

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

BIO-RAD LABORATORIES, INC. and
THE UNIVERSITY OF CHICAGO,

Plaintiffs,

v.

10X GENOMICS, INC.,

Defendant.

C.A. No. 15-152-RGA

MEMORANDUM ORDER

Presently before the Court are Plaintiffs Bio-Rad Laboratories Inc. (“Bio-Rad”) and the University of Chicago’s Motions to Exclude Expert Testimony of Drs. Wilhelm Huck and John Quackenbush (D.I. 239, 240, 265, 293) and to Exclude Expert Testimony of Dr. Ryan Sullivan (D.I. 244, 245, 271, 294), and Defendant 10X Genomics, Inc.’s (“10X’s”) Motion to Exclude Expert Testimony of James E. Malackowski (D.I. 248, 249, 267, 287). I have considered the parties’ briefing.

I. BACKGROUND

On February 12, 2015, RainDance Technologies, Inc. (“RainDance”) and the University of Chicago filed suit against 10X alleging infringement of U.S. Patent Nos. 8,273,573 (“the ’573 patent”); 7,129,091 (“the ’091 patent”); 8,304,193 (“the ’193 patent”); 8,329,407 (“the ’407 patent”); 8,822,148 (“the ’148 patent”); and 8,889,083 (“the ’083 patent”) (collectively, “the Ismagilov patents”). (D.I. 1). On October 18, 2016, RainDance and the University of Chicago filed a third amended complaint in which they asserted the original Ismagilov patents except for

the '573 patent, and an additional patent on behalf of RainDance only. (D.I. 85). The RainDance patent was later dismissed. (D.I. 138). On May 30, 2017, Bio-Rad substituted for RainDance. (D.I. 180).

II. 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). Indeed, “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596.

III. ANALYSIS

A. Drs. Wilhelm Huck and John Quackenbush

Plaintiffs move to exclude the testimony of Drs. Huck and Quackenbush as based on impermissible claim constructions. (D.I. 240 at 2). “As expert testimony inconsistent with the Court’s claim construction is unreliable and unhelpful to the finder of fact, it should be excluded under the *Daubert* standard.” *EMC Corp. v. Pure Storage, Inc.*, 154 F. Supp. 3d 81, 109 (D. Del. 2016) (internal quotation marks and citations excluded). Plaintiffs argue that Drs. Huck and Quackenbush present non-infringement theories for the ’193 and ’407 patents based on improperly limiting the claims to reactions on a “chip” or “substrate.” (D.I. 240 at 6–7; *see also* D.I. 116 at 9–13). Specifically, Plaintiffs object to (1) Dr. Huck’s reliance on the claim preambles as limiting (D.I. 240 at 7–8; D.I. 241, Ex. 2 ¶¶ 156–77), and (2) Drs. Huck and

Quackenbush’s “channel” theory (D.I. 240 at 8–10; D.I. 241, Ex. 2 ¶¶ 318–38, Ex. 4 ¶¶ 208, 240, 242).

1. Preambles as Limiting

The ’193 and ’407 patent preambles refer to “an autocatalytic reaction in plugs in a microfluidic system” and “a reaction in plugs in a microfluidic system,” respectively. I previously found each preamble “limiting only to the extent that it provides an antecedent basis for the terms ‘microfluidic system’ and ‘reaction.’” (D.I. 116 at 12–13). I rejected Defendant’s proposed construction that each preamble limited the method such that the reaction must take place “in the substrate.”¹ (*Id.*). Plaintiffs thus allege that Dr. Huck testifies contrary to my construction by opining that Defendant does not infringe, because it carries out reactions, not in the substrate, but on a 96-well plate placed in a thermal cycler. (D.I. 240 at 7–8).

