IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

W.R. GRACE & CO.-CONN., Plaintiff, v. ELYSIUM HEALTH, INC., Defendant.	C.A. No. 20-1098-GBW-JLH **REDACTED PUBLIC VERSION**

MEMORANDUM ORDER

Plaintiff W.R. Grace & Co.-Conn. ("Grace") accuses Defendant Elysium Health, Inc. ("Elysium") of infringing U.S. Patents Nos. 10,323,058 ("the '058 patent") and 10,233,207 ("the '207 patent") (collectively, the "Form I patents"), and U.S. Patent No. 10,189,872 ("the '872 patent" or "the Form II patent").[1] D.I. 1 ¶ 1. On May 5, 2022, Elysium filed an Amended Answer and Counterclaims to Grace's Complaint (the "Answer"). D.I. 113. Here, Elysium raises claims of inequitable conduct against Grace, asserting that the Asserted Patents be deemed invalid. *Id.*

The Court will address (1) Grace's *Daubert* motions, D.I. 206, D.I. 207, D.I. 208, D.I. 209, D.I. 210, (2) Elysium's *Daubert* motions, D.I. 186, D.I. 187, D.I. 188, (3) Grace's motions for summary judgment, D.I. 191, D.I. 192, D.I. 193, D.I. 194, and (4) Elysium's motions for summary judgment, D.I. 197, D.I. 198, D.I. 199, D.I. 200.

I. BACKGROUND

The Asserted Patents claim crystalline Forms I and II of nicotinamide riboside chloride ("NRCl"). *See* D.I. 1, Ex. A (the '207 patent) at claim 1; Ex. B (the '058 patent) at claim 1; Ex. C

[1] All three patents, the '058 patent, the '207 patent, and the '872 patent, will be collectively referred to as the "Asserted Patents."

(the '872 patent) at claim 1. The Court construed (a) "crystalline Form I of [NRCl] according to formula I" in the '058 patent and the '207 patent as "[c]rystalline Form I of [NRCl], according to Formula I, which can be identified by one or more of the analytical methods described in the specification" and (b) "crystalline Form II of [NRCl]" in the '872 patent as "[c]rystalline Form II of [NRCl], which can be identified by one or more of the analytical methods described in the specification[.]" D.I 109 at 1.

II. *DAUBERT* MOTIONS

Grace moves to exclude the (1) the testimony of Robert Armitage, D.I. 206, (2) the opinions and testimony of Dr. Robert Perni and Dr. Robert Steed, in part, for allegedly improperly opining on states of mind and legal standards, D.I. 207, (3) the testimony and opinions of Dr. Robert Perni in their entirety, D.I. 208, (4) the testimony and opinions of Alexander Clemons, in part, concerning the topics of royalty rates and non-infringing alternatives, D.I. 209, and (5) the testimony and opinions of Dr. Ryan Dellinger, in part, D.I. 210. Elysium moves to exclude the testimony and opinions of W.R. Grace's crystallography expert Dr. Aeri Park, D.I. 186, and the testimony and opinions offered by W.R. Grace's damages expert Kimberly Schenk for alleged failure to apportion damages (1) by batch, and (2) by patent. D.I. 187; D.I. 188. The Court will address each *Daubert* motion in turn below.

A. Legal Standards

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the Supreme Court held that Federal Rule of Evidence 702 creates "a gatekeeping role for the [trial] judge" in order to "ensur[e] that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." 509 U.S. at 597, 580. Rule 702 provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise 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. As the Third Circuit has explained,

> Rule 702 embodies a trilogy of restrictions on expert testimony: qualification, reliability and fit. Qualification refers to the requirement that the witness possess specialized expertise. We have . . . [held] that a broad range of knowledge, skills, and training qualify an expert. Secondly, the testimony must be reliable; it must be based on the methods and procedures of science rather than on subjective belief or unsupported speculation; the expert must have good grounds for his o[r] her belief. In sum, *Daubert* holds that an inquiry into the reliability of scientific evidence under Rule 702 requires a determination as to its scientific validity. Finally, Rule 702 requires that the expert testimony . . . must be relevant for the purposes of the case and must assist the trier of fact.

Schneider ex rel. Estate of Schneider v. Fried, 320 F.3d 396, 404-05 (3d Cir. 2003) (cleaned up); *Kuhar v. Petzl Co.*, C.A. No. 19-3900, 2022 WL 1101580, at *7 (3d Cir. Apr. 13, 2022) (noting the same trilogy).

Rule 702 "'has a liberal policy of admissibility[,]'" *Pineda v. Ford Motor Co.*, 520 F.3d 237, 243 (3d Cir. 2008) (citation omitted); *see also United States v. Scripps*, 599 F. App'x 443, 447 (3d Cir. 2015) (same), as "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). "Vigorous 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; *see Karlo v. Pittsburgh Glass Works, LLC*, 849 F.3d 61, 83 (3d Cir. 2017) (quoting *Daubert*, 509 U.S. at 596).

