IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

GUARDANT HEALTH, INC., Plaintiff, v. FOUNDATION MEDICINE, INC., Defendant.	)	Civil Action No. 17-1616-LPS-CJB
GUARDANT HEALTH, INC., Plaintiff, v. PERSONAL GENOME DIAGNOSTICS, INC., Defendant.	)	Civil Action No. 17-1623-LPS-CJB

REPORT AND RECOMMENDATION

In these two related actions filed by Plaintiff Guardant Health, Inc. ("Guardant") against Defendants Foundation Medicine, Inc. ("FMI") and Personal Genome Diagnostics, Inc. ("PGDx" and collectively with FMI, "Defendants"), Guardant alleges infringement of United States Patent Nos. 9,598,731 (the "'731 patent"), 9,834,822 (the "'822 patent"), 9,840,743 (the "'743 patent") and 9,902,992 (the "'992 patent" and collectively with the other patents, "the asserted patents"). This Report and Recommendation addresses: (1) those portions of Guardant's Motion for Summary Judgment ("MSJ"), filed pursuant to Federal Rule of Civil Procedure 56, that relate to Defendants' inventorship defenses and inequitable conduct counterclaims (the "inventorship MSJ"), (Civil Action No. 17-1616-LPS-CJB, D.I. 291; Civil Action No. 17-1623-LPS-CJB, D.I. 434); (2) those portions of Guardant's MSJ that relate to PGDx's antitrust counterclaims (the "antitrust MSJ"), (*id*.); (3) Guardant's *Daubert* motion seeking to exclude the testimony of

PGDx's damages expert Dr. Bradley Reiff ("Guardant's *Daubert* Motion"), filed pursuant to Federal Rule of Evidence 702, (Civil Action No. 17-1623-LPS-CJB, D.I. 435); and (4) FMI's *Daubert* motion, also filed pursuant to Rule 702, which seeks to exclude the damages opinions of Guardant's expert, Dr. Stephen L. Becker, and the related opinions of its infringement expert, Dr. Gregory Cooper ("FMI's *Daubert* Motion"), (Civil Action No. 17-1616-LPS-CJB, D.I. 300). For the reasons that follow, the Court recommends that Guardant's inventorship MSJ be DENIED and that Guardant's antitrust MSJ be GRANTED-IN-PART and DENIED-IN-PART, and it orders that Guardant's *Daubert* Motion be DENIED and that FMI's *Daubert* Motion be GRANTED.[1]

I. PROCEDURAL BACKGROUND AND STANDARD OF REVIEW

A. Procedural Background

Guardant commenced these actions on November 9, 2017. (D.I. 1) The cases were thereafter referred to the Court to hear and resolve all pretrial matters, up to and including case-dispositive motions. (Civil Action No. 17-1616-LPS-CJB, D.I. 5; Civil Action No. 17-1623-LPS-CJB, D.I. 4) Briefing on all summary judgment and *Daubert* motions in the cases was completed on January 16, 2020, and the Court heard oral argument on those motions on January 23, 2020. (D.I. 530 ("Tr."))

B. Standard of Review

1. Summary Judgment

[1] For simplicity's sake, the Court will hereafter refer solely to the "D.I." number in Civil Action No. 17-1623-LPS-CJB, unless otherwise indicated.

A grant of summary judgment is appropriate where "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. *See Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 585-86 n.10 (1986). If the moving party meets this burden, the nonmovant must then demonstrate that there is a genuine issue of material fact that prevents grant of the motion. *Id.* at 587; *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986). If the nonmoving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23 (1986). During this process, the Court will "draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence." *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

2. *Daubert* Motions

Rule 702 governs the admissibility of qualified expert testimony, providing that an expert witness may testify 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. Rule 702's requirements were examined in detail in *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), and have been said to embody "three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit." *Elcock v. Kmart Corp.*, 233 F.3d 734, 741 (3d Cir. 2000); *see also B. Braun Melsungen AG v. Terumo Med. Corp.*, 749 F. Supp. 2d 210, 222 (D. Del. 2010).

As to the above-referenced *Daubert* motions, at issue is the reliability and/or "fit" of the proposed expert testimony. With regard to the reliability requirement, Rule 702 mandates that the relevant expert testimony "must be supported by appropriate validation—*i.e.*, 'good grounds,' based on what is known." *Daubert*, 509 U.S. at 590; *see also Schneider ex rel. Estate of Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003). Such testimony should amount to "more than subjective belief or unsupported speculation[,]" and a court's focus in examining this factor must be on "principles and methodology" rather than on the expert's conclusions. *Daubert*, 509 U.S. at 590, 595; *see also Daddio v. Nemours Found.*, 399 F. App'x 711, 713 (3d Cir. 2010). As to the "fit" requirement, it "goes primarily to relevance" as the testimony must "assist the trier of fact to understand the evidence or to determine a fact in issue" and have "a valid . . . connection to the pertinent inquiry as a precondition to admissibility." *Daubert*, 509 U.S. at 591-92 (internal quotation marks and citations omitted); *see also Schneider*, 320 F.3d at 404. The standard for fit, however, is "not high; it is met when there is a clear 'fit' connecting the issue in the case with the expert's opinion that will aid the jury in determining an issue in the case." *Meadows v. Anchor Longwall & Rebuild, Inc.*, 306 F. App'x 781, 790 (3d Cir. 2009) (citations omitted).[2]

II. DISCUSSION

A. Guardant's Inventorship MSJ

[2] The Court has fairly wide discretion in determining whether to admit or exclude expert testimony. *See Pineda v. Ford Motor Co.*, 520 F.3d 237, 243 (3d Cir. 2008). Overall, "Rule 702 embodies a 'liberal policy of admissibility.'" *B. Braun*, 749 F. Supp. 2d at 222 (quoting *Pineda*, 520 F.3d at 243). The burden is placed on the party offering expert testimony to show that it meets each of the standards for admissibility. *Id.* (citing *Daubert*, 509 U.S. at 592 n.10).

The Court first addresses Guardant's inventorship MSJ, which relates to: (1) Defendants' inventorship allegations; (2) Defendants' inequitable conduct allegations relating to all of the asserted patents other than the '992 patent ("the Talasaz patents"); and (3) Defendants' inequitable conduct allegations relating to the '992 patent. Below, the Court sets out some facts relevant to each of these issues.

In the currently-operative Third Amended Complaints, Guardant alleges that Defendants' liquid biopsy tests infringe claims of the asserted patents. (Civil Action No. 17-1616-LPS-CJB, D.I. 149 at ¶¶ 4, 14-24; Civil Action No. 17-1623-LPS-CJB, D.I. 280 at ¶¶ 6, 17-28) The asserted patents relate to methods for identifying genetic material harboring cancer-causing mutations from a patient's blood. (*See* D.I. 59 at 1) Each of the patents is titled "Systems and Methods to Detect Rare Mutations and Copy Number Variation." (D.I. 53, exs. C-F)[3] The Talasaz patents share a common specification ("the specification"), and the '992 patent has a similar specification. (*See* D.I. 75, ex. 1 at Slide 4)

Dr. Helmy Eltoukhy and Dr. AmirAli Talasaz, the founders of Guardant, met in the early 2000s when they were Ph.D. students at Stanford University. (D.I. 461, ex. 20 at 76) By March 2009, both were employed by Illumina. (D.I. 462, exs. 40-41) Both men signed agreements with Illumina stating that, *inter alia*, all inventions that they made, conceived, reduced to practice or developed (in whole or in part, either alone or jointly with others) during their employment shall be the sole property of Illumina. (*Id.*, ex. 40 at ILL_GUARD0000004; *id.*, ex. 41 at

[3] The asserted patents appear on the docket in this action more than once. Citations to the patents will simply be to the '731 patent, '822 patent, '743 patent and '992 patent.

ILL_GUARD0000017) In 2011, while still employed by Illumina, Dr. Eltoukhy and Dr. Talasaz founded Guardant. (D.I. 461, ex. 24 at 10; D.I. 462, ex. 48; *id.*, ex. 55)

On June 25, 2012, Dr. Talasaz resigned from Illumina. (D.I. 462, exs. 66-67) The same day, Dr. Eltoukhy indicated that he would be on "non extended [paid time off from Illumina] for" most of July. (*Id.*, ex. 68 at GUARDFM00968319)

Two days later, on June 27, 2012, Dr. Eltoukhy emailed an Illumina employee, Frank Steemers, asking if he had "the presentation where you show the random coding improvement in error rate" because Dr. Eltoukhy was "thinking about creating some Matlab models for some communication theory ideas" that he had on how to decode barcodes more effectively. (*Id.*, ex. 72 at GUARDFM00276787) Dr. Steemers replied by sending a few Illumina slides (the "Steemers Presentation"). (*Id.* at GUARDFM00276786-87) Two minutes later, Dr. Eltoukhy forwarded the slides to his personal Gmail account, (*id.*, ex. 70), and immediately thereafter to Dr. Talasaz's personal Gmail account, (*id.*, ex. 71). Dr. Eltoukhy then requested additional slides from Dr. Steemers, which he then also forwarded to his and Dr. Talasaz's personal Gmail accounts. (*Id.*, exs. 69, 73-75) The day after that, June 28, 2012, Dr. Eltoukhy and Dr. Talasaz met with a potential Guardant consultant, and they discussed the use of "tags" to perform molecular counting and "next generation sequencing technology" to analyze cancer by "sampling blood rather than through analyzing biopsied material." (*Id.*, ex. 76)

Guardant contends that Dr. Talasaz conceived of the inventions recited in the Talasaz patents in "July 2012." (D.I. 461, ex. 25 at 5) On January 2 or 3, 2013, Dr. Eltoukhy left Illumina and joined Guardant. (D.I. 441, ex. 7 at 23)

Meanwhile, on September 12, 2012, Guardant filed U.S. Provisional Application No. 61/696,734 (the "'734 Provisional"), identifying Dr. Talasaz as the sole inventor. (D.I. 460, ex.