I disagree. The crux of Dr. Huck’s theory is not that the reaction must occur in the substrate, but that the reaction must occur in the microfluidic system, which does not include the 96-well plate and thermal cycler. (*See* D.I. 241, Ex. 2 ¶¶ 156–77 (“166. . . . For each of 10X’s products, once the droplets are mechanically removed from the microfluidic chip and mechanically transferred to a 96-well plate, the droplets cease to be part of the ‘microfluidic system.’ . . . 168. The thermal cycler is certainly not part of the ‘microfluidic system.’”)). Dr. Huck does not dispute my constructions of “microfluidic system” and “reaction.” (*See id.* ¶ 158 (“I understand that the Court has construed ‘microfluidic system’ as a ‘system comprised of at least one substrate having a network of channels of micrometer dimensions through which fluid may be transported.’ I also understand from the Court’s order that ‘[a] ‘microfluidic system’ is

¹ As discussed in the claim construction opinion, “devices are manufactured from one or more substrates and devices are used to build microfluidic systems.” (D.I. 116 at 6–7).

not limited to or the equivalent of a ‘substrate.’” I understand that the court has construed ‘reaction’ as a “‘physical, chemical, biochemical or biological transformation.’ The location of reactions is not limited to the substrate.” (internal citations omitted))). Instead, Dr. Huck opines that elements of Defendant’s product are not part of the “microfluidic system,” because they are not physically connected to the microfluidic chip or instrument. (*See id.* ¶¶ 159, 166–68). I already held in my Summary Judgment Order that, despite the claim construction, there remains a dispute of material fact as to the outer limits of the “microfluidic system” in the preamble. (D.I. 351 at 4–5). I expressly found a dispute of material fact regarding whether the thermal cycler in Defendant’s product meets the preamble. (*Id.* at 4). Therefore, it is proper for Dr. Huck to opine that the 96-well plate and thermal cycler are outside the scope of the “microfluidic system.”

2. The “Channel” Theory

Plaintiffs object to Drs. Huck and Quackenbush’s reliance on the “channel” theory—the argument that “the plug being substantially surrounded by an oil flowing through the channel” in claim 1 of the ’407 and ’193 patents requires reactions to occur while the plug is “flowing through the channel.” (D.I. 240 at 8–10). Both rely on this alleged limitation to support a finding of non-infringement. Dr. Huck opines that “Dr. Sia’s [infringement] analysis of ‘claim 1d’ fails to analyze a crucial element of claim 1 of the ’407 and ’193 patents: ‘the ‘reaction’ must take place within a ‘plug’ while the plug is ‘substantially surrounded by the immiscible carrier fluid flowing through the channel.’” (D.I. 241, Ex. 2 ¶ 320; *see also id.* ¶¶ 318–38). Dr. Quackenbush likewise finds that the relevant reaction “does not occur in ‘the at least one plug’ as required by step 1e of the ’193 and ’407 patents,” where “‘the at least one plug’ is a ‘plug being substantially surrounded by an oil flowing through the channel.’” (D.I. 241, Ex. 4 ¶ 208; *see*

also id. ¶¶ 240, 242). Plaintiffs assert that nothing in the claim language imposes a requirement that reactions must occur during the flow conditions that prevail during droplet formation. (D.I. 240 at 8–10).

I rejected Defendant’s argument in my Summary Judgment Order. In the prior summary judgment briefing, Defendant asserted that “the plug being substantially surrounded by the immiscible carrier fluid flowing through the channel” requires that the biological reaction occur in “the at least one plug” while “flowing through the channel.” (D.I. 351 at 4–5). I found this reading too limiting, and instead held, “The plain reading of the disputed language is that when the ‘at least one plug’ *is formed*, it is ‘substantially surrounded by the immiscible carrier fluid flowing through the channel.’” (*Id.* (emphasis added)). The disputed language does not bear on the location of the reaction. Therefore, it is inconsistent with my claim construction for Drs. Huck and Quackenbush to opine that the reaction must occur while the plug is “substantially surrounded by the immiscible carrier fluid flowing through the channel.” Their “channel” opinions are excluded.

