

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

ZIILABS INC., LTD.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Case No. 2:14-cv-203-JRG-RSP
	§	
SAMSUNG ELECTRONICS CO. LTD., ET	§	
AL.,	§	
	§	
Defendants.	§	

**MEMORANDUM ORDER**

Pending before the Court is Plaintiff ZiiLabs’ Opposed Motion to Strike Portions of the Expert Reports of Dr. John Kelly and Dr. Keith Ugone. (Dkt. No. 303.) Dr. Kelly is Defendant Samsung’s non-infringement expert on U.S. Patent No. 6,111,584 (the ’584 patent).<sup>1</sup> Dr. Ugone is Samsung’s damages expert. Plaintiff asserts the Court should exclude: (1) Dr. Kelly’s testimony on claim construction; (2) Dr. Kelly’s testimony on apportionment; (3) Dr. Ugone’s testimony on apportionment; and (4) Dr. Ugone’s testimony on the effective royalty rate. (Dkt. No. 303 at 1.) For the following reasons, the Court will only exclude Dr. Kelly’s testimony on claim construction.

***O2 Micro***

**A. Background**

Plaintiff asserts that Samsung infringes the ’584 patent. That patent claims a GPU that is “[a] rendering processor with texture processing capability, in which textures are retrieved from local storage as nxn patches.” (’584 patent, at [57].) In plainer English, the ’584 patent claims

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<sup>1</sup> “Samsung” refers to Defendants Samsung Electronics Co. Ltd., Samsung Electronics America, Inc., and Samsung Austin Semiconductor, LLC.

rendering systems or rendering methods performed on a processor such as a GPU that retrieves pixels of a certain size from a single memory location instead of multiple memory locations.

Claim 1 of the '584 patent recites:

1. A rendering method, comprising the steps of:  
decomposing primitives into fragments to be rendered;  
computing depth and color values for individual ones of said fragments;  
retrieving at least four pixels of a stored texture from a single memory location, using a word width which is more than three times the number of bits per pixel in said stored texture; said pixels of each said word being grouped in said stored texture in a pattern which is more than one pixel wide and more than one pixel high;  
performing a texturing operation upon said color values using said stored texture to generate primitive data;  
rendering a primitive using said primitive data; and  
displaying said rendered primitive.

('584 patent col. 84, ll. 21–35.)

Claim 4 of the '584 patent recites:

4. A rendering system comprising:  
a data bus;  
a processor connected to said data bus;  
a local-buffer memory connected to said data bus for storing texture data;  
reading circuitry connected to said memory, wherein said circuitry, when commanded to read, reads at least four pixels of a stored texture from a single memory location, using a word width which is more than three times the number of bits per pixel in said stored texture; said pixels of each said word being grouped in said stored texture in a pattern which extends over more than one pixel in multiple orthogonal directions;  
a frame-buffer memory for storing rendered primitives;  
and  
display circuitry for displaying the contents of said frame-buffer memory.

('584 patent col. 84, ll. 41–58.)

## B. Analysis

On October 28, 2015, the Court granted Plaintiff's Motion in Limine No. 3. The Order barred Samsung from using intrinsic evidence to support its position on the plain and ordinary meaning of a claim term at trial. (Dkt. No. 455 at 1–2.) This dispute, as to Dr. Kelly's testimony, is a variation on the Motion in Limine. The issue here is whether Dr. Kelly can form an opinion on the plain and ordinary meaning of a term using intrinsic evidence from the '584 patent. Plaintiff challenges the admissibility of Dr. Kelly's testimony on (1) the term "single memory location" ('584 patent col. 84, l. 27) and (2) the phrase "processor connected to said data bus" ('584 patent col. 84, l. 43).<sup>2</sup>

Dr. Kelly addresses the plain and ordinary meaning of the term "single memory location." (Dkt. No. 303-2 ¶¶105–9.) He asserts that the term means "a location within a single memory chip that is accessible with a single memory address and whose contents can be retrieved from the chip in a single read." (Dkt. No. 303-2 ¶108.) Dr. Kelly states that he determined the plain and ordinary meaning based on remarks the applicant made during patent prosecution. (Dkt. No. 303-2 ¶¶105–6, 108.) Specifically, Dr. Kelly claims that the applicant added "single memory location" to distinguish a claim from the Winser reference. (Dkt. No. 303-2 ¶105.) Dr. Kelly contends that when the applicant added "single memory location," the applicant intended to "equate[] 'memory location' with a part within a memory bank." (Dkt. No. 303-2 ¶105.)