2) The Talasaz patents claim priority to the '734 Provisional. (D.I. 437 at 5; D.I. 456 at 5) The fourth patent asserted in this case, the '992 patent, lists both Dr. Talasaz and Dr. Eltoukhy as inventors. (D.I. 460, ex. 15 at 1)[4] Guardant asserts that the '992 patent derives priority from U.S. Provisional Application 61/948,530, which was filed on March 5, 2014. (D.I. 437 at 19; D.I. 499 at 8)[5]

1. Inventorship

The Talasaz patents list Dr. Talasaz as the sole inventor. ('731 patent at 1; '822 patent at 1; '743 patent at 1; D.I. 284 at 25 at ¶ 38) Defendants assert that the Talasaz patents are invalid because Dr. Eltoukhy jointly conceived of the inventions claimed therein with Dr. Talasaz, but was not identified as a co-inventor on these patents. (*See, e.g.*, D.I. 284 at 16-17, 20-21, 25 at ¶¶ 19, 28-30, 38) Dr. Eltoukhy was intentionally not named as an inventor, Defendants allege, because: (1) he was still employed by Illumina when the two men conceived of the invention; and (2) he and Dr. Talasaz wanted to ensure that Guardant (and not Illumina) would have full ownership and exclusive rights to the Talasaz patents. (*Id.* at 25 at ¶ 39)

With its Motion, Guardant asserts that Defendants cannot demonstrate by clear and convincing evidence that Dr. Eltoukhy is a co-inventor of the Talasaz patents, and that Defendants' inventorship defense must therefore fail as a matter of law. (D.I. 437 at 8-16; D.I. 499 at 2-7)

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[4] Guardant asserts that the '992 patent also names Dr. Stefanie Mortimer as an inventor. (D.I. 437 at 16 (citing D.I. 20, ex. 4)) The "[i]nventors" section of the '992 patent lists only Dr. Talasaz and Dr. Eltoukhy as inventors.

[5] Defendants dispute this and assert that the '992 patent derives priority from the '734 Provisional. (*See* D.I. 456 at 19 & n.27, 21 & n.30)

The Court will first set out the legal standard with regard to inventorship, and will then turn to the merits.

a. Legal Standard

"A patent is invalid if more or less than the true inventors are named." *Trovan, Ltd. v. Sokymat SA, Irori*, 299 F.3d 1292, 1301 (Fed. Cir. 2002). Inventorship is a question of law with underlying factual issues. *Checkpoint Sys., Inc. v. All-Tag Sec. S.A.*, 412 F.3d 1331, 1338 (Fed. Cir. 2005); *see also Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1473 (Fed. Cir. 1997) ("The determination of whether a person is a joint inventor is fact specific[.]"). Because there is a presumption that the inventors named on an issued patent are correct, nonjoinder of inventors must be proven by clear and convincing evidence. *Falana v. Kent State Univ.*, 669 F.3d 1349, 1356 (Fed. Cir. 2012). At the summary judgment stage, if there is a genuine issue of material fact regarding the issue of joint inventorship in light of the evidence submitted by the parties, then summary judgment should not be granted. *Checkpoint Sys.*, 412 F.3d at 1334; *Fina Oil*, 123 F.3d at 1474.

Conception is the touchstone of inventorship, which requires a definite and permanent idea of the complete and operative invention. *Tavory v. NTP, Inc.*, 297 F. App'x 976, 979 (Fed. Cir. 2008) (citations omitted). A joint inventor must contribute to the invention's conception. *CODA Dev. S.R.O. v. Goodyear Tire & Rubber Co.*, 916 F.3d 1350, 1358 (Fed. Cir. 2019); *Fina Oil*, 123 F.3d at 1473 ("[T]o be a joint inventor, an individual must make a contribution to the conception of the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention."). However, a joint inventor need not "make the same type or amount of contribution" to the invention nor contribute to every claim; a contribution to one claim is enough. *CODA Dev. S.R.O.*, 916 F.3d at 1358 (internal quotation

marks and citations omitted); *see also Vanderbilt Univ. v. ICOS Corp.*, 601 F.3d 1297, 1303 (Fed. Cir. 2010) ("[E]ach contributor need not have their own contemporaneous picture of the final claimed invention in order to qualify as joint inventors."). There is no "explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor." *Fina Oil*, 123 F.3d at 1473. Rather, a joint invention is the product "of a collaboration between two or more persons working together to solve the problem addressed." *Id.*; *see also CODA Dev. S.R.O.*, 916 F.3d at 1359; *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1359 (Fed. Cir. 2004) ("Joint inventorship . . . can only arise when collaboration or concerted effort occurs—that is, when the inventors have some open line of communication during or in temporal proximity to their inventive efforts[.]") (citation omitted). Evaluating joint inventorship has been described as "one of the muddiest concepts in the muddy metaphysics of patent law." *In re VerHoef*, 888 F.3d 1362, 1365 (Fed. Cir. 2018) (internal quotation marks and citation omitted).

b. Analysis

The Court agrees with Defendants that there are genuine disputes of material fact regarding whether and the extent to which Dr. Eltoukhy made an inventive contribution to the Talasaz patents.

For example, Defendants assert that Dr. Eltoukhy conceived of an alleged "communication theory" solution that is a key feature of the Talasaz patents. And there is evidence to support this assertion.

The specification of the '731 patent refers to "communication theory[,]" explaining that:

> *Polynucleotide sequencing can be compared with a problem in communication theory.* A[] . . . polynucleotide . . . is thought of as an original message. Tagging and/or amplifying can be thought of

> as encoding the original message into a signal. Sequencing can be thought of as communication channel. The output of a sequencer, e.g., sequence reads, can be thought of as a received signal. Bioinformatic processing can be thought of as a receiver that decodes the received signal to produce a transmitted message, e.g., a nucleotide sequence or sequences. The received signal can include artifacts, such as noise and distortion. Noise can be thought of as an unwanted random addition to a signal. Distortion can be thought of as an alteration in the amplitude of a signal or portion of a signal. . . .
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> *Collapsing sequence reads into a consensus sequence is one way to reduce noise in the received message from one molecule. . . . With respect to an ensemble of molecules, grouping reads into families and determining a quantitative measure of the families reduces distortion, for example, in the quantity of molecules at each of a plurality of different loci. Again, collapsing sequence reads of different families into consensus sequences eliminate errors introduced by amplification and/or sequencing error.*

('731 patent, cols. 31:15-28, 32:6-16 (emphasis added)) Pursuant to this description, the communication theory idea (as utilized in the context of the inventions) speaks to the steps of, *inter alia*, "grouping reads" into "families" and "[c]ollapsing sequence reads into a consensus sequence[.]" (*See* D.I. 456 at 6) Guardant's July 30, 2012 invention summary states that if "molecular tracking is used[,] [c]ollapse all the same-molecule derived reads into a consensus read" to "reduce biases introduced in amplification[.]" (D.I. 462, ex. 82 at GUARDFM00482826; Defendants' Summary Judgment Presentation, Slide DSJ 68; *see also* D.I. 461, ex. 33 at ¶¶ 397-98) And these communication theory steps are reflected in the claims of the Talasaz patents. (*See* D.I. 456 at 6) For example, claim 1 of the '731 patent recites, *inter alia*, "comparing the sequence reads grouped within each family to each other to determine consensus sequences for each family[.]" ('731 patent, col. 62:37-39) Claim 1 of the '822 patent

recites, among other steps, "collapsing sequence reads in each family to yield a base call for each family at the genetic locus[.]" ('822 patent, col. 62:44-46)[6]

Defendants also point to evidence linking *Dr. Eltoukhy* to the utilization of this communication theory as it relates to the asserted patents. (D.I. 456 at 6) As described above, Dr. Eltoukhy requested the Steemers Presentation "show[ing] random coding improvement in error rate" in relation to "some *communication theory* ideas" that he had. (D.I. 462, ex. 72 at GUARDFM00276787 (emphasis added)) The Steemers Presentation slides, in turn, refer to the concepts of: (1) "[g]roup[ing] reads with same barcode[;]"; (2) [c]ollaps[ing] reads into a single, accurate consensus sequence"; and (3) the "[b]arcode[s] . . . mak[ing] each molecule unique[.]" (*Id.* at GUARDFM00276786-87; *see also* D.I. 456 at 3-4) In August 2012, Dr. Eltoukhy forwarded an e-mail to Dr. Talasaz for his review that summarized a discussion Dr. Eltoukhy had with someone regarding Guardant's "[k]ey [a]ttributes" which includes "[u]se of communication theory informatics via 'error-correcting codes' to achieve great sensitivity[.]" (D.I. 462, ex. 83) And in February 2013 (one month after he had left employment at Illumina), Dr. Eltoukhy explained in an email that *he and Dr. Talasaz* built a "communication-theoretic signal processing workflow" that allows them to "error-correct to arbitrary levels of accuracy[.]" (*Id.*, ex. 85)

This evidence (along with other evidence cited by Defendants) is easily sufficient to establish a genuine issue of material fact as to the significance of the Steemers Presentation (and Dr. Eltoukhy's related contribution) to inventorship of the Talasaz patents.[7]