B. Discussion

a. Robert Armitage

At issue is the relevance of Elysium's expert on the United States Patent and Trademark Office ("USPTO" or "PTO")) patent examination practices. *See* D.I. 211 at 25; D.I. 212, Exs. 8, 10, 26. For the reasons stated below, the Court grants-in-part Grace's Motion to Exclude the opinions of Defendant's Expert Robert Armitage. D.I. 206.

"[T]his Court has a strong and consistent view with respect to the admittance of the testimony of 'patent law experts.'" *Shire Viropharma Inc. v. CSL Behring LLC,* C.A. No. 17-414, 2021 WL 1227097, at *16 (D. Del. Mar. 31, 2021) (quoting *W.L. Gore & Assocs., Inc. v. C.R. Bard, Inc.*, C.A. No. 11-515, 2015 WL 12815314, at *3 (D. Del. Nov. 20, 2015)). "It has at times permitted testimony from such experts, including with regard to inequitable conduct allegations, so long as the testimony clearly related to the ins and outs of internal PTO practices and procedures." *Id.* (internal quotations and citation omitted). "Beyond that narrow topic, however, courts have generally excluded patent law expert testimony relating to inequitable conduct largely because such testimony frequently amounts to the proffering of impermissible legal opinions." *Id.* at *16-17 (striking testimony on inequitable conduct as improper legal analysis and legal opinion). *See also PureWick Corp. v. Sage Prod., LLC*, C.A. 19-1508-MN, 2021 WL 2593338, at *1 (D. Del. June 24, 2021) ("It is the Court's function to determine the applicable legal standards" and "legal testimony on substantive issues of patent law or Patent Office procedure improperly substitutes the judgment of the expert for that of the Court.") (internal quotations and citations omitted).

Grace asserts that Mr. Armitage's testimony should be struck because testimony concerning the actions of a "competent patent professional" is irrelevant, as there are no

inequitable conduct claims against patent professionals at Grace, and Mr. Armitage applies the incorrect standard for materiality.

Mr. Armitage in his Reply Report set out his task:

> I was asked to opine on how a competent patent professional, based upon my training and experience, would undertake the identification of information of necessary materiality under the *Therasense* standard, i.e., information that necessarily must be disclosed under the "duty of disclosure," as this duty has been imposed by the USPTO and the courts, in connection with communications with the USPTO during the examination of a patent application

D.I. 212, Ex. 8 ("Armitage Reply Rpt.) ¶ 4.

Therasense, Inc. v. Becton, Dickinson & Co., provides the rule that in order to show inequitable conduct, an accused infringer must generally show (1) "that the patentee acted with the specific intent to deceive the PTO" and (2) materiality. 649 F.3d 1276, 1290 (Fed. Cir. 2011). Inequitable conduct claims are still alleged against Erik Carlson and Brett Reynolds. D.I. 225. Erik Carlson is an employee at Grace and a named inventor of the Asserted Patents. D.I. 1 ¶¶ 15-17, Exs. A-C. Regarding Mr. Reynolds, "Elysium alleges that Reynolds determined on September 25, 2018 that Grace shipped crystalline NRCl to a third party and sent or received emails related to 'patent applications' and to 'the prosecution and validity of the Grace patents' on July 30, 2018." D.I. 225 at 9. It is not clear to the Court that either Mr. Reynolds or Mr. Carlson qualify as the "competent patent professional" that Mr. Armitage seeks to opine on the actions (or inactions) of. *See* D.I. 212, Ex. 10 (Armitage Depo. Tr.) at 27:20-28:23. Furthermore, Mr. Armitage states that his "opinions are confined to how that [*Therasense*] standard would be applied by a competent patent attorney" and that he "limited [his] opinions to what subject matter the patent examiner would or would not have allowed to issue based upon what the USPTO instructs patent examiners they must do through the MPEP." D.I. 212, Ex. 8 (Armitage Reply Rpt.) ¶¶ 67, 70. Notably, neither Mr. Reynolds nor Mr. Carlson are patent attorneys or patent examiners. D.I. 258 at 2.

When addressing Grace's contention that Mr. Armitage's opinions are not relevant to Elysium's claims in this case and that the conduct of patent professionals is not "germane" to any issues in this case, Elysium asserts that such a stance "ignores the fact that Elysium's Amended Counterclaims specifically alleges that Grace's patent professionals and those working with them intentionally failed to provide material information concerning the pre-Critical Date offers to sell and sales of crystalline NR-Cl." D.I. 229 at 32. But neither Mr. Short nor Ms. Smith, the referenced "patent professionals" and those working with them, have inequitable conduct claims alleged against them. D.I. 225.

"As a general rule, expert witnesses may not testify as to the law governing a dispute or offer conclusions concerning a party's compliance with legal duties." *Brigham & Women's Hosp. Inc. v. Teva Pharms. USA, Inc.*, C.A. No. 08-464, 2010 WL 3907490, at *2 (D. Del. Sept. 21, 2010). *See also Zimmer Surgical, Inc. v. Stryker Corp.*, 365 F. Supp. 3d 466, 497 (D. Del. 2019) ("Expert testimony as to intent, motive, or state of mind offers no more than the drawing of an inference from the facts of the case ... and permitting expert testimony on this subject would be merely substituting the expert's judgment for the jury's and would not be helpful to the jury.") (quoting *Siring v. Oregon State Bd. of Higher Educ.*, 927 F. Supp. 2d 1069, 1077 (D. Or. 2013)).