B. Dr. Ryan Sullivan

Plaintiffs move to exclude Dr. Ryan Sullivan’s reasonable royalty opinions. Specifically, Plaintiffs object to Dr. Sullivan’s (1) reliance on a license agreement between the University of Chicago and RainDance (“the Chicago-RainDance Agreement”), and (2) methodology used to calculate royalty rates based on the same agreement. (D.I. 245 at 2–3).

1. The Chicago-RainDance Agreement

Dr. Sullivan identifies the Chicago-RainDance Agreement as the most comparable agreement to the license resulting from the hypothetical negotiation between RainDance and Defendant. (D.I. 246, Ex. 10 ¶ 186). Plaintiffs argue that the agreement cannot be considered

comparable, because “the University of Chicago is a university and not a competitor in the market for the accused and embodying products.” (D.I. 245 at 5–12).

“When relying on licenses to prove a reasonable royalty, alleging a loose or vague comparability between different technologies or licenses does not suffice.” *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 79 (Fed. Cir. 2012); *see also Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1327–32 (Fed. Cir. 2009) (finding reliance on license agreements “radically different” from a license resulting from the hypothetical negotiation weighed strongly against the jury’s lump-sum damages award). However, the “degree of comparability of [the agreements] as well as any failure on the part of [the expert] to control for certain variables are factual issues best addressed by cross examination and not by exclusion.” *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1333 (Fed. Cir. 2012).

Plaintiffs present that the University of Chicago is distinguishable from a for-profit company, like RainDance, because “the mission of the university is to disseminate knowledge.” Therefore, Plaintiffs allege that the royalty rates in the Chicago-RainDance Agreement are lower than what would have been agreed upon in the hypothetical negotiation. (D.I. 245 at 7–8). Defendant counters that Plaintiffs’ position is inconsistent with Dr. Sullivan’s report, which states that the University of Chicago retained a consultant to analyze and value the patents-in-suit and sought to license the technology to at least 20 companies that had commercialized microfluidics products. (D.I. 246, Ex. 10 ¶¶ 76–77). Plaintiffs do not cite any cases to support their argument that, as a rule, universities have different licensing goals than for-profit companies. I am not persuaded that any license with a university is so incomparable to a license with a for-profit company that related royalty testimony should be excluded.

Plaintiffs also argue that Dr. Sullivan’s reliance on the Chicago-RainDance Agreement is improper, because RainDance and Defendant were competitors during the time of the hypothetical negotiation, while the University of Chicago and RainDance were not. (D.I. 245 at 9–12). The central disagreement between the parties is whether RainDance and Defendant were competitors during the relevant period. (D.I. 271 at 11–15). This is a factual question best addressed through cross-examination.²

I find Dr. Sullivan provides sufficient reasons beyond “alleging a loose or vague comparability” to rely on the Chicago-RainDance Agreement. Dr. Sullivan explains that the agreement is comparable as it “includes relevant parties to the hypothetical negotiation, grants rights to the patents-in-suit for a field of use applicable to 10X as a licensee, was executed around the time of the hypothetical negotiation, and is an agreement between two non-competing parties.” (*Id.*). Therefore, Dr. Sullivan’s reasonable royalty testimony based on the Chicago-RainDance Agreement is proper.

2. Royalty Rate Calculations

Plaintiffs object to the adjustments Dr. Sullivan makes to the Chicago-RainDance Agreement royalty rates. Plaintiffs argue that both the “royalty stacking” adjustment and the “exclusivity” adjustment should be excluded for arbitrariness. (D.I. 245 at 13–16).

“[A]ny reasonable royalty analysis necessarily involves an element of approximation and uncertainty.” *Lucent*, 580 F.3d at 1325 (quoting *Unisplay, S.A. v. Am. Electronic Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995)). “And, while mathematical precision is not required, some explanation of both why and generally to what extent the particular factor impacts the royalty

² Any opinions I stated in connection with a motion to stay are meaningless for the *Daubert* issue.

calculation is needed.” See *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 31 (Fed. Cir. 2012) (discussing *Georgia-Pacific* factors). “But 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 and of the results produced thereunder belongs to the factfinder.” *Summit 6*, 802 F.3d at 1296.

Plaintiffs agree that royalty stacking provisions can reduce the royalty rate for a product subject to multiple royalty payments. (D.I. 245 at 14). Dr. Sullivan includes a 50% reduction to account for Defendant’s royalty payments to Harvard College and Matrix Technologies. (D.I. 246, Ex. 10 ¶¶ 258, 260). Plaintiffs argue that Dr. Sullivan applies the same reduction twice, because the Harvard agreement has its own royalty stacking provision that would have been triggered by the hypothetical agreement. (D.I. 245 at 14–15; see also D.I. 246, Ex. 8 at 201:15–203:8). Plaintiffs further argue that the use of 50% is arbitrary, because Dr. Sullivan merely selects the floor from a range of royalty stacking rates in the Chicago-RainDance Agreement. (D.I. 245 at 15). I find Dr. Sullivan provides reasonable support for his analysis, and thus Plaintiffs’ arguments go to the weight and credibility of his testimony. Dr. Sullivan explains in his report that the 50% rate is based on similar rates in existing agreements. (D.I. 264, Ex. 10 ¶ 260). Further, he opines that Plaintiffs oversimplify the relationship between different licenses affected by royalty stacking. Rather than “double benefiting” from the Harvard royalty stacking provision, Dr. Sullivan states that his hypothetical license rates “reflect relative contributions of technology.” (See D.I. 246, Ex. 8 at 201:15–204:9). Plaintiffs’ objections to the accuracy of Dr. Sullivan’s analysis may be explored during cross-examination.

Dr. Sullivan also applies a 50% reduction to account for exclusivity—the Chicago-RainDance Agreement was an exclusive license, while the license arising from the hypothetical

negotiation would be non-exclusive. Plaintiffs argue that this reduction is arbitrary. (D.I. 245 at 15–16). Again, I find Dr. Sullivan provides sufficient support for his calculations. Dr. Sullivan relies on an agreement between Stanford University and Defendant, which applied a 50% reduction in the royalty rate once 10X’s patent rights transitioned from exclusive to non-exclusive. (D.I. 246, Ex. 10 ¶ 261). Once more, Plaintiffs’ arguments go to the weight, not the admissibility, of Dr. Sullivan’s testimony.

C. James E. Malackowski

Defendant moves to exclude James E. Malackowski’s lost profits and reasonable royalties testimony as unreliable and irrelevant. (D.I. 249).

1. Lost Profits

Defendant objects to Mr. Malackowski’s lost profits testimony for (1) failure to offer a final opinion, (2) inadequate support for a two-supplier market, and (3) failure to apportion damages.

First, Defendant argues that Mr. Malackowski’s opinion should be excluded “for the simple fact that he has not offered a final opinion as to the amount of lost profits Bio-Rad would obtain.” (D.I. 249 at 9). In support, Defendant cites to a single district court case—*Dolphin v. Synthes (USA) Ltd.*, 2011 WL 1345334 (S.D.N.Y. Mar. 25, 2011). I find *Dolphin* inapposite. The court in *Dolphin* excluded an expert witness for failure to conduct tests that the same witnesses indicated were necessary to supplement his final report. *See id.* at *6–7. Here, Mr. Malackowski calculated a per-unit incremental profit expected for each sale Bio-Rad lost to Defendant. Mr. Malackowski opted for a per-unit figure pending the production of actual sales information. Mr. Malackowski also asserts that he has since supplemented his report to provide total profit

calculations. (D.I. 267 at 3; D.I. 269, Ex. 1 at 42:6–16). I expect Mr. Malackowski will have a final opinion by the time of trial.