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[6] Claim 1 of the '992 patent, on which Dr. Eltoukhy is listed as an inventor, recites this same step. ('992 patent, col. 64:32-34)

[7] Guardant argues that the above-cited evidence is wanting, asserting that Defendants only cited to a single e-mail from Dr. Eltoukhy (the one in which he requested the Steemers Presentation) in support of their assertion that Dr. Eltoukhy contributed a

In arguing to the contrary, Guardant asserts that Dr. Eltoukhy's forwarding of the Steemers Presentation to Dr. Talasaz cannot amount to evidence of Dr. Eltoukhy's joint inventorship because: (1) he did not create or write the documents; and (2) the Steemers Presentation simply reflects an approach that was already disclosed in the prior art. (D.I. 437 at 11-12; D.I. 499 at 4-5) But as to Guardant's first point, the law does not require that Dr. Eltoukhy need have written or created the Steemers Presentation for it to constitute evidence of inventorship.[8] And as to Guardant's second point, it is undisputed that the Steemers Presentation did not disclose applying its described method to cell-free DNA (or "cfDNA"). (*See, e.g.*, D.I. 461, ex. 31 at ¶ 430; *id.*, ex. 33 at ¶ 411) And *that* is really the crux of Defendants' position—that Dr. Eltoukhy, working with Dr. Talasaz, "applied this 'communication theory' to the analysis of cell-free DNA[.]" (D.I. 456 at 17)[9] Indeed, Guardant has pointed to this application

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communication theory to the inventions, and that the e-mail's "vague reference" to a "communication theory" is insufficient to tie that theory to the claims of the Talasaz patents. (D.I. 499 at 2-3; Tr. at 188-89) But in the Court's view, Defendants' evidence is robust enough and it *does* neatly set out this tie: (1) Dr. Eltoukhy's e-mail tells us the Steemers Presentation slides relate to a "communication theory"; (2) we know that that the slides (which Dr. Eltoukhy quickly forwarded to Dr. Talasaz) refer to specific concepts such as grouping reads and collapsing reads to get a consensus sequence; (3) we know that the specifications of the Talasaz patents then describe these concepts as solving a problem in "communication theory"; (4) we know that these concepts are reflected in the patent claims; and (5) we know that in additional e-mails, Dr. Eltoukhy referred to how he and Dr. Talasaz created "communication theory-related workflow" that allows them to reduce errors (i.e., noise) that results from the typical sequencing process. (Tr. at 204)

[8] *See, e.g.*, *CODA Dev. S.R.O.*, 916 F.3d at 1359 (joint inventorship may involve "one inventor seeing a relevant report and building upon it") (citing *Kimberly-Clark Corp. Procter & Gamble Distrib. Co.*, 973 F.2d 911, 917 (Fed. Cir. 1992)); *see also KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-19 (2007) ("[I]nventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.").

[9] (*See also* Tr. at 212 (Defendants' counsel explaining that "[i]t is not just that [Eltoukhy] took Steemers. It is that he then recognized Steemers' application to cell-free DNA

as novel and non-obvious.[10] *Cf. Magnetar Techs. Corp. v. Six Flags Theme Parks, Inc.*, C.A. No. 07-127-LPS-MPT, 2014 WL 547712, at *8-9 (D. Del. Feb. 7, 2014) (concluding that there was an unnamed inventor of the asserted patent, in that the inventor at issue did more than merely explain a well-known concept to the other inventors, but instead suggested a particular kind of motor and stood behind it as the solution to the problem that the company was facing).[11]

The Court has focused its discussion above on the significance of the Steemers Presentation to the inventorship issue, as it received the bulk of the attention by the parties. (*See, e.g*, Tr. at 216-17) But beyond that issue, the Court also agrees with Defendants that there is a genuine fact dispute as to whether Dr. Eltoukhy contributed the concept of filtering sequence reads based on a quality or mapping score to the claims of the Talasaz patents. (D.I. 456 at 6-7;

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and implemented it, which hadn't been done before"); Tr. at 187, 213-14; D.I. 461, ex. 28 at ¶ 193 (FMI's expert explaining that the Steemers Presentation is "describing a method that could be applied to analysis of cfDNA"); *id.*, ex. 33 at ¶ 411; *id.*, ex. 34 at ¶¶ 105-06; Guardant Summary Judgment Presentation, Slide 178)

[10] (*See, e.g.*, D.I. 461, ex. 16 at 8; *see also* D.I. 58 ("Guardant's Technology Tutorial"), Slides 10-12 and accompanying notes); D.I. 461, ex. 27 at ¶¶ 1218-24; *id.*, ex. 33 at ¶ 402)

[11] The Court is not persuaded otherwise by Guardant's citations to certain deposition testimony of Defendants' experts. In that testimony, one expert, on cross-examination, responded that he did not know whether Dr. Eltoukhy "ever arrived at a definite and permanent idea of the complete and operative invention at any point in time" and another expert stated that other than what was in his report, he did not analyze whether Dr. Eltoukhy participated in the conception or the development of the inventions recited in the Talasaz patents. (D.I. 499 at 5 (citing D.I. 441, ex. 5 at 414; *id.*, ex. 32 at 432); *see also* D.I. 437 at 10-11) With respect to the first citation, as Defendants note, the law only requires that a joint inventor make a *contribution* to the conception of the subject matter of a claim, not that each contributor have their own independent contemporaneous picture of the final claimed invention. (D.I. 456 at 14-15 (citing *Vanderbilt*, 601 F.3d at 1303 and *Eli Lilly & Co.*, 376 F.3d at 1361-62)) As for the second citation, it ignores other testimony by the expert in which he opined that Dr. Eltoukhy should have been named as an inventor. (*See* D.I. 456 at 15-16 & n.19 (citing D.I. 461, ex. 36 at 88; *id.*, ex. 37 at 305, 308, 328))

Tr. at 209) In January 2012, Guardant was using "mapping quality score[s]" on cell-free samples. (D.I. 462, ex. 56) And the first Steemers Presentation Slide, obtained by Dr. Eltoukhy in July 2012, refers to reads being "[w]eighted by q scores[.]" (*Id.*, ex. 72 at GUARDFM00276786; *see also* Tr. at 209; D.I. 461, ex. 28 at ¶ 199) From there, the record can be read to show Dr. Eltoukhy providing input regarding the idea of filtering out certain sequence reads based on their quality score. For example, on July 23, 2012, Dr. Hong Gao emailed Dr. Eltoukhy to inform him that she "filtered" "the bases with base quality [redacted] before alignment" and Dr. Eltoukhy replied to confirm that "those very bad reads with varying start points" were "removed" by this filtering. (D.I. 462, ex. 80; D.I. 461, ex. 35 at ¶ 10)[12] And this "filtering" concept did end up in Guardant's invention summary, (D.I. 462, ex. 82 at GUARDFM00482826 (indicating that "[s]ome reads are filtered based on mapping quality scores"), in the specifications of the Talasaz patents, (*see, e.g.*, '743 patent, col. 3:54-58 ("filtering out reads with an accuracy or quality score of less than a threshold"), and in claims 1 and 10 of the '743 patent, (*id.*, cols. 62:49-50, 63:33-34 (reciting "filtering out reads that fail to meet a set accuracy, quality score, or mapping score threshold")).[13]

[12] To the extent that Guardant suggests that this e-mail is not persuasive of Dr. Eltoukhy's contribution to the inventions, because it "specifically references filtering implemented by Dr. Gao" and does "not even suggest that this concept originated with Dr. Eltoukhy[,]" (D.I. 499 at 3), that is unclear from the e-mail. The extent to which the document demonstrates that Dr. Eltoukhy made a contribution to the invention is a disputed fact to be resolved at trial.

[13] In light of the Court's conclusions that Defendants' evidence demonstrates genuine issues of material fact with respect to whether Dr. Eltoukhy contributed to the Talasaz patents the above-referenced concepts (i.e., the communication theory solution and the concept of filtering reads based on quality or mapping score), the Court need not address Defendants' further argument that Dr. Eltoukhy also contributed a windows/binning approach to the claims of the Talasaz patents. (*See* D.I. 456 at 7-8)

Lastly, there is other testimony and evidence of record that supports the idea that Dr. Eltoukhy was a co-inventor as to the Talasaz patents. (D.I. 456 at 9, 12-14) For example, Dr. Stefanie Mortimer, a Rule 30(b)(6) witness for Guardant, testified that it was her understanding that, while they were at Dr. Eltoukhy's pool house around September 2012, Dr. Eltoukhy and Dr. Talasaz jointly came up with the idea that "you can filter out random . . . noise in . . . sequencing [cell free DNA] to be able to have better confidence that a [true] mutation really exists" by "bar coding molecules." (D.I. 460, ex. 10 at 105-08; *see also* D.I. 461, ex. 17 at 15-30) Other Guardant employees testified similarly. (*See, e.g.*, D.I. 461, ex. 18 at 227-28; *id.*, ex. 19 at 57-58, 175) Furthermore, Guardant initially listed Dr. Eltoukhy as a co-inventor on several patent applications, including the application filed in March 2015 that eventually issued as the '743 patent, before removing him as an inventor in July 2017. (D.I. 461, ex. 12 at GD00006836, GD00007176-77)[14]

In sum, evaluating the issue of inventorship is a fact-intensive exercise, and numerous genuine issues of material fact clearly exist here. *See, e.g.*, *Skyline USA, Inc. v. M.A.S. GA LLC*, Case No: 6:14-cv-210-Orl-22GJK, 2015 WL 12559958, at *4 (M.D. Fl. July 31, 2015). Thus, the Court recommends that Guardant's inventorship MSJ be denied with respect to the inventorship issue.