"The law of this district is clear that experts in patent cases may not opine on whether a party engaged in inequitable conduct, discuss whether certain information was material to a pending patent application, or otherwise provide legal conclusions on 'substantive issues of patent law.'" *Brigham and Women's Hosp.*, 2010 WL 3907490, at *2 (citation omitted). Such substantive issues of patent law not permitted in expert testimony includes, for example, interpretations of the "on-sale" bar following the America Invents Act. *See, e.g.*, D.I. 212, Ex. 26 (Armitage Opening

Rpt.) ¶ 76 ("In my opinion, Grace would have had an expectation of some good faith, bona fide basis on which to believe that it was entitled to seek a patent[.]").

However, Mr. Armitage also discusses the practices and procedures of the PTO. *See* D.I. 212, Ex. 26 ("Armitage Opening Rpt.) Section III. The law permits experts in patent cases to offer such testimony. *Revlon Consumer Prods. Corp. v. L'Oréal S.A.*, No. 96-192, 1997 WL 158281, at *3 (D. Del. Mar. 26, 1997) (concluding that while the proffered patent law expert could testify with respect to "matters of PTO practice and procedure[,]" it would not allow him "to testify as an expert on inequitable conduct; to do otherwise would usurp the respective functions of the ... Court")).

Accordingly, Grace's motion to preclude testimony from Mr. Armitage is granted except to the extent that he explains the USPTO's practices and procedures.

b. Dr. Robert Perni and Dr. Robert Steed

Grace seeks to exclude the testimony of Dr. Robert Perni and Dr. Robert Steed to the extent that the experts opine on "states of mind and legal standards." D.I. 207. For the reasons discussed below, the Court grants-in-part, denies-in-part Grace's motion to exclude such testimony.

Generally, "[e]xpert witnesses are not 'permitted to testify ... regarding [a party's] intent, motive, or state of mind, or evidence by which such state of mind may be inferred.'" *AstraZeneca LP v. Tap Pharm. Prod., Inc.*, 444 F. Supp. 2d 278, 293 (D. Del. 2006) (quoting *Oxford Gene Tech., Ltd. v. Mergen Ltd.*, 345 F.Supp.2d 431, 443 (D. Del. 2004)). Upon review of the paragraphs at issue, the Court agrees that Dr. Perni and Dr. Steed, in their reports, appear to offer testimony as to Grace's state of mind related to Elysium's inequitable conduct claims. For example, Dr. Perni states:

> Documents produced by Grace demonstrate that other Grace employees, including employees involved in patent prosecution, also were aware that Grace's crystalline NR-Cl was the subject of commercial offers for sale and actual sales to ChromaDex at least one year before the priority date of the Asserted Patents and knew of its materiality to obtaining the Asserted Patents.

D.I. 213, Ex. 3 (Perni Opening Rpt.) ¶ 246 (emphasis added).

Testimony such as this goes beyond what is permissible by a technical witness and subsume the role of the fact-finder. *AstraZeneca*, 444 F. Supp. 2d at 293.

Accordingly, the Court grants Grace's motion and Drs. Perni and Steed are precluded from offering testimony about knowledge, intent, motivation, or state of mind, including but not limited to the opinions expressed in Dr. Perni's Opening Report at paragraphs 186-187, 190-193, and 221-263, and in Dr. Steed's Opening Report at paragraphs 173-174, 177-180, and 203-243.[2]

c. Dr. Robert Perni

Grace argues that Dr Robert Perni's testimony should be excluded in its entirety because he is not qualified to provide opinions on behalf of a person of ordinary skill in the art ("POSA"). D.I. 211 at 36-37. For the reasons stated below, the motion is denied.

Rule of Evidence 702 states that a witness offering an expert opinion must possesses adequate "knowledge, skill, experience, training, or education" to support his or her opinion. Qualification requires "'that the witness possess specialized expertise.'" *Allscripts Healthcare, LLC v. Andor Health, LLC*, C.A. No. 21-704-MAK, 2022 WL 3021560, at *2 (D. Del. July 29, 2022) (quoting *Pineda*, 520 F.3d at 244). The Third Circuit interprets this requirement "liberally." *Pineda*, 520 F.3d at 244. "'[A] broad range of knowledge, skills, and training qualify an expert.'" *Allscripts*, 2022 WL 3021560, at *2

[2] This is not a preclusion of all testimony found in the cited paragraphs, only a preclusion of the testimony in the paragraphs that offer testimony relating to Grace's knowledge, intent, motivation, or state of mind.

(quoting *In re Paoli*, 35 F.3d at 741). "This liberal policy of admissibility extends to the substantive as well as the formal qualifications of experts." *Pineda*, 520 F.3d at 244. Generally, experts lacking the minimum skill level of a POSA in the relevant art should be excluded. *Kyocera Senco Industrial Tools Inc. v. International Trade Commission*, 22 F.4th 1369, 1376–78 (Fed. Cir. 2022) ("To offer expert testimony from the perspective of a skilled artisan in a patent case—like for claim construction, validity, or infringement—a witness must at least have ordinary skill in the art. Without that skill, the witness' opinions are neither relevant nor reliable.")

