with Eidos's damages expert Mr. Cobb, not Dr. Smith.

#### CONCLUSION

Accordingly, for the reasons stated herein, Defendants' Motion to Exclude the Opinions of Dr. Smith (Doc. No. 681) is **DENIED**.

**So ORDERED and SIGNED this 22nd day of March, 2017.**

  
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JOHN D. LOVE  
UNITED STATES MAGISTRATE JUDGE