[14] Guardant suggests that summary judgment should not be granted because "[t]he two people best positioned to know" whether Dr. Eltoukhy jointly invented the Talasaz patents—Dr. Eltoukhy and Dr. Talasaz—have consistently testified that Dr. Talasaz was the sole inventor. (D.I. 437 at 9-10; D.I. 499 at 5) But in the face of the contrary evidence described above, the Defendants are not required to take Guardant's principals at their word. *See, e.g.*, *F'Real Foods, LLC v. Hamilton Beach Brands, Inc.*, Civil Action No. 16-41-CFC, 2019 WL 1747550, at *1 (D. Del. Apr. 18, 2019) (denying plaintiff's motion seeking summary judgment on defendants' defenses and counterclaims regarding incorrect inventorship, even though an asserted unnamed inventor "denied under oath at his deposition that he invented or co-invented the subject matter of the patents at issue").

2. Inequitable Conduct for the Talasaz Patents

In its briefing, Guardant asserts that because Defendants' evidence is insufficient to support their claim of improper inventorship for the Talasaz patents, their inequitable conduct claims relating to these patents fail as well. (D.I. 437 at 16; D.I. 499 at 7-8) Because the Court has recommended denial of Guardant's inventorship MSJ with respect to the inventorship issue, it therefore also recommends denial of that motion with respect to inequitable conduct as to the Talasaz patents. (D.I. 456 at 18)

3. Inequitable Conduct for the '922 Patent

Guardant also argues that Defendants' claim that the '992 patent is unenforceable by virtue of infectious inequitable conduct fails as a matter of law, and that summary judgment on that claim must therefore be granted as well. (D.I. 437 at 16-21; D.I. 499 at 8-11) Guardant had previously moved to dismiss Defendants' counterclaims for unenforceability based on inequitable conduct with respect to the '992 patent, (Civil Action No. 17-1616-LPS-CJB, D.I. 169; Civil Action No. 17-1623-LPS-CJB, D.I. 285), and on January 7, 2020, the Court issued a Report and Recommendation (the "R&R") recommending denial of the motions, (Civil Action No. 17-1616-LPS-CJB, D.I. 343; Civil Action No. 17-1623-LPS-CJB, D.I. 470). The Court hereby incorporates by reference that R&R. On March 23, 2020, Chief Judge Leonard P. Stark overruled Guardant's objections to the R&R and adopted it. (Civil Action No. 17-1616-LPS-CJB, D.I. 404 at 10; Civil Action No. 17-1623-LPS-CJB, D.I. 541 at 10)

Here, Guardant first argues that its Motion should be granted because "Defendants have not explained how the alleged failure to disclose an inventor for the Talasaz patents permeated the prosecution of the '992 patent—which lists its inventors properly." (D.I. 437 at 17 (internal quotation marks omitted)) The Court, however, has already considered and rejected this

argument in the R&R, (D.I. 470 at 11-15), concluding that "the law on infectious unenforceability requires no direct linkage between the inequitable conduct at issue and the *prosecution* of the patent-in-question[,]" (*id*. at 11 (emphasis added)).

In the R&R, the Court further concluded that Defendants had pleaded sufficient facts to demonstrate the required "immediate and necessary relation" between the inequitable conduct at issue and the *enforcement* of the '992 patent in light of: (1) the close relationship between the content of the respective patents and the inequitable conduct allegations at issue; and (2) Defendants' plausible allegations regarding the family history and the priority relationship of the respective patents. (*Id.* at 15-23) The doctrine of infectious unenforceability exists to prevent "manipulation of the patent process[,]" as otherwise "a party committing inequitable conduct could avoid the consequences of that conduct through a scheme of . . . continuation applications." *eSpeed, Inc. v. Brokertec USA, L.L.C.*, 417 F. Supp. 2d 580, 595 (D. Del. 2006) (internal quotation marks and citation omitted).

Now at the summary judgment stage, the Court finds that the evidence, viewed in the light most favorable to Defendants, is sufficient to demonstrate at least a genuine dispute of fact as to whether an immediate and necessary relation exists between the inequitable conduct alleged with respect to the Talasaz patents and the enforcement of the '992 patent. For example, as Defendants point out in their brief and as the Court explained in the R&R, elements of the "communication theory" solution (as applied to cell-free DNA) that Dr. Eltoukhy purportedly contributed to the Talasaz patents *are also recited in claim 1 of the '992 patent* (such as grouping reads into families and collapsing sequence reads in each family to yield a base call). (*See, e.g.*, D.I. 456 at 20; Defendants' Summary Judgment Presentation, Slide DSJ 91; *see also* Guardant's Technology Tutorial, Slides 33-34 and accompanying notes) In light of this, and in light of other

evidence set out by Defendants that demonstrates the close relation between the Talasaz patents and the '992 patent, summary judgment is not warranted here. *See, e.g.*, *Robocast, Inc. v. Apple Inc.*, 39 F. Supp. 3d 552, 571 (D. Del. 2014) ("The extent to which the inequitable conduct in the '063 application actually infects the '451 patent is best left for trial, where the facts can be more clearly developed.").[15]

B. Antitrust MSJ and Guardant's *Daubert* Motion

The Court next addresses Guardant's antitrust MSJ and Guardant's *Daubert* Motion.

Section 2 of the Sherman Act, 15 U.S.C. § 2, makes it unlawful to "monopolize" or "attempt to monopolize[.]" The Supreme Court of the United States established in *Walker Process Equipment, Inc. v. Food Machinery & Chem. Corp.*, 382 U.S. 172 (1965) that "the enforcement of a patent procured by fraud on the [United States] Patent Office may be violative of [Section] 2 of the Sherman Act[.]" *Walker Process*, 382 U.S. at 174.

To succeed on a *Walker Process* claim, a party must prove two elements: (1) "the anti-trust defendant obtained the patent by knowing and willful fraud on the patent office and maintained and enforced the patent with knowledge of the fraudulent procurement" and (2) "all the other elements necessary to establish a Sherman Act monopolization claim." *TransWeb, LLC v. 3M Innovative Props. Co.*, 812 F.3d 1295, 1306 (Fed. Cir. 2016). A monopolization claim under Section 2 of the Sherman Act, in turn, requires: (1) the possession of monopoly power in the relevant market; and (2) the willful acquisition or maintenance of that power (as

[15] This is true even if (as Guardant asserts) the '992 patent is a continuation-in-part to the parent application of the Talasaz patents and derives priority from U.S. Provisional Application 61/948,530, which issued in 2014. (D.I. 437 at 16, 19; D.I. 499 at 8-9; *but see* D.I. 465 at 8 (Guardant noting that the "earliest provisional application" for the '822 and '992 patent is the '734 Provisional)) As the Court explained in the R&R, that two patents may not share the same priority date is not dispositive of the infectious unenforceability issue. (D.I. 470 at 22 n.15)

distinguished from growth as a consequence of a superior product, business acumen, or historic accident). *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 306-07 (3d Cir. 2007).[16] And the elements of attempted monopolization are (1) a dangerous probability of achieving monopoly power, (2) predatory or anticompetitive conduct with (3) a specific intent to monopolize the relevant market. *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993); *Barr Labs., Inc. v. Abbott Labs.*, 978 F.2d 98, 112 (3d Cir. 1992).

Guardant asserts three main arguments as to why summary judgment[17] should be granted on PGDx's antitrust counterclaims: (1) PGDx has not put forward sufficient evidence of harm to competition; (2) PGDx has failed to sufficiently demonstrate monopoly power; and (3) PGDx

[16] District Courts apply the law of the United Sates Federal Circuit to the "fraudulently obtained" element of a *Walker Process* claim and their own regional Circuit law to the monopolization element. *See, e.g.*, *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1067-68 (Fed. Cir. 1998); *Chamberlain Grp., Inc. v. Techtronic Indus. Co., Ltd.*, Case No. 16 CV 6097, 2017 WL 3493799, at *9 (N.D. Ill. Aug. 14, 2017).

[17] As a threshold matter, during oral argument, Guardant suggested PGDx faces a more stringent standard than that applying to a typical summary judgment motion, because the claims at issue here are antitrust counterclaims. Guardant's counsel asserted that as to summary judgment motions regarding antitrust claims, "if it is a close call . . . [the court should] err on the side of innovation and free enterprise under the antitrust laws[.]" (Tr. at 13; *see also id.* at 22, 65-66) In support, Guardant cites to *Verizon Commc'ns Inc. v. Law Offices of Curtis v. Trinko, LLP*, 540 U.S. 398 (2004). (Tr. at 65; Guardant's Summary Judgment Hearing Presentation, Slide 5) It is true that the Supreme Court of the United States explained in *Verizon* that, generally, "[m]istaken inferences and the resulting false condemnations are especially costly, because they chill the very conduct the antitrust laws are designed to protect [and] [t]he cost of false positives counsels against an undue expansion of [Section] 2 liability." *Verizon*, 540 U.S. at 414. But *Verizon* does not clearly state (or even implicitly suggest) that there are two sets of legal standards: one that applies to summary judgment motions regarding antitrust claims and one that applies to all other summary judgment motions. Indeed, Guardant did not "cite any case saying that the normal summary judgment standard should not apply[.]" (Tr. at 43) And so the Court will treat this like any other summary judgment motion, and will ask whether there is a genuine dispute of material fact as to each of the relevant issues, giving PGDx the benefit of all reasonable inferences.

has no admissible economic testimony with regard to injury and damages (which implicates Guardant's *Daubert* Motion). (Tr. at 12) The Court will address each argument in the order that Guardant briefed them.