A POSA, as defined by the parties:

> would have had a Ph.D. in chemistry, or a similar field, with 5 or more years of experience in academia or industry focused on crystallography and its methods of analysis (some of those five years could be spent as part of the Ph.D. program, for instance, but additional experience is needed to be considered a POSA). The methods of analysis can include X-ray powder diffraction ("XRPD") but are not limited to XRPD.

D.I. 212, Ex. 3 (Perni Opening Rpt.) ¶ 13.

Dr. Perni was asked to "provide opinions regarding certain matters ***from the perspective of a person of ordinary skill in the art ("POSA")*** concerning the validity" of the Asserted Patents. *Id.* ¶ 9 (emphasis added).

The issue Elysium takes with Dr. Perni's testimony is that Dr. Perni does not purport to be a POSA:

> Q: The person of ordinary skill in the art, as it has been defined, is not a synthetic chemist who has a great deal of experience in crystallization of organic compounds, right?
> A: That's correct.
> Q: So you're not going to provide opinions from the perspective of a POSA in this case, right?
> A: No.
> Q: You do not meet the qualifications as such, right?
> A: Not as written, no.

D.I. 212, Ex. 29 (Perni Depo. Tr.) at 95:3-16. *See also id.* at 90:18-92:11.

Beyond Mr. Perni's testimony, Elysium asserts that Dr. Perni objectively lacks the qualifications to testify on behalf of a POSA on the infringement and invalidity claims in the present case. D.I. 211 at 38.

Grace argues that (1) Dr. Perni is, in fact, a qualified POSA, and (2) the deposition questions that Elysium relies on were unclear. D.I. 229 at 41.

First, Dr. Perni does have a Ph.D. in chemistry and spent 30 years in research, focusing on the synthesis and crystallization of nicotinamide riboside chloride [("NRCL")]. D.I. 212, Ex. 3 (Perni Opening Rpt.) ¶ 1. While Elysium notes that Dr. Perni is "not an expert in crystallography, XRPD, or identification and characterization of crystalline forms using other analytical methods[,]" D.I. 258 at 21, he need not be in order to qualify as a POSA under the parties' definitions. Mr. Perni holds a doctorate in chemistry, decades of research experience relating to synthetic and medicinal chemistry, and "has a great deal of experience in crystallization of organic compounds." D.I. 212, Ex. 29 (Perni Depo. Tr.) 94:19-95:2. This Court finds that Dr. Perni has at least comparable qualifications to testify, and his testimony on NRCL is relevant to the case. The Court is also not inclined to disqualify Dr. Perni based on the deposition testimony presented. Indeed, Grace's criticism goes to the weight, not admissibility, of the testimony and Plaintiff is free to challenge those opinions through cross-examination of Dr. Perni at trial. *Daubert*, 509 U.S. at 596. For these reasons, Grace's motion to exclude Dr. Perni's testimony in its entirety, D.I. 207, is denied.

d. Alexander Clemons

Grace seeks to exclude the testimony of Elysium's damages expert, Alexander Clemons, in part. D.I. 209; D.I. 211 at 40-41. Specifically, Grace seeks to preclude Mr. Clemons "from

offering testimony regarding (1) his 50% reasonable royalty rate reduction opinion, and (2) his opinions regarding Elysium's allegedly available non-infringing alternatives." D.I. 211 at 40-41. The Court will review each argument in turn:

On a finding of infringement, the patentee is entitled to "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C. § 284. The burden of proving damages falls on the patentee. *Lucent Techs., Inc. v. Gateway*, 580 F.3d 1301, 1324 (Fed. Cir. 2009). A reasonable royalty is based not on the infringer's profit, but on the royalty that a willing licensor and a willing licensee would have agreed to at the time the infringement began. *Id.* at 1324-25 (describing the hypothetical negotiation or the "willing licensor-willing licensee" approach). The factors discussed in *Georgia-Pac. Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) *modified sub nom. Georgia-Pac. Corp. v. U.S. Plywood-Champion Papers, Inc.*, 446 F.2d 295 (2d Cir. 1971), frame the reasonable royalty analysis. *Minerva Surgical, Inc. v. Hologic, Inc.*, C.A. No. 18-00217-JFB-SRF, 2021 WL 3048447, at *7 (D. Del. July 20, 2021).

Grace takes issue with Mr. Clemons' alleged reliance on a "rule of thumb" adjustment stemming from articles with no ties to this case, as well as relying on "vague references. . . untestable on cross-examination[.]" D.I. 211 at 41. Elysium asserts that the 50% reasonable royalty is based on "an analysis of how much it would cost Elysium to develop a new NR salt," then comparing the cost "set out in [redacted]" and finally adjusts the royalty based on factors such as exclusivity and bargaining power." D.I. 229 at 42-45.