Second, Defendant argues that Mr. Malackowski fails to provide adequate support for finding a two-supplier market. I believe Defendant objects to both the methodology and relevance of Mr. Malackowski's testimony on the basis that a two-supplier market does not fit with the facts of this case. (*See* D.I. 249 at 10–13). Defendant asserts that the evidence shows there were additional participants in the market. (*Id.*). Plaintiffs argue that the evidence shows Bio-Rad and Defendant were the only relevant participants. (*See* D.I. 267 at 4). I find the actual number of market participants to be a factual issue that should be addressed in cross-examination.

Defendant also argues that Mr. Malackowski failed to conduct a suitable “market reconstruction.” Defendant alleges that, to show “but for” causation and entitlement to lost profits, Federal Circuit law requires a “market reconstruction” with “sound economic proof of the nature of the market.” (D.I. 249 at 9 (citing *Crystal Semiconductor Corp. v. TriTech Microelectronics Int’l, Inc.*, 246 F.3d 1336, 1355 (Fed. Cir. 2001))). It is well accepted that lost profits may be awarded “based on a wide variety of reconstruction theories where the patentee has presented reliable economic evidence of ‘but for’ causation.” *Crystal Semiconductor*, 246 F.3d at 1355. Defendant argues that under *Presidio Components, Inc. v. American Technical Ceramics, Corp.*, a lost profits analysis must address “whether a non-infringing alternative would be acceptable compared to the patent owner’s product, not whether it is a substitute for the infringing product.” 875 F.3d 1369, 1381 (Fed. Cir. 2017). Defendant argues that Mr. Malackowski’s testimony is wrong as a matter of law, because he failed to “reconstruct the entire market without 10X’s products to determine whether [other products on the market] would be an

acceptable alternative to Bio-Rad's ddSEQ." (D.I. 287 at 2). Defendant's argument thus depends on the existence of a non-infringing alternative. Mr. Malackowski determined that there were no non-infringing alternatives as the relevant market only had two products—Defendant's Genomics Chromium and Bio-Rad's ddSEQ. Therefore, Defendant's argument under *Presidio* again goes to the validity Mr. Malackowski's two-supplier market theory.

Third, Defendant argues that Mr. Malackowski's testimony should be excluded for failure to apportion the lost profits attributable to the patented technology. (D.I. 249 at 13–14). Plaintiffs allege that Mr. Malackowski has taken apportionment into account through his consideration of the *Panduit* factors by finding a two-supplier market. (D.I. 267 at 9–10 (citing *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1287–88 (Fed. Cir. 2017))). "In the two-supplier market, it is reasonable to assume, provided the patent owner has the manufacturing and marketing capabilities, that it would have made the infringer's sales." *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1578 (Fed. Cir. 1989). Again, Defendant's argument turns on whether Mr. Malackowski properly determined the existence of a two-supplier market.

The underlying theme of Defendant's arguments is that Mr. Malackowski failed to provide "sound economic proof" for his two-supplier market theory. The Federal Circuit has held that the first step in a two-supplier market test is to define the relevant market. The relevant market includes the patented invention, as well as "other devices or substitutes similar in physical and functional characteristics to the patented invention. It excludes, however, alternatives 'with disparately different prices or significantly different characteristics.'" *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1124–25 (Fed. Cir. 2003) (quoting *Crystal Semiconductor*, 246 F.3d at 1356). Notably, "the patentee often must adduce economic data supporting its theory of the relevant market in order to show 'but for' causation." *See Grain*

Processing Corp. v. Am. Maize-Prods. Co., 185 F.3d 1341, 1354 (Fed. Cir. 1999); *see also* *Linear Tech. Corp. v. Micrel, Inc.*, 2006 WL 8425047, at *80 (N.D. Cal. June 9, 2006).

Defendant has presented several devices by other suppliers that it alleges are part of the relevant market. (D.I. 249 at 9–11). Mr. Malackowski has not provided any analysis to support his contrary finding that the market is limited to Defendant and Bio-Rad’s products. Rather, Mr. Malackowski simply states that based on his review of the technical expert’s report, he understands that “the Patents-in-Suit disclose technologies that are foundational to the industry generally and to the Accused Products specifically. As a result, [he understands] that there are no acceptable non-infringing alternatives.” (D.I. 250, Ex. 1 at 19). This is a conclusory statement and insufficient to show the existence of a two-supplier market.