1. Harm to Competition.

Guardant first asserts that PGDx's antitrust counterclaim fails as a matter of law because PGDx has no evidence of harm to competition. (D.I. 437 at 26-28; D.I. 500 at 2-5; Tr. at 15-30); *United States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 187 (3d Cir. 2005) (explaining that in order to demonstrate that a party has unlawfully maintained monopoly power, there "must be proof that competition, not merely competitors, ha[ve] been harmed"). Here, Guardant argues that PGDx cannot point to any evidence of harm that has flowed from Guardant's allegedly anti-competitive conduct (such as an indication of higher prices or decreased output or quality); it also argues that PGDx's attorney's fees may not, on their own, constitute such harm. (D.I. 437 at 27, 39; D.I. 500 at 1, 3-14)[18]

[18] Another argument Guardant makes with respect to this element is that there is no harm to competition where a *Walker Process* claim is based on improper inventorship, because PGDx must show that "but for the alleged fraud, the patents *would not have been issued to anyone*" and here, if Dr. Eltoukhy had been acknowledged as an inventor on the Talasaz patents, those patents "still would have issued with Illumina and Guardant as co-owners." (D.I. 437 at 25-26 (certain emphasis omitted, certain emphasis added). In support of this proposition of law, Guardant relies on the decision in *Brunswick Corp. v. Riegel Textile Corp*., 752 F.2d 261, 265 (7th Cir. 1984). But *Brunswick* is not controlling law. And the Court reads Federal Circuit law to suggest that *Walker Process* claims premised on improper inventorship carried out with deceptive intent would be permitted. *See C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1365 (Fed. Cir. 1998) Our Court too has followed that path. *See In re Metoprolol Succinate Direct Purchaser Antitrust Litig.*, Civil Action Nos. 06-52 (GMS), 06-71 (GMS), 2010 WL 1485328, at *9 (D. Del. Apr. 13, 2010); *Medtronic Ave, Inc. v. Boston Sci. Corp.*, No. CIV.A. 98-478-SLR, 2001 WL 652016, at *1 (D. Del. Mar. 30, 2001).

Guardant further argues that PGDx's *Walker Process* claim with respect to the '992 patent fails even if that patent were found to be unenforceable under the doctrine of infectious unenforceability. Guardant states that this is because such a finding would not demonstrate

The Court is not persuaded. In a *Walker Process* claim like PGDx's here, the focus is on harm to competition that *will result* if Guardant's lawsuit is successful. *See, e.g., TransWeb*, 812 F.3d at 1309 (noting that "TransWeb . . . [demonstrated harm to competition where it showed] what would have resulted had 3M succeeded in its [patent infringement] suit"); (D.I. 455, ex. 4 at 37-38 (Guardant's damages expert Dr. Stephen Becker agreeing that the analysis is "forward-looking in terms of the likelihood that, given the structure of the market and its characteristics, that Guardant would . . . be able to control price and exclude competition")). Dr. Eltoukhy testified that Guardant is seeking an injunction through its lawsuits against PGDx and FMI (not a royalty). (D.I. 455, ex. 7 at 347-48) And PGDx's economic expert Dr. Reiff analyzed the evidence and opined that if Guardant prevails in this lawsuit, its market concentration will dramatically increase, its prices will increase (as Guardant will leverage its position as the only truly viable provider in the market), and product quality and innovation will decline. (D.I. 454, ex. 1 at ¶¶ 67-75; *id.*, ex. 2 at ¶¶ 32-48; *see also* Guardant's Summary Judgment Presentation, Slides 7-9)[19] Indeed, Guardant's expert Dr. Becker testified that PGDx and FMI are the only strong Guardant "competitors" and the only entities that act as a "competitive restraint" on

materiality of the alleged misconduct with respect to prosecution of the '992 patent, and thus would not rise to the level of fraud on the PTO required for a *Walker Process* claim. (D.I. 437 at 24-25) In its answering brief, PGDx does not really respond in a persuasive manner to this charge. (D.I. 453 at 14 ("[E]ven if PGDx could not assert *Walker Process* claims based on the '992 Patent, PGDx's claims are still properly based on Guardant's other patents.")) Therefore, the Court recommends that Guardant's antitrust MSJ be granted-in-part to the extent that PGDx's *Walker Process* counterclaims are premised on the '992 patent.

[19] Guardant challenges the admissibility of these opinions in its *Daubert* motion, but as the Court will explain below, it does not agree with Guardant's *Daubert* challenge.

Guardant; if PGDx and FMI are eliminated from the market, Dr. Becker acknowledged that Guardant would capture all of their sales. (D.I. 455, ex. 4 at 168, 170-71, 206, 237-38, 275-76)

PGDx has also put forward some evidence of already-occurring harm to competition, purportedly caused by Guardant's lawsuit. To that end, PGDx identified a lost investor, Endeavor Vision ("Endeavor"), who failed to invest $10 million in PGDx's Series B funding after Guardant filed this suit. (D.I. 455, ex. 12 at ¶ 7; *see also* D.I. 454, ex. 2 at ¶ 51; PGDx's Presentation on Guardant's Motion for Summary Judgment and Daubert Motion, Slide 11) PGDx's Chief Executive Officer, Douglas Ward, submitted a Declaration in which he explains that Endeavor began "inquiring about the lawsuit's impact on PGDx" and his interactions with Endeavor caused him to believe that PGDx lost the investment "because of Guardant's lawsuit." (D.I. 455, ex. 12 at ¶ 7)[20]

Additionally, PGDx cites the fact that it has been required to expend attorneys' fees and costs in order to defend itself in this lawsuit. (D.I. 453 at 12-13; Tr. at 47-49) And there is good authority suggesting that such fees and costs amount to actionable injury in this context. *See, e.g.*, *TransWeb*, 812 F.3d at 1309-12 (holding that where 3M's unlawful act was "the bringing of

[20] Guardant's position with respect to lost investors has shifted; initially, Guardant asserted that PGDx failed to identify *any* lost investor. (D.I. 437 at 38) After PGDx pointed out that it had provided evidence regarding Endeavor, (D.I. 453 at 13), Guardant then argued that this evidence is insufficient because: (1) PGDx's expert Dr. Reiff could only speculate as to why Endeavor failed to invest; and (2) this lost capital is not a harm to competition, since PGDx went on to complete that funding round, (D.I. 500 at 5). But, as the Court noted above, PGDx's expert's view that Endeavor passed on funding PGDx partly because of this lawsuit is not based on the expert's speculation—it is based on evidence to that effect provided by PGDx's CEO. And Dr. Reiff also testified that Mr. Ward told him that, as a result, PGDx obtained less funding in the funding round than PGDx had hoped for. (D.I. 455, ex. 10 at 75) There are thus factual disputes about whether harm to PGDx flowed from the loss of this investor due to Guardant's actions.

suit based on a patent known to be fraudulently obtained[,]" TransWeb's attorney's fees flowed "directly" from that "which makes [3M's] acts unlawful" and thus constituted "both injury-in-fact and antitrust injury"); *Ni-Q, LLC v. Prolacta Biosci., Inc.*, Case No. 3:17-cv-934-SI, 2020 WL 485525, at *4-5 (D. Or. Jan. 29, 2020) (finding that plaintiff sufficiently alleged harm to competition where it alleged, *inter alia*, harm to it through attorney's fees) (citing cases); *Avocent Huntsville, LLC v. ZPE Sys., Inc.*, Case No. 3:17-cv-04319-WHO, 2018 WL 4859527, at *15 (N.D. Cal. July 23, 2018).[21] Taking all of this together, then, there is a genuine dispute of fact on this element that precludes summary judgment.[22]

2. Monopoly Power

Guardant additionally asserts that PGDx's antitrust counterclaim fails as a matter of law because PGDx has no evidence of monopoly power. (D.I. 437 at 28-35; D.I. 500 at 6-9; Tr. at 31-35) "Monopoly power is the ability to control prices and exclude competition in a given

[21] Guardant further argues that PGDx's position that there are multiple commercially acceptable non-infringing alternatives for each of the patents-in-suit means that PGDx's attorney's fees would not constitute antitrust injury as a matter of law. (D.I. 437 at 39; D.I. 500 at 4 n.2 ("Because [PGDx] argues that there are commercially acceptable non-infringing alternatives accessible to it, PGDx cannot viably argue that Guardant's suit will shut them out of the market.")) The Court declines to recommend that summary judgment be granted on this basis. For one thing, *Guardant* argues that there are *no* non-infringing alternatives. (D.I. 455, ex. 4 at 161-62; *see also* Tr. at 51) The Court agrees with PGDx that such a factual dispute may not be resolved on summary judgment. (D.I. 453 at 13) And further, PGDx's *Walker Process* claims are focused on the harm that would occur if Guardant's lawsuit *were to succeed in excluding the competition*. (Tr. at 52)

[22] PGDx claims that Guardant's conduct, if not monopolization, amounts to attempted monopolization. (D.I. 453 at 1, 12) In its briefing, Guardant did not address why it is entitled to summary judgment on this claim. (*See id.* at 12; Tr. at 57-58) During oral argument, Guardant asserted that "if there is no harm to competition . . . that alone takes care of the attempted monopolization" claim. (Tr. at 62) However, in light of the Court's conclusion with respect to this element, the Court recommends that PGDx's attempted monopolization claim survive summary judgment.

market." *Broadcom*, 501 F.3d at 307. The existence of monopoly power may be proven through "indirect evidence" that Guardant has a "dominant share in a relevant market, and that significant entry barriers protect that market." *Id.* (internal quotation marks and citation omitted).[23] PGDx's indirect evidence on this front is sufficient to establish a genuine dispute of fact.