"Assessing the comparability of licenses requires a consideration of whether the license at issue involves comparable technology, is economically comparable, and arises under comparable circumstances as the hypothetical negotiation." *Bio-Rad Lab'ys, Inc. v. 10X Genomics Inc.*, 967 F.3d 1353, 1372-73 (Fed. Cir. 2020) (citation omitted). "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 Computer, Inc.*, 694 F.3d 51, 79 (Fed. Cir. 2012). Mr. Clemons' report discusses taking the market approach (after considering and ultimately rejecting other approaches based on available data), a comparability analysis with [redacted] and a review of the *Georgia-Pacific* factors. *See* D.I. 212. Ex. 27 (Clemons Rebuttal Rpt.). Grace's argument targets a factual dispute as to whether Mr. Clemons properly weighed the evidence in determining the reasonably royalty, and thus Grace's motion to preclude Mr. Clemons' testimony regarding reasonable royalty is denied. *CAO Lighting, Inc. v. Gen. Elec. Co.*, C.A. No. 20-681-GBW, 2023 WL 1930354, at *10 (D. Del. Jan. 30, 2023)

Grace next argues that Mr. Clemons should be precluded from opining on non-infringing alternatives because his testimony is (1) "too speculative" and (2) "improperly considers the accused infringing forms of NRCl to be non-infringing alternatives if one or a subset of patents might eventually be determined to be invalid or not infringed." D.I. 211 at 41-42.

"Unlike an opinion identifying a specific proposed alternative design, an opinion that there are 'many other alternative designs' is not best addressed via cross-examination or by submission to the jury because it is vague and speculative and does not 'rest[ ] on a reliable foundation." *WhereverTV, Inc. v. Comcast Cable Commc'ns, LLC*, C.A. No. 2:18 -529-JLB-NPM, 2022 WL 2751752, at *7 (M.D. Fla. July 14, 2022) (quoting *Daubert*, 509 U.S. at 597). That is not the case here. Mr. Clemons recites specific examples of noninfringing alternatives including Thorne's

NiaCel and ResveraCel products. D.I. 212, Ex. 7 (Clemons Rebuttal Rpt.) at 39-40; D.I. 229 at 45. And Grace's Reply makes it more evident that Grace's issues with Mr. Clemons' testimony on noninfringing alternatives are proper for cross-examination. *Daubert*, 509 F.3d at 596.

For the reasons above, Grace's motion to exclude portions of Alexander Clemons' testimony and opinions, (D.I. 209), is denied.

e. Dr. Ryan Dellinger

Lastly, Grace seeks to exclude Dr. Ryan Dellinger's testimony on (1) acceptable noninfringing alternatives, (2) what Elysium "would likely do," and (3) partial costs for pursuing an alternative salt form of NR. D.I. 211 at 42-43.

First, Grace asserts that Dr. Dellinger should be precluded from offering testimony because he lacks "an understanding as to what would be acceptable to customers." D.I. 211 at 43. While consumer demand is important to determining the relative market, such factors shaping that demand include "consumers' intended use for the patentee's product, similarity of physical and functional attributes of the patentee's product to alleged competing products, and price." *Grain Processing Corp. v. Am. Maize-Prod. Co.*, 185 F.3d 1341, 1355 (Fed. Cir. 1999). Elysium refutes this, arguing that "Dr. Dellinger did not offer testimony on consumers; he compared various vitamin B3 analogs and describes whether they are biological alternatives." D.I. 229 at 47 (cleaned up). Instead, Elysium clarifies that:

> Dr. Dellinger intends to testify that the body uses NR and other vitamin B3 supplements, such as niacin, nicotinamide, and NMN, to make an important cellular enzyme, NAD, and the role of another signaling protein family called sirtuins. Ex. 96, Dellinger Open. ¶¶37-39. He also will testify about NAD's role in cellular processes and recent research that vitamin B3 analogs can boost NAD levels reversing the effects of aging in cells. *Id.* at ¶¶3-4, 6, 21.

D.I. 229 at 47 n..15

Regarding Dr. Dellinger's statements on marketing, Elysium separately notes that "Elysium's marketing studies and its marketing witness confirm that "the science" is "a key driver" for the sale/marketing of Basis." D.I. 229 at 48 (citing Ex. 97, (ELY_G0023663) at -668 ("Users understand and believe the science"); Ex. 98, Marcotulli at 18:9-19:5; 46:1-15; *see* Ex. 96, Dellinger Open. ¶¶55). Dr. Dellinger thus has proper grounds to opine on the technical aspects of noninfringing alternatives and whether or not that science drives sales. Any issues Grace has with the testimony can be addressed during cross-examination. *Daubert*, 509 U.S. at 596 ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking [] evidence.")

After reviewing the parties's briefing, it is also evident that cross-examination is also an appropriate means to address Grace's concerns regarding testimony on actions in obtaining noninfringing alternatives and the costs associated. For these reasons, the Court denies Grace's *Daubert* motion, D.I. 210.

f. Dr. Aeri Park

Elysium seeks to exclude Dr. Aeri Park's opinions "that assume infringement." D.I. 189 at 4. Elysium asserts that "Dr. Park considered tests from a small percentage of NR-Cl batches and presumes they are 'representative' of all batches without justification." D.I. 261 at 18.