In addition, Mr. Malackowski opines “but for” causation exists, because “within their particular market segment, 10X and Bio-Rad are essentially the only two suppliers of single cell products, and are head-to-head competitors in that two-supplier market.” (D.I. 250, Ex. 1 at 19). In support, Mr. Malackowski relies on qualitative evidence describing Bio-Rad and Defendant as competitors, including charts showing an overview of the “Competitive Landscape,” and Bio-Rad employee and expert testimony. (*Id.* at 19–23; *see also* D.I. 267 at 4–5). Mr. Malackowski does not appear to rely on any economic or financial data. It is not clear to me why Mr. Malackowski, as an economics expert, is better equipped than the finder of fact to interpret such qualitative evidence. I find Mr. Malackowski’s testimony regarding the two-supplier market to be divorced from any economic analysis, and therefore to be excludable.

1. Reasonable Royalties

Defendant objects to Mr. Malackowski's reasonable royalty testimony for (1) use of unreliable methodology, (2) being inconsistent with the facts of this case, and (3) failure to apportion damages. (D.I. 249 at 14–20).

First, Defendant objects to Mr. Malackowski's selection of three comparable license agreements. (*Id.* at 15). As discussed with respect to Dr. Sullivan, beyond “alleging a loose or vague comparability” between licenses, the “degree of comparability” and any failure to “control for certain variables” are factual issues best addressed by cross examination. *See LaserDynamics*, 580 F.3d at 1327–32; *ActiveVideo*, 694 F.3d at 1333. Mr. Malackowski provides reasonable and specific explanations for selecting the agreements he did. (*See* D.I. 267 at 10–11). Thus, Mr. Malackowski does more than allege a “loose or vague comparability,” and his testimony in reliance on the agreements is proper.

Defendant also argues that Mr. Malackowski's methodology is unreliable, because he fails to adjust the royalty rates from the selected agreements. Specifically, Defendant asserts that Mr. Malackowski engaged in a “superficial recitation of the *Georgia-Pacific* factors, followed by conclusory remarks,” insufficient to render the testimony reliable. (D.I. 249 at 15–16 (quoting *Whitserve*, 694 F.3d at 31)). Plaintiffs respond that Mr. Malackowski should not be penalized for declining to make arbitrary adjustments. (D.I. 267 at 11–12). It is well established that estimating a reasonable royalty is not an “exact science.” *Summit 6*, 802 F.3d at 1296. Here, Mr. Malackowski discusses each *Georgia-Pacific* factor, makes an individual determination of its effect on the reasonable royalty, and finds the factors together do not warrant adjusting the royalty rate. (D.I. 250, Ex. 1 at 38–51). I find Mr. Malackowski's analysis goes beyond a “superficial recitation” of the factors and thus is proper.

Second, Defendant argues that Mr. Malackowski's reasonable royalty opinions should be excluded as inconsistent with the facts of this case. (D.I. 249 at 16–19). As stated, Defendant's objections to license comparability are best addressed in cross-examination. Defendant also argues for exclusion based on Mr. Malackowski's failure to account for royalty stacking. (*Id.* at 18). Defendant argues that under *AVM Technologies, LLC v. Intel Corp.*, Mr. Malackowski is required to discuss royalty stacking to provide context for the parties' hypothetical negotiations. 2017 WL 1787561 (D. Del. May 1, 2017). Defendant mischaracterizes my opinion in *AVM*. I did not require the expert at issue to discuss royalty stacking, but merely noted that he chose to do so. *See id.* at *3. Finally, Defendant argues that Mr. Malackowski improperly finds Defendant and RainDance were competitors. (D.I. 249 at 18–19). As discussed with respect to Dr. Sullivan, the disagreement over whether the companies were competitors during the time of the hypothetical negotiation goes to the credibility, not the admissibility, of the expert's testimony.