Market share is a "primary determinant" of whether monopoly power exists. *Pa. Dental Ass'n v. Med. Serv. Ass'n of Pa.*, 745 F.2d 248, 260 (3d Cir. 1984); *see also Race Tires Am., Inc. v. Hoosier Racing Tire Corp.*, 614 F.3d 57, 75 (3d Cir. 2010) ("[M]arket share, while crucial, may not always be determinative."). And there can be no real dispute that Guardant has quite a lot of it. Dr. Reiff estimated that Guardant has a [redacted] market share in the relevant comprehensive liquid biopsy ("CLB") market. (D.I. 454, ex. 2 at ¶ 4; *see also* D.I. 453 at 6; D.I. 500 at 6)[24] Guardant's expert agrees that Guardant "enjoys a high market share[.]" (D.I. 455, ex. 17 at ¶ 45; *see also id.* at ¶ 55; ex. 4 at 34, 203-04) Indeed, Guardant's own documents recognize Guardant's "dominance" of the market, (D.I. 455, ex. 19 at GUARDPG00058083; *id.*, ex. 24 at GUARDPG00599936), as do Guardant's witnesses, (*id.*, ex. 5 at 202, 318 (witness Bill Getty explaining that Guardant has "[l]imited [r]eal [c]ompetition" and that its main competition is "apathy"); *id.*, ex. 6 at 299-300, 302-03 (witness Mark Jacobstein testifying that Guardant was the "800-pound gorilla" in the liquid biopsy space and the "clear leader on many, and in fact, all,

[23] Monopoly power may also be proven through "direct evidence of supracompetitive prices and restricted output." *Broadcom*, 501 F.3d at 307. PGDx asserts that it has put forward direct evidence (in addition to indirect evidence) regarding Guardant's pricing and ability to exclude competition. (D.I. 453 at 9-10) However, because the Court finds that PGDx has established sufficient indirect evidence to survive summary judgment, it need not further assess PGDx's asserted direct evidence.

[24] Guardant itself claims to have a market share of [redacted] of the clinical submarket. (D.I. 455, ex. 21 at GUARDPG00348773, GUARDPG00348789; *id.*, ex. 5 at 291)

axes that we thought were important")).[25] Meanwhile, PGDx and FMI jointly have approximately [redacted] of the market, and all remaining competitors constitute [redacted] of the market. (D.I. 454, ex. 2 at ¶ 4)

With respect to barriers to entry, Guardant argues that none of PGDx's evidence shows that there will be no new entrants into the CLB market, or no expansion of the current CLB market participants going forward. (D.I. 500 at 7; Tr. at 34-35) However, PGDx's evidence establishes a dispute of fact on this point. (D.I. 453 at 6-8; Tr. at 54-55) For example:

- One of Guardant's own documents identified several "[b]arriers to [e]ntry" [redacted] (D.I. 455, ex. 20 at GUARDPG00321963; *id.*, ex. 6 at 307-09) These included [redacted] (D.I. 455, ex. 20 at GUARDPG00321963)

- Furthermore, while it is true that PGDx's damages expert identified five companies beyond PGDx and FMI that have entered the market in the last three years (Resolution Bioscience, Archer, Inivata, Biodesix and Biocept), (D.I. 501, ex. 98 at 32-33; *see also* Tr. at 34), Guardant's expert Dr. Becker acknowledged that these companies were not a competitive restraint on Guardant because: (1) customers were not willing to switch to these entities' products and (2) Resolution Bioscience may have been the only other company that was even able to offer a comprehensive liquid biopsy test, (D.I. 455, ex. 4 at 170-71).

[25] Guardant makes much of testimony from FMI executive Doron Lipson, Ph.D. that Guardant was not "the most dominant player" in the market, in arguing that PGDx has failed to demonstrate monopoly power. (D.I. 437 at 30 (citing D.I. 441, ex. 20 at 133); D.I. 500 at 6; Tr. at 18-19) However, that was not the full extent of Dr. Lipson's testimony on this point; he explained that this view stemmed from the fact that "it's not like there's like a 90 percent dominance of anybody, which is what I would call dominant." (D.I. 441, ex. 20 at 133) Considering the full context of his testimony, it does not move the needle with respect to this market share issue.

- It is undisputed that PGDx and FMI's combined share of the market increased by only 3% in 2018. (D.I. 441, ex. 12 at ex. 4; *see also* D.I. 437 at 35; D.I. 453 at 7)

- Dr. Becker also testified that since 2015, 26 companies attempted to enter the CLB market but failed due to technological challenges. (D.I. 455, ex. 4 at 47-49)[26]

In sum, PGDx's evidence with respect to entry barriers, combined with Guardant's undisputedly high market share, could lead a reasonable fact-finder to infer monopoly power. Thus, summary judgment cannot be granted on this front.

3. Economic Expert Testimony Regarding Injury and Damages

Guardant's third ground for dismissal of PGDx's antitrust counterclaim is raised via its *Daubert* Motion, in which it argues that PGDx has no admissible economic testimony on injury and damages. (Tr. at 38-41; *see also* D.I. 437 at 40-50; D.I. 500 at 2, 9-13)

PGDx's economic expert, Dr. Reiff, applied three tests (the Herfindahl-Hirschman Index analysis ("HHI"), Upward Pricing Pressure analysis ("UPP") and the hypothetical monopolist test, or the small but significant and non-transitory increase in price test ("SSNIP")) to opine that

[26] Guardant further argues PGDx must prove that Guardant has "durable monopoly power, not fleeting power[,]" (D.I. 437 at 30 (citing *Dentsply Int'l, Inc.*, 399 F.3d at 188-89 ("[I]n evaluating monopoly power, it is not market share that counts, but the ability to *maintain* market share.") (emphasis added))), and it faults PGDx for failing to put forward evidence on this front, (D.I. 500 at 6; Tr. at 31). However, PGDx has emphasized that through this lawsuit, Guardant seeks to eliminate PGDx and FMI from the market. (D.I. 453 at 4, 7 (citing D.I. 455, ex. 4 at 104-05; *id.*, ex. 7 at 347-48)) And if that were to happen, then Guardant would capture [redacted] of the market and have no real competitor. (*See* D.I. 455, ex. 4 at 168, 170-71, 206, 237-38, 275-76; *id.*, ex. 32 at ¶ 6 & exs. SLB-9AR, SLB-9BR; *see also id.*, ex. 11 at 96, 134-35, 146-47 (FMI's Chief Commercial Officer identifying Guardant, PGDx and FMI as the only three companies that have a commercially available product in the space and the other companies as "small sort of esoteric ones that aren't commonly used")) The evidence can indicate that, if successful, Guardant's lawsuit would increase barriers to entry which would "further cement Guardant's monopoly power" such that it would not be fleeting. (Tr. at 56; PGDx's Hearing Presentation, Slide 24; D.I. 454, ex. 1 at ¶ 75)

the exclusion of PGDx and FMI from the market would result in harm to competition (by generating a substantial increase in market concentration and increased prices). (D.I. 454, ex. 1 at ¶¶ 23-47, 72-73 & n.133; *see also* D.I. 453 at 16-20; Tr. at 48; PGDx's Summary Judgment Hearing Presentation, Slides 7-9) The United States Department of Justice and the Federal Trade Commission employ these three tests when examining horizontal mergers between competitors. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines ("Merger Guidelines"), 8-9, 18-21 (Aug. 19, 2010). They explain that the tests are:

> [T]he principal analytical techniques and the main types of evidence on which the Agencies usually rely to predict whether a horizontal merger *may substantially lessen competition*. They are not intended to describe how the Agencies analyze cases other than horizontal mergers.

Id. at 1 (emphasis added). The "may substantially lessen competition" burden used to evaluate mergers is a "different, lower" burden than that required by a plaintiff asserting a monopolization claim, (Guardant's Summary Judgment Presentation, Slide 37; D.I. 437 at 41-42; Tr. at 39-40), which "provides damages only when a person has proven *actual* injury[,]" (D.I. 437 at 42 (citing *J. Truett Payne Co., Inc. v. Chrysler Motors Corp.*, 451 U.S. 557, 561-62 (1981)).