"[A]n expert's testimony is admissible so long as the process or technique the expert used in formulating the opinion is reliable." *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 744 (3rd Cir. 1994). "The [Rule 702] inquiry is a flexible one . . . [and its focus] must be solely on principles and methodology, not on the conclusions that they generate." *Daubert*, 509 U.S. at 595. "'[T]he reliability analysis [required by *Daubert*] applies to all aspects of an expert's testimony: the methodology, the facts underlying the expert's opinion, [and] the link between the facts and the

conclusion.'" *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 291 (3d Cir. 2012) (quoting *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 155 (3d Cir. 1999)); *see also* FED. R. EVID. 702. "'A court may conclude that there is simply too great a gap between the data and the opinion proffered.'" *Magnetar Techs. Corp. v. Six Flags Theme Parks Inc.*, C.A. No. 07-127-LPS-MPT, 2014 WL 529983, at *4 (D. Del. Feb. 7, 2014) (citations omitted).

One of Elysium's primary concerns regarding Dr. Park's testimony relies on a "small percentage" of batches and "presumes they are 'representative' of all batches." D.I. 261 at 18. These arguments go to the weight, not the admissibility, of the evidence. *VLSI Technology LLC v. Intel Corporation*, C.A. 18-966-CFC-CJB, 2022 WL 2304112, at *4 (D. Del. June 27, 2022) (denying motion to strike expert opinion that relied on a single simulation to support that all versions of the accused products infringed). Therefore, Elysium's motion as to Dr. Aeri Park's opinions is denied.

g. Kimberly Schenk

Elysium filed two *Daubert* motions to preclude the testimony of Grace's damages expert Kimberly Schenk. D.I. 187; D.I. 188. The first motion seeks to preclude Ms. Schenk's opinions that rely on Dr. Park's testimony, addressed above *supra* §II.B.f. Because this Court determined that Dr. Park's testimony is admissible, the Court will not preclude Ms. Schenk's testimony on these grounds. *EMC Corp. v. Pure Storage, Inc.*, 154 F. Supp. 3d 81, 115 (D. Del. 2016) ("It is perfectly reasonable for a finance and damages expert to adopt the conclusions of other experts. Whether those conclusions are sound can be explored at trial through cross examination and other expert testimony.") Thus, this Court will turn to the arguments of apportionment of batches and apportionment among Asserted Patents.

Elysium asserts that "even if Dr. Park is permitted to offer testimony on the batches she analyzed, [Ms.] Schenk's damages opinions still must be excluded because she does not provide any opinion or methodology for the jury to determine what damages Elysium might owe Grace for any subset of batches." D.I. 261 at 23. To allow such testimony, Elysium asserts, would be to shift the burden to Elysium to show that all products are like the one tested. D.I. 189 at 8.

During the provisional rights period, Elysium obtained its NRCl from PCI and AMPAC. Dr. Park analyzed PXRD patterns of NRCl from PCI and AMPAC and concluded that all samples contained Form I, Form II, or a mixture thereof. D.I. 227 at 8 (citing Ex. 2 (Park Reply Rpt.) ¶¶ 37-38, 40, 47). Ms. Schenk's analysis does provide a means to adjust her provisional rights damages by reducing the royalty base, but maintaining the royalty rate because "the parties to the hypothetical negotiation would have negotiated a royalty rate that is not conditional on the form of NRCl produced, similar to [redacted]" D.I. 228, Ex. 7 (Schenk Reply Rpt.) ¶114. Ms. Schenk's analysis is acceptable, as Federal Circuit's precedent allows apportionment to be addressed in a variety of different ways, including "by careful selection of the royalty base to reflect the value added by the patented feature, where that differentiation is possible; by adjustment of the royalty rate so as to discount the value of a product's non-patented features; or by a combination thereof." *Ericsson, Inc. v. D-Link Sys.*, Inc., 773 F.3d 1201, 1226 (Fed. Cir. 2014).

Elysium also asserts that "Ms. Schenk's damages opinions also are flawed because they do not apportion between the patents." D.I. 189 at 9. Grace disagrees, first by asserting that Ms. Schenk does apportion by patent and second, by arguing that Ms. Schenk's methodology relies on a comparable license agreement, [redacted] and thus does not need to apportion by patent. D.I. 227 at 14.