Dr. Kelly also addresses the plain and ordinary meaning of the term "processor" and the phrase "processor connected to said data bus." (Dkt. No. 303-2 ¶¶294–95.) He says that the term

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<sup>2</sup> The Court treats all references to the '096 patent in the technical portions of Plaintiff's brief as inadvertent errors (*see* Dkt. No. 303 at 3, 4) because as far as the Court can tell Samsung retained Dr. Kelly as an expert on "non-infringement of United States Patent No. 6,111,584" (Dkt. No. 303-2).

“processor” means “a graphics processor that performs 3D rendering operations, such as texturing, decomposing primitives into fragments, and computing color and depth for fragments.” (Dkt. No. 303-2 ¶294.) He further says that the phrase “processor connected to said data bus” “requires [] the processor be *directly* connected to the data bus.” (Dkt. No. 303-2 ¶295.)

Dr. Kelly determined the plain and ordinary meaning of the term “processor” from the specification of the ’584 patent. He pointed to the abstract and a preferred embodiment, the GLINT processor, as showing the use of “processor.” The GLINT processor is a graphics processor that accelerates “3D rendering operations” “including Gouraud shading, texture mapping, depth buffering, anti-aliasing, and alpha blending.” (Dkt. No. 303-2 ¶294.) Dr. Kelly also determined the plain and ordinary meaning of the phrase “processor connected to said data bus” from the intrinsic record. He states that, based on the plain language of the claims, “a direct connection is [] necessary to give [] meaning to this limitation” because otherwise, “nearly all [] components, including a processor and memories, would be coupled or indirectly connected together through buses.” (Dkt. No. 303-2 ¶295.)

In *O2 Micro*, the Federal Circuit held that a district court must resolve a dispute between the parties when the dispute is “not [over] the *meaning* of the words themselves, but the *scope* that should be encompassed by th[e] claim language.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008). A “dispute over the scope of the asserted claims is a question of law,” *id.*, and a court cannot leave “the jury free to consider these arguments,” *id.* at 1362.

A party has made an improper claim construction argument to the jury when it elicits testimony that goes to the scope of a claim. For example, the Federal Circuit held the following

to be improper testimony on scope: “Actually, in my opinion, specification did not change. “Only if” [the disputed term], between my patent lawyer and examiner, they added in to try to clarify, make the entire invention more easier to understand. I think that’s what it is. To me, there’s no change to my original invention’s intent.” *O2 Micro*, 521 F.3d at 1362; *see also id.* (“I don’t think I gave up anything. I think it just make it clear that you and I can understand. Only when the lamp is lit . . . we control power at that time.”).

Dr. Kelly’s testimony on “single memory location,” “processor,” and “processor connected to said data bus” are claim construction arguments. The Court finds that under controlling precedent Dr. Kelly cannot serve as a conduit for putting these arguments to the jury. *O2 Micro*, 521 F.3d at 1361. An expert’s testimony on the plain meaning of terms should be based on his training and experience. He must view the terms in the context of their use in the patent but cannot rely on statements in the prosecution history to limit the ordinary meaning of the term. That is for the Court. Therefore, the Court rejects Dr. Kelly’s position on the plain and ordinary meaning of “single memory location,” “processor,” and “processor connected to said data bus.” These arguments were not raised as claim construction arguments and are unjustified under the claim construction principles of “lexicography” and “disclaimer.” *See GE Lighting Solutions, LLC v. AgriLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“The standards for finding lexicography and disavowal are exacting.”).

First, Dr. Kelly’s testimony on “single memory location” amounts to an improper disclaimer argument. “[A]n applicant can make a binding disavowal of claim scope in the course of prosecuting the patent, through arguments made to distinguish prior art references,” *Cordis Corp. v. Medtronic Ave, Inc.*, 511 F.3d 1157, 1177 (Fed. Cir. 2008), but “[s]uch argument-based

disavowals will be found [] only if they constitute clear and unmistakable surrenders of subject matter,” *id.*

Samsung points to an instance where the applicant added a term to distinguish a claim from the prior art (Dkt. No. 303-2 ¶105) but Samsung has not shown that the addition was an unmistakable surrender of scope on the term “single memory location.” Plaintiff, indeed, offers a better reading of the ’584 patent’s prosecution history. (Dkt. No. 303 at 3 (“The passage is more properly read as distinguishing Winsor based on the fact that it takes four addresses to read four texels and that a single address corresponds to a single memory location.”).)

Second, Dr. Kelly’s testimony on “processor” amounts to an improper disclaimer argument. He relies on the abstract of and a preferred embodiment in the ’584 patent to construe the term. But “Even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 632 F.3d 1246, 1254 (Fed. Cir. 2011) (quoting *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1381 (2009)).

Finally, Dr. Kelly’s testimony that the “processor connected to said data bus” must be “directly connected” conflicts with the claim language. Claim 4 of the ’584 patent does not use the word “directly” or use words that show the “processor” and the “data bus” must be “directly” connected. (’584 patent col. 84, ll. 41–58.) To the extent that Samsung raises an indefiniteness argument, the Court rejects that as well. *See Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015) (“Claim language employing terms of degree has long been found definite where it provided enough certainty to one of skill in the art when read in the context of the invention.”).

In sum, Dr. Kelly may not offer any testimony at trial that relies on a purported plain and ordinary meaning of “single memory location,” “processor,” or “processor connected to said data bus” that the Court rejected above. *See O2 Micro*, 521 F.3d at 1362 (“[C]laim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement.”) (quoting *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554 (1997)). However, the parties have not asked the Court to construe the terms, therefore, the plain and ordinary meaning still controls. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (“The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation.”).

## ***DAUBERT***

### **A. Background**

Plaintiff raises three *Daubert* challenges to the admissibility of Dr. Kelly’s testimony and Dr. Ugone’s testimony. First, Plaintiff contends that Dr. Kelly’s testimony on apportionment is unreliable. (Dkt. No. 303 at 5–8.) Second, Plaintiff asserts that Dr. Ugone’s testimony on apportionment hinges on Dr. Kelly’s unreliable testimony. (Dkt. No. 303 at 8–9.). Finally, Plaintiff argues that Dr. Ugone’s testimony on the effective royalty rate is unreliable. (Dkt. No. 303 at 9–10.)

### **B. Analysis**

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 inquiry envisioned by Rule 702 is . . . a flexible one,” but, in *Daubert*, the Supreme Court held that 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); *see also Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1321 (Fed. Cir. 2014) (“Experts routinely rely upon other experts hired by the party they represent for expertise outside of their field.”); *TQP Dev. LLC v. 1-800-Flowers.com, Inc.*, Case No. 2:11-cv-248-JRG, 2015 WL 6694116, at \*4 (E.D. Tex. Nov. 3, 2015) (“Dr. Becker was entitled to rely upon Dr. Jager’s technical analysis when constructing his damages model and presenting it to the jury.”).

“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).

#### **1. Dr. Kelly’s apportionment analysis and Dr. Ugone’s reliance on that analysis**

Plaintiff disclosed to Samsung in late-2013 that it owned 106 United States patents. (Dkt. No. 303-2 ¶339.) Dr. Kelly said that his analysis of these patents involved organizing them, including the Asserted Patents, into twelve categories.<sup>3</sup> (Dkt. No. 303-2 ¶340.) He created a process for organizing the patents. First, Dr. Kelly generated categories using the major steps of the graphics processing unit (GPU) workflow. (Dkt. No. 303-5 at 179:1–180:7.) Second, he considered where each patent fit as to the workflow categories. (Dkt. No. 303-5 at 179:8–13.) Third, he created a new category if a patent did not fit into a workflow category. (Dkt. No. 303-5 at 179:9–13.) Finally, in creating the categories, Dr. Kelly consulted with experts such as Dr. David Cummings, Mr. Ravi Cherukuri, and Dr. Andrew Mayo. (Dkt. No. 303-5 at 184:22–185:4.)

Plaintiff contends that Dr. Kelly’s method of organization is unreliable and should be excluded under *Daubert* for two reasons. First, Plaintiff asserts that Dr. Kelly’s iterative process

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<sup>3</sup> U.S. Patent No. 5,835,096 (the ’096 patent), the ’584 patent, and U.S. Patent No. 6,977,649 (the ’649 patent),

of organizing patents is unreliable because it can vary from day to day. (Dkt. No. 303 at 6.) Second, Plaintiff claims that Dr. Kelly’s method of selecting the single most innovative feature of each patent is unreliable because it does not consider the patents as a whole or the scope of the claims. (Dkt. No. 303 at 6–7.)

As to the first, Dr. Kelly categorized graphics-related patents into categories created from the steps of the graphics processing unit workflow. (Dkt. No. 303-5 at 179:1–180:7; *see id.* at 179:23–180:1 (“Sure. I mean, just look at the OpenGL pipeline, for example. Look at – look at the major steps in the GPU workflow. And that will come up with – with many of these categories.”).) This appears sufficiently reliable to the Court because of the technological nexus between the patents and the steps of the GPU workflow. Plaintiff can challenge the categorization process or the categories themselves on cross-examination. *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.”).

As to the second, Dr. Kelly categorized the patents by their single most innovative feature but did this without reviewing the claims in all of the patents. (Dkt. No. 303 at 6.) The Court finds Dr. Kelly’s method of categorizing patents adequate under *Daubert* because he at least considered the patent specification which relates to the claims. (Dkt. No. 322 at 10 (“As Dr. Kelly explained . . . the innovative feature was evident in its title, abstract, and summary of the inventions section.”)); *Ariad Pharms. Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (“[T]he test for sufficiency [of written description] is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.”). Plaintiff can challenge the adequacy of Dr. Kelly’s method of categorization and the effect of his method of categorization,

that is, a patent can only fit in one category, on cross examination. *See Summit 6*, 802 F.3d at 1296.

Finally, as to Dr. Ugone's reliance on Dr. Kelly's testimony, "Rule 703 explicitly allows an expert to rely on information he has been made aware of 'if experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject.'" *Apple*, 757 F.3d at 1321; *see TQP Dev.*, 2015 WL 6694116, at \*4. Plaintiff has not argued that Dr. Ugone's reliance on relevant and reliable testimony from Dr. Kelly would be unreasonable. (Dkt. No. 303 at 9.)

## **2. Dr. Ugone's effective royalty rate calculation**

Graphics Properties Holdings, Inc. (GPH) signed an agreement with third-party RPX on December 21, 2012. (Dkt. No. 303-7 ¶¶167–168.) The agreement includes at least two terms that are relevant to the dispute between Plaintiff and Samsung on the reliability of Dr. Ugone's testimony on apportionment.

The first term provides: "Subject to the terms hereof, GPH wishes to [] grant to the RPX Licensees . . . the Direct Patent License . . . under the Litigation Patents, Participant Patents, Transferred Patents and Licensable Patents." (Dkt. No. 322-6 ¶1.2.) The second term provides: "Subject to the terms hereof, GPH wishes to . . . sell, assign, transfer and convey all right, title and interest in and to the Samsung Patents (as defined below) to Samsung Electronics Co., Ltd." (Dkt. No. 322-6 ¶1.2.)

The agreement defines the following terms: (1) "RPX Licensees" means Samsung and other technology companies. (Dkt. No. 322-6 ¶2.48 ex.6); (2) "Transferred Patents" means United States and foreign patent and patent applications (Dkt. No. 322-6 ¶2.53 ex.8); and (3)

“Samsung Patents” means nineteen United States patent and patent applications. (Dkt. No. 322-6 ¶2.50 ex.12).

Plaintiff asserts that Dr. Ugone’s apportionment testimony “should [] be excluded insofar as he calculates his effective royalty [of the GPH license] by relying on worldwide sales.” (Dkt. No. 303 at 9.) Dr. Ugone erred, Plaintiff argues, because “[t]he parties’ agreement indicates an intent on the part of Samsung and RPX to negotiate for U.S. patents,” therefore, “[w]here the parties are negotiating for U.S. patents, apportionment between U.S. and worldwide sales is not necessary or appropriate.” (Dkt. No. 303 at 9–10.)

The Court rejects this argument because the RPX agreement speaks for itself. The RPX agreement consists of at least two parts: a United States and foreign patent-related transaction between GPH and RPX in paragraph 2.53 (Dkt. No. 322-6 ¶2.53 ex.8) and a United States patent-related transaction between GPH and Samsung in paragraph 2.50 (Dkt. No. 322-6 ¶2.50 ex.12). (Dkt. No. 322 at 14 (“The GPH license comprises two agreements that were both entered into on the same day (December 21, 2012): (1) an agreement between GPH and patent acquisition company RPX Corporation . . . and (2) a second related agreement between RPX and Samsung.”).) Dr. Ugone’s apportionment analysis which accounts for foreign patents is reliable under *Daubert* because it is consistent with certain terms of the agreement. Samsung can challenge the propriety of attributing a value to foreign patents on cross-examination. *See Summit 6*, 802 F.3d at 1296.

## CONCLUSION

Plaintiff ZiiLabs’ Opposed Motion to Strike Portions of the Expert Reports of Dr. John Kelly and Dr. Keith Ugone is **GRANTED-IN-PART** and **DENIED-IN-PART**. (Dkt. No. 303.) The Motion is **GRANTED** as to Dr. Kelly’s testimony on claim construction because controlling

Federal Circuit precedent bars him from presenting claim construction arguments to the jury, but the motion is **DENIED** as to the rest of his testimony. The Motion is **DENIED** as to Dr. Ugone's testimony.

**SIGNED this 8th day of December, 2015.**

  
ROY S. PAYNE  
UNITED STATES MAGISTRATE JUDGE