In Guardant's opening brief, it first asserts that Dr. Reiff's utilization of these three tests to demonstrate anticompetitive effects for purposes of a *Walker Process* Sherman Act Section 2 monopolization claim amounts to use of an unreliable methodology and does not fit the facts of the case. Initially, it argued that the tests should not be employed at all outside of the merger context. (D.I. 437 at 40-44) Guardant's argument narrowed a bit by the time of the reply brief, however, where it argued that Dr. Reiff's "use of the merger guidelines *in a patent context* is unreliable." (D.I. 500 at 9-10 (emphasis added))

The Court, however, is not persuaded that these tests may never be used outside of the merger context. (D.I. 453 at 16-18) Dr. Reiff explained why he found these tests useful in evaluating the competitive effects of Guardant's conduct. (*See, e.g.*, D.I. 454, ex. 1 at ¶¶ 72, 74 at n.133; *id.*, ex. 2 at ¶¶ 6 & n.5, 32, 35, 43, 45, 48)[27] Indeed, Guardant's expert Dr. Becker acknowledged that Dr. Reiff "spends a fair amount of time pointing to theoretical tools that economists use to assess . . . indicia of whether particular firms have or do not have market power and/or monopoly power" and that Dr. Reiff did "a reasonable job of articulating what the theory is on that[.]" (D.I. 455, ex. 4 at 31) Further, Defendants cite to several "peer-reviewed academic articles and learned treatises" which in fact apply these tests outside the merger context. (D.I. 453 at 18 (citing D.I. 455, exs. 26-30); Tr. at 58) And *Guardant* even cited to the Merger Guidelines in its discussion of monopoly power. (D.I. 437 at 33-34 (citing to the Merger Guidelines in support of the proposition that when analyzing barriers to entry, "the actual history of entry is a significant factor which is given substantial weight")) The Court thus will not exclude Dr. Reiff's opinions on this basis.[28] And Guardant's other complaints with respect to Dr. Reiff's use of these tests may be explored on cross-examination. (*Id.* at 42-44)

[27] Dr. Reiff was the plaintiff's expert in *TransWeb, LLC v. 3M Innovative Props. Co.*, 812 F.3d 1295 (Fed. Cir. 2016), where the Federal Circuit found anticompetitive effects and where Dr. Reiff utilized the UPP test to identify such effects. (D.I. 455, ex. 10 at 14, 188-89; Tr. at 59)

[28] *Cf. Hartle v. FirstEnergy Generation Corp.*, 7 F. Supp. 3d 510, 522 (W.D. Pa. 2014) ("The EPA's use of a different test for regulatory purposes does not necessarily mean that Method 17 is unreliable when used on saturated stacks."); *Henrob Ltd. v. Bollhoff Systemtechnick GmbH & Co.*, No. 05-CV-73214-DT, 2009 WL 3199850, at *1-2 (E.D. Mich. Sept. 29, 2009) (rejecting defendants' argument that plaintiff's expert utilized an unreliable test (the "LSMR Test") that had nothing to do with lateral material flow, where the expert "presents an objectively reasonable basis for his opinion that the LSMR Test is an effective method of visually discerning lateral material flow, or at least the effects of lateral material flow").

Other of Guardant's arguments for exclusion of Dr. Reiff's opinions are also unpersuasive.

For example, as to the issue of "fit," Guardant asserts that Dr. Reiff failed to disaggregate the effects of Guardant's lawful procompetitive conduct from its alleged anticompetitive conduct, rendering his opinion "of no use in determining whether any claimed harm was, is or will be the result of the alleged anticompetitive conduct." (*Id.* at 46; *see also* D.I. 500 at 11-12) However, Dr. Reiff opined with respect to what would occur in the market if Guardant's lawsuit were successful, as described above. And the caselaw does not require experts to perfectly disaggregate competitive activity from anticompetitive activity. *See ZF Meritor LLC v. Eaton Corp.*, Civ. No. 06-623-SLR, 2013 WL 6729509, at *2-3 (D. Del. Dec. 20, 2013) (rejecting the defendant's argument that an expert's opinion was fatally flawed for failing to separate the losses attributable to its lawful, pro-competitive conduct from its allegedly unlawful, anti-competitive conduct, as such disaggregation would be "unnecessary, if not impossible") (citing *LePage's Inc. v. 3M*, 324 F.3d 141 (3d Cir. 2002)); *see also, e.g.*, *Dial Corp. v. News Corp.*, 165 F. Supp. 3d 25, 38 (S.D.N.Y. 2016) (same).

Guardant also complains that Dr. Reiff's opinions do not fit the facts of the case because he did not consider information from any customers about the market, and that he did not consider Dr. Lipson's testimony, *supra* n. 25, that Guardant was not a dominant player on the market. (D.I. 437 at 45) But Guardant's expert, Dr. Becker, also did not speak to any customers, because he did not think it necessary. (D.I. 455, ex. 4 at 60, 283) And Dr. Reiff *did* address Dr. Lipson's testimony, explaining why he discounted its import. (D.I. 454, ex. 2 at ¶ 29 & n.41) In any event, these concerns go to the weight of Dr. Reiff's testimony, and may also be addressed during cross-examination.

Lastly, Guardant asserted that Dr. Reiff's "[m]echanical [d]amages [c]alculations [u]sing [s]ummary [i]nvoices [w]ith [n]o [b]ack-[u]p [a]re [i]nadmissable" for a few different reasons. (D.I. 500 at 12-13; *see also* D.I. 437 at 47-50) Yet the Court does not find persuasive the three arguments that Guardant consistently raised to this effect in its opening and reply briefs,[29] for the following reasons:

- First, the Court does not see a problem with the fact that Dr. Reiff tallied up the attorney's fees and costs asserted to be damages related to Guardant's anticompetitive conduct (i.e., the bringing of this lawsuit)—as opposed to having left that task for the jury. (*See* D.I. 500 at 12) Experts regularly present juries with their view of the total damages that are associated with purportedly wrongful conduct. And part of the process of doing that can involve (as here) the expert calculating the amount of damages by reconciling data obtained from a large number of underlying records. (D.I. 453 at 23-24; PGDx's Presentation on Guardant's Motion for Summary Judgment and Daubert Motion, Slide 36); *see also Cromeans v. Morgan Keegan & Co., Inc.*, No. 2:12-CV-04269-NKL, 2014 WL 5351193, at *1 (W.D. Mo. Oct. 20, 2014).

- Second, the Court is not convinced that in doing these calculations, Dr. Reiff was necessarily required (as Guardant argues he was) to parse through billing descriptions and make determinations about how much of those fees/costs were the product of good, efficient lawyering—as opposed to "simple waste" on the part of PGDx's attorneys. (D.I. 500 at 12); *see ABS Glob., Inc. v. Inguran, LLC*, 14-cv-503-wmc, 2016 WL 4204160, at *4 (W.D. Wis. Aug. 9, 2016). Moreover, such a process could raise some thorny privilege/work product issues, (D.I. 453 at 24), and Guardant assures the Court that its motions here are not meant to raise a "question about privilege[,]" (D.I. 500 at 12).

[29] To the extent the Court herein does not address additional arguments that Guardant made in its opening brief for disallowing Dr. Reiff's testimony, it is because after PGDx responded to those arguments in its answering brief, Guardant did not press them again in its reply brief. The Court thus deems Guardant to have abandoned these arguments. *See Progressive Sterilization, LLC v. Turbett Surgical LLC*, Civil Action No. 19-627-CFC, 2020 WL 1849709, at *6 n.8 (D. Del. Apr. 13, 2020) (citing *Blakeman v. Freedom Rides, Inc.*, Civil Action No. 12-416-LPS-CJB, 2013 WL 3503165, at *13 (D. Del. July 10, 2013)).

- Third, while the Court agrees with Guardant that Dr. Reiff does have to provide the jury with some articulable basis to explain his conclusion that the fees and costs at issue are actually associated with this litigation (as opposed to fees and costs associated with other matters, or not fairly traceable to work on this suit), (D.I. 500 at 12-13), here he has (minimally) met this hurdle. The record indicates that Dr. Reiff was provided with invoices from PGDx's counsel that link certain fees and costs with counsels' work on this case. (D.I. 454, ex. 1 at ¶ 77 & ex. 5) To be sure, these invoices are very heavily redacted, and they do not provide much detail (beyond connecting certain amounts of money to counsels' work on this matter). (D.I. 441, exs. 53, 56; D.I. 455, ex. 25) But if Guardant thought it was entitled to more detail here in expert discovery, it could have pressed the Court for it. Having not done so, Guardant is free to cross-examine Dr. Reiff on what he did or did not do in order to conclude that all of the fees and costs at issue are properly attributable to damages. (Tr. at 60) But the testimony will not be stricken on this ground.

The Court thus finds Guardant's arguments as to this issue to be wanting as well.

4. Conclusion

For the reasons set out above, while this may be an unusual type of antitrust suit, and while PGDx's evidence in a few areas may be not the most robust, genuine disputes of material fact exist in all relevant areas. Thus, the Court recommends that Guardant's antitrust MSJ be GRANTED-IN-PART only to the extent that PGDx's *Walker Process* counterclaims are premised on the '992 patent, and that it be DENIED in all other respects. And it orders that Guardant's *Daubert* Motion be DENIED.

C. FMI's *Daubert* Motion

The Court lastly turns to FMI's *Daubert* Motion. It will first summarize the dispute and thereafter will address the parties' arguments.

1. Background and Legal Standards

The dispute raised in this motion regards an opinion by Guardant's damages expert, Dr. Becker. In that opinion, Dr. Becker applies an apportionment factor of 50%—that is, he posits that the asserted patents contribute at least 50% of the value of the FMI accused products at issue. (D.I. 302, ex. 32 at ¶¶ 201, 226)[30] As support for this opinion, Dr. Becker relies on a "[d]iscussion with Dr. [Gregory] Cooper[,]" who is Guardant's infringement expert. (*Id.*, ex. 32 at ¶ 201 & nn.403-04)

With its *Daubert* Motion, FMI asserts that the portions of Dr. Becker's and Dr. Cooper's testimony regarding reasonable royalty damages should be excluded, because of their failure to properly apportion damages to only the patented features of the accused products. The Court has recently set out the relevant legal standards regarding apportionment of damages in *Sunoco Partners Mktg. & Terminals L.P. v. Powder Springs Logistics, LLC*, Civil Action No. 17-1390-LPS-CJB, D.I. 445 at 7-9 (D. Del. Jan. 3, 2020). The Court hereby incorporates its discussion of those standards in *Sunoco* and will follow them herein. To the extent that consideration of FMI's *Daubert* Motion necessitates discussion of other, related legal principles, the Court will set out those principles below.