First, Ms. Schenk's analysis concludes that "both lost profits and reasonable royalty damages for this period [following the filing of the Complaint] should be attributed 100% to the Form I Patents" during the period of time following the complaint. D.I. 228, Ex. 7, (Schenk Reply Rpt.) ¶113 (relying on Dr. Park's reports). She next explains that her analysis would not change dependent if one Form I patent was found invalid, not infringed, or unenforceable because the "lost tested contained Form I NRCl" as claimed in both patents. *Id.*

"When a sufficiently comparable license is used as the basis for determining the appropriate royalty, further apportionment may not necessarily be required." *Vectura Ltd. v. GlaxoSmithKline LLC*, 981 F.3d 1030, 1040 (Fed. Cir. 2020). "That is because a damages theory that is dependent on a comparable license. . . may in some cases have 'built-in apportionment.'" *Id.* "Built-in apportionment effectively assumes that the negotiators of a comparable license settled on a royalty rate and royalty base combination embodying the value of the asserted patent." *Id.* at 1041. It is not uncommon to provide royalty rates that subsume multiple asserted patents. *See, e.g., Bio-RadLabs.*, 967 F.3d at 1372-73; *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1330 (Fed. Cir. 2014). Elysium's arguments showing how the [redacted] license should be considered in a hypothetical negotiations analysis, *see* D.I. 261 at 24 (citing to Elysium's own expert analysis on the differences), go to the weight of the testimony and not the admissibility. *Daubert*, 509 U.S. at 596.

III. SUMMARY JUDGMENT MOTIONS

Pending before the Court are Grace's Motions for Summary Judgment, D.I. 191, D.I. 192, D.I. 193, D.I. 194, and Elysium's Motions for Summary Judgment, D.I. 197, D.I. 198, D.I. 199, D.I. 200. The below analyses are made in light of the Court's ruling on the parties' *Daubert* motions above.

A. Legal Standards

"The court shall grant summary judgment if 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). Material facts are those "that could affect the outcome" of the proceeding. *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). "[A] dispute about a material fact is 'genuine' if the evidence is sufficient to permit a reasonable jury to return a verdict for the nonmoving party." *Id.* (citations omitted). "The burden on the moving party may be discharged by pointing out to the district court that there is an absence of evidence supporting the non-moving party's case." *Peloton Interactive, Inc. v. iFIT Inc.*, C.A. No. 20-1535-RGA, 2022 WL 1523112, at *1 (D. Del. May 13, 2022) (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986)).

The burden then shifts to the non-movant to demonstrate the existence of a genuine issue for trial. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-87 (1986); *Williams v. Borough of West Chester*, 891 F.2d 458, 460-61 (3d Cir. 1989). A non-moving party asserting that a fact is genuinely disputed must support such an assertion by: "(A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations . . . , admissions, interrogatory answers, or other materials; or (B) showing that the materials cited [by the opposing party] do not establish the absence . . . of a genuine dispute . . . ." FED. R. CIV. P. 56(c)(1).

When determining whether a genuine issue of material fact exists, the court must view the evidence in the light most favorable to the non-moving party and draw all reasonable inferences in that party's favor. *Wishkin v. Potter*, 476 F.3d 180, 184 (3d Cir. 2007). If the non-moving 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. *See Celotex Corp.*, 477 U.S. at 322.

B. Discussion[3]

a. Inequitable Conduct

"The inquiry is whether, viewing the evidence in the light most favorable to [Elysium], no reasonable trier of fact could find the [patentees] acted with the specific intent to deceive the PTO." *Sysmex Corp. v. Beckman Coulter, Inc.*, No. CV 19-1642-JFB-CJB, 2022 WL 1503987, at *4 (D. Del. May 6, 2022), report and recommendation adopted, C.A. No. 19-1642-JFB-CJB, 2022 WL 1744573 (D. Del. May 31, 2022) (quoting *Alcon Rsch., Ltd. v. Apotex, Inc.*, C.A. No. 1:09-102-RLY-TAB, 2013 WL 2244338, at *8 (S.D. Ind. May 21, 2013). "Put another way, summary judgment of no inequitable conduct should be denied if, drawing all reasonable inferences in favor of [Elysium], a reasonable factfinder could reasonably find that intent to deceive is the single most reasonable inference." *Id.* (citing *Sprint Commc'ns Co. LP v. Charter Commc'ns, Inc.*, C.A. No. 17-1734-RGA, 2021 WL 982728, at *4-5 (D. Del. Mar. 16, 2021); *CliniComp Int'l, Inc. v. Athenahealth, Inc.*, C.A. No. 18-00425-LY, 2020 WL 7011769, at *5 (W.D. Tex. Nov. 10, 2020); *Helios Software, LLC v. Awareness Techs., Inc.*, C.A. No. 11-1259-LPS, 2015 WL 12806482, at *13 (D. Del. Apr. 13, 2015)).

[3] The Court ordered the parties to rank the grounds for summary judgment raised in their motions with the understanding that "[i]f the Court decides to deny a motion filed by the party, barring exceptional reasons determined *sua sponte* by the Court, the Court will not review any lower ranked summary judgment motions filed by the party." D.I. 183. Grace ranked "No Summary Judgment of No Inequitable Conduct" first. D.I. 191. Elysium ranked "Summary Judgment that U.S. Patent Nos. 10,323,058, and 10,233,207 are Invalid Under 35 U.S.C. § 102(a) for Violating the on Sale Bar" first. D.I. 197.

In the Court's view, Grace's motion should be denied. In denying the motion to dismiss the inequitable conduct claims, the Court found that:

> Read in the light most favorable to Elysium, the Court may reasonably infer that Carlson knew of his duty to disclose information to the PTO, knew of the crystalline NRCl that practiced the Asserted Patents in 2013, and intentionally failed to disclose its existence. The Court may also reasonably infer that Reynolds was involved in patent prosecution, determined in September 2018 that Grace had not yet disclosed the crystalline NRCl sales to the PTO, and intentionally avoided such disclosure.

D.I. 225 at 9.

Intent and materiality are separate requirements for determining inequitable conduct. *Hoffmann–La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354, 1359 (Fed.Cir.2003). With respect to materiality of the sales, genuine issues of material fact exist, detailed below, § IV.B.b. Now, at the summary judgment stage, the Court searches for the facts that can lead to the reasonable inference that Mr. Carlson and Mr. Reynolds intentionally deceived the USPTO. "A district court may infer intent from indirect and circumstantial evidence," *Therasense*, 649 F.3d at 1290. Elysium alleges facts that suggest intent. For example, Elysium points to the following instances in its concise statement of acts:

- Mr. Carlson and Mr. Reynolds being aware that Grace was planning to produce a white crystalline powder, D.I. 233 ¶ 1,
- Mr. Carlson signing batch records "that identify pre-priority date crystalline NRCL" that was sold to a third party, *id.* ¶ 16, neither Mr. Carlson nor Mr. Reynolds performed or sought to perform XRPD testing while applications were pending, *id.* ¶ 3,[4]

[4] Elysium's Counterstatement of Facts, D.I. 233, often cites to deposition testimony of a Mr. Short, who is not a named defendant in the inequitable conduct claims pending before the Court. *See* D.I. 225. Elysium asks this Court to infer that Mr. Short, not a named defendant, having conversations with legal counsel implies inequitable conduct. First, Elysium failed to make a

- Mr. Reynolds requesting another Grace employee to compile purchase order numbers and shipment dates for customer ChromaDex, *id.* ¶ 5, and
- Mr. Reynolds and Mr. Carlson are aware of a duty to disclose material information before the USPTO, *id.* ¶¶ 17-18.

In the Order granting-in-part the motion to dismiss, the Court noted that:

> Elysium's allegations also support a finding that Reynolds's intent to deceive the PTO is the single most reasonable inference. Grace alleges that "[t]he only possible conclusion" is that Reynolds's order to Smith not to further research the 2013 batch orders was "because of Grace's desire to mislead the US PTO . . . ." D.I. 113 ¶ 70; *see also* D.I. 113 ¶ 76 (making similar allegations as to Grace as a whole, but not as to individuals). No alternative inference is alleged.

D.I. 225 at 10 n.3.

At this summary judgment stage, Elysium again raises the alleged research project. D.I. 229 at 6. ("Mr. Reynolds asked his admin. Ms. Peggy Smith also to compile a [] research project, but Mr. Reynolds inexplicably stopped that work only three hours later. At deposition, Mr. Reynolds testified that he had no recollection of this research project." (citations and quotations omitted)). Still, there does not appear to be an alternative inference. *See* D.I. 229 at 6.

Elysium also cites to deposition transcripts to show that Mr. Reynolds and Mr. Carlson were involved in patent prosecution and were aware of their duty to disclose. D.I. 229 at 10-11.

Thus, Elysium has sufficiently shown that there is a genuine issue of material fact as to whether Reynolds and Carlson knew of sales of the invention (which is disputed, *see* § IV.B.b) a

---

showing of specific intent against Mr. Short at the motion to dismiss stage, D.I. 225, and "no adverse inference shall arise from invocation of the attorney-client and/or work product privilege." *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1344 (Fed. Cir. 2004)).

year before the applications for the Form I patents were filed, knew of the on-sale bar imposed by 35 U.S.C. § 102, and intentionally withheld information of the sales from the USPTO. *See Lear Corp. v. NHK Seating of Am. Inc.*, No. 13-12937, 2022 WL 876021, at *11 (E.D. Mich. Mar. 23, 2022) ("Adapting [*Therasense*'s] prior-art test to the on-sale-bar context, the [defendant] must prove by clear and convincing evidence that someone involved in the prosecution of the [Accused Patents] knew" that the alleged offers for sale were material and thus knew that the patent office would reject the patent application if it were informed of the offers for sale).

Because there is genuine issue of fact as to whether Mr. Reynolds and Mr. Carlson had the intent to deceive the USPTO, this Court denies Grace's Motion for Summary Judgment of No Inequitable Conduct, D.I. 191.

b. On-Sale Bar

For the reasons discussed below, Elysium's Summary Judgment Motion, D.I. 197, is denied. Elysium moves for summary judgment regarding the validity of the Form I patents in light of the on-sale bar codified in 35 U.S.C. § 102. The Court denies Elysium's motion, finding genuine issues of material fact ripe for a fact-finder.

The "on-sale bar applies when two conditions are satisfied before the critical date." *Pfaff v. Wells Elecs.*, Inc., 525 U.S. 55, 67 (1998) (citing 35 U.S.C. § 102(b)). "First, the product must be the subject of a commercial offer for sale," and "[s]econd, the invention must be ready for patenting." *Id.* "That condition may be satisfied in at least two ways: by