Third, Defendant argues that Mr. Malackowski's reasonable royalty opinion should be excluded for failure to apportion damages. (D.I. 249 at 19–20). A reasonable royalty award “must be based on the incremental value that the patented invention adds to the end product.” *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226–27 (Fed. Cir. 2014). The parties agree that the products at issue have non-infringing aspects. (*See* D.I. 250, Ex. 1 at 50). It is further undisputed that Mr. Malackowski does not identify the smallest salable patent-practicing unit in order to conduct an apportionment analysis. Plaintiffs argue, however, that Mr. Malackowski properly accounted for apportionment through the selection of royalty rates from comparable license agreements. (D.I. 267 at 18–20).

The Federal Circuit does not limit apportionment to specific methodologies, because flexibility is required to determine fact-dependent damages. *See, e.g., Ericsson*, 773 F.3d at 1226; *Commonwealth Sci. & Indus. Research Org. v. Cisco Sys.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015). As a methodology, I see no problem with using comparable licenses to establish a reasonable royalty rate, without performing a separate apportionment analysis, where there is a logical basis for doing so. *See Commonwealth*, 809 F.3d at 1302–03 (Fed. Cir. 2015) (finding the district court’s analysis of the reasonable royalty based on a prior negotiation between the parties “already built in apportionment” without analysis of the smallest salable unit); *Intel Corp. v. Future Link Sys., LLC*, 2017 WL 2482881, at *1–2 (D. Del. June 1, 2017) (finding an expert’s reasonable royalty opinion based on comparable licensing negotiations without a separate apportionment analysis consistent with the Federal Circuit’s approved methodology).

I am dubious, however, of Mr. Malackowski’s execution. In his report, Mr. Malackowski simply states that apportionment “would have been considered by the parties to the various agreements referenced throughout this report,” and “[a]s a result, this apportionment has largely already been taken into consideration through the selection of the quantitative royalty indicators I have referenced.” (D.I. 250, Ex. 1 at 50).

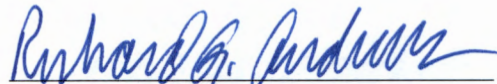
The Federal Circuit has repeatedly emphasized the importance of apportionment as part of a district court’s gatekeeping function. *See VirnetX, Inc. v. Cisco, Sys.*, 767 F.3d 1308, 1328 (Fed. Cir. 2014) (“[T]he district court should have exercised its gatekeeping authority to ensure that only theories comporting with settled principles of apportionment were allowed to reach the jury.”); *see also Commonwealth*, 809 F.3d at 1301–02; *Ericsson*, 773 F.3d at 1226–27. Allowing Mr. Malackowski’s cursory analysis to circumvent the apportionment requirement would

effectively gut the doctrine.³ Therefore, I find Mr. Malackowski's reasonably royalty opinion improper for failure to account for apportionment.

IV. CONCLUSION

For the foregoing reasons, Plaintiffs' motion to exclude testimony of Drs. Huck and Quackenbush (D.I. 239) is **GRANTED-IN-PART** and **DENIED-IN-PART**, Plaintiffs' motion to exclude testimony of Dr. Sullivan (D.I. 244) is **DENIED**, and Defendant's motion to exclude testimony of Mr. Malackowski (D.I. 248) is **GRANTED-IN-PART** and **DENIED-IN-PART**.

IT IS SO ORDERED this 28 day of September 2018.


United States District Judge

³ Further, the fact that the parties to each agreement incorporated the concept of apportionment into their reasonable royalties does not itself show that the same royalty rates apply here. For example, one comparable agreement might provide a 15% reasonable royalty where the patented technology accounts for 50% of a product. A second comparable agreement might provide a 3% reasonable royalty where the patented technology accounts for 10% of a different product. Both rates are apportioned, but further analysis is required to determine whether either rate is apportioned in a comparable fashion to the contribution of the patented technology to the accused products.