2. Discussion

The central dispute here is whether the 50% apportionment value chosen by Dr. Becker (Guardant's damages expert) is sufficiently supported by the content of his discussion with Dr. Cooper (Guardant's infringement expert)—a discussion that provided the exclusive basis for Dr. Becker's apportionment figure. FMI argues that it is not, as Dr. Cooper's opinions regarding the 50% apportionment value are without "explanation or methodology[.]" (D.I. 301 at 2)

[30] In this sub-section, references are to the docket in Civil Action No. 17-1616-LPS-CJB, the case in which FMI is the Defendant.

In his report, Dr. Becker explains Dr. Cooper's input as to this issue:

> I understand from Dr. Cooper that the Patents-in-Suit are foundational to the commercial acceptability and success of the FMI accused products, and that they are at least as important as all of the non-patented contributions made to the product by FMI. With respect to technical aspects of FMI's accused products, the Patents-in-Suit account for the overwhelming majority of the technical value.[403] Based on my discussion with Dr. Cooper, it is reasonable and conservative to assume that the Patents-in-Suit contribute at least 50% of the value of the Accused Products. Other elements that contribute to the success of CGP liquid biopsies, such as machine learning aspects that help improve the accuracy of the assay over time may be important as well but would not be relevant without the benefits of the Patents-in-Suit. It is my understanding from Dr. Cooper that the accused CGP liquid biopsies would not be able to achieve an acceptable level of sensitivity and specificity without using the inventions of the Patents-in-Suit.[404]

(D.I. 302, ex. 32 at ¶ 201 (footnotes 403 and 404 reciting "Discussion with Dr. Cooper")) And in applying this understanding, Dr. Becker states:

> [] Dr. Cooper informs me that the Patents-in-Suit are foundational to the commercial success of the Accused Products, and account for at least as much value as the non-patented contributions made by FMI. This suggests an apportionment factor of no less than 50% of the value of the Accused Products to the Patents-in-Suit. For the purposes of my determination of the reasonable royalty, I have assumed an apportionment factor of 50% to the Patents-in-Suit.

(*Id.* at ¶ 226)

Guardant advances two arguments as to why it believes Dr. Cooper has sufficiently articulated how he determined that this 50% value was warranted. The Court concludes, however, that neither argument is persuasive.

First, Guardant states that in his expert report, Dr. Cooper "clearly set forth his opinions . . . that the Guardant Patents-in-Suit are foundational and essential to the significant commercial

success of . . . FMI's Accused Products" and that these opinions were what Dr. Becker in turn relied upon in utilizing the 50% figure. (D.I. 335 at 1 (citing D.I. 339, ex. 80 at ¶¶ 39-78)) Here, Guardant is citing to a section of Dr. Cooper's opening report on infringement, titled "SUMMARY OF THE PATENTED INVENTIONS[.]" (D.I. 339, ex. 80 at ¶¶ 39-78) This section discusses prior art "Tissue Biopsies[,]" "Liquid Biopsies And The Approach Of The Patents-In-Suit[,]" and certain claims of the asserted patents. (*Id*.)

However, nowhere in this portion of Dr. Cooper's report does Dr. Cooper purport to tie the relative value of the patented features to *FMI's accused products*, which is meant to be the focus of the apportionment analysis.[31] Instead, Dr. Cooper generally discusses the field of "liquid biopsies" and the role of the asserted patents within that field. (*See* D.I. 339, ex. 80 at ¶ 41 ("In this section, I provide an overview of 'liquid biopsies' and the approach in the Patents-in-Suit"); *see also id* at ¶¶ 39-78 (not mentioning the FMI accused products))

Moreover, even were this section of Dr. Cooper's report to have made reference to the accused products, and even if Dr. Cooper is correct when he says that the patented technology is "foundational" to the accused products, this report still would not pass muster under *Daubert*. That is because nowhere in this section does Dr. Cooper provide any factual foundation to support the *specific 50% figure* that he provided to Dr. Becker. In its briefing, Guardant appears to suggest that this is not problematic, because after hearing that the patents were "foundational"

[31] *See, e.g., Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015) (noting that "damages awarded for patent infringement must reflect the value attributable to the *infringing features of the product*, and no more") (emphasis added) (internal quotation marks and citation omitted); *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014) ("What is taken from the owner of a utility patent (for purposes of assessing damages under § 284) is only the patented technology, and so the value to be measured is only the value of the *infringing features of an accused product*.") (emphasis added).

to the accused products, Dr. Becker "applied the most conservative apportionment possible of 50%." (D.I. 335 at 3-4; *see also id.* at 1) But merely labelling a value "conservative" is no substitute for a showing that there is an evidentiary foundation for the particular percentage selected—i.e., for describing the methodology used to reach that number. *See Koninklijke Philips Elecs. N.V. v. Zoll Lifecor Corp.*, Civil No. 12-1369, 2017 WL 3140798, at *4 (W.D. Pa. July 25, 2017) (excluding expert opinion that provided "no objective support for his 50% apportionment rate" and precluding testimony from that same expert that the patented features were a "significant driver" and "majority of" the value of the accused products) (internal quotation marks omitted); *Open Text S.A. v. Box, Inc.*, Case No. 13-cv-04910-JD, 2015 WL 349197, at *4, *6-7 (N.D. Cal. Jan. 23, 2015) (excluding expert's purportedly "conservative" apportionment that did not reflect "the usage and importance of the accused features[,]" where the expert provided no "formula, method, or calculation, however approximate" to justify the 15% figure used, and instead "simply announces it and proceeds to apply it to her royalty base data").

Second, Guardant points to the portion of Dr. Cooper's reply report in which he states that he told Dr. Becker that "the Asserted Patents are essential to the commercial acceptability and success of FMI's Accused Products as they cover in essence the whole process of the detection of rare mutations in [cell-free]DNA." (D.I. 302, ex. 34 at ¶¶ 84, 87 (cited in D.I. 335 at 1, 3)) But obviously, as Dr. Becker notes, there are other non-patented aspects of FMI's accused products that *also* contribute to the products' success, "such as machine learning aspects that help improve the accuracy of the assay over time[.]" (*Id.*, ex. 32 at ¶ 201) And the key is that in Dr. Cooper's reply report, he does not really explain *why* the patented features amount to approximately *50%* of what makes the products successful. (*See* D.I. 366 at 10) Indeed, when

asked at his deposition whether Dr. Cooper ever told him "what [Dr. Cooper's] methodology was for evaluating the extent to which the patented elements contributed to the realizable profit of the product[,]" Dr. Becker replied "No." (D.I. 302, ex. 36 at 798; *see also id*. at 800 (Dr. Becker recalling his conversation with Dr. Cooper as Dr. Becker asking "Okay, so if I've got to put a number on it, are you saying it's at least 50%?" and Dr. Cooper replying "Yeah, that would be reasonable[.]"))

Because no concrete tie to the specific 50% value is explained, Dr. Becker's and Dr. Cooper's opinions lack a sufficiently reliable methodology. *See Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prods. Grp., LLC*, 879 F.3d 1332, 1351 (Fed. Cir. 2018) (concluding that the district court erred in failing to exclude an expert's damages opinion, where the expert "plucked the 5% royalty rate out of nowhere" because it "is not enough for an expert to simply assert that a particular royalty rate is reasonable in light of evidence without tying the proposed rate to that evidence"); *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 69 (Fed. Cir. 2012) (rejecting apportionment that was "plucked out of thin air based on vague qualitative notions of the relative importance of the [accused technology]"); *NetFuel, Inc. v. Cisco Sys. Inc.*, Case No. 5:18-cv-02352-EJB, 2020 WL 1274985, at *9 (N.D. Cal. Mar. 17, 2020) (excluding apportionment analysis where the expert "failed to provide the methodology underlying his apportionment amount or explain how he arrived at that figure based on the facts of this case") (internal quotation marks omitted). Therefore, the Court orders that FMI's *Daubert* Motion be granted.

The Court further orders that Guardant be provided a further opportunity to present supplemental expert reports to address the deficiencies in Dr. Becker's and Dr. Cooper's analysis, and that it may do so by no later than **May 6, 2020**. The parties may further meet and

confer as to what additional process is needed for a response to any such supplemental report, if filed.

III. CONCLUSION

For the foregoing reasons, the Court recommends that Guardant's inventorship MSJ be DENIED. It recommends that Guardant's antitrust MSJ be GRANTED-IN-PART and DENIED-IN-PART, as set out above. It orders that Guardant's *Daubert* Motion be DENIED and that FMI's *Daubert* Motion be GRANTED.

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections by **May 1, 2020**. Reponses to objections may be served by **May 11, 2020**. The failure of a party to object to legal conclusions may result in the loss of the right to de novo review in the district court. *See Sincavage v. Barnhart*, 171 F. App'x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987).

The parties are directed to the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the District Court's website, located at http://www.ded.uscourts.gov.

Because this Report and Recommendation may contain confidential information, it has been released under seal, pending review by the parties to allow them to submit a single, jointly proposed, redacted version (if necessary) of the Report and Recommendation. Any such redacted version shall be submitted no later than **April 27, 2020** for review by the Court, along with a motion for redaction that includes a clear, factually detailed explanation as to why disclosure of any proposed redacted material would "work a clearly defined and serious injury to the party seeking closure." *Pansy v. Borough of Stroudsburg*, 23 F.3d 772, 786 (3d Cir. 1994)

(internal quotation marks and citation omitted). The Court will subsequently issue a publicly-available version of its Report and Recommendation.

Dated: April 22, 2020

Christopher J. Burke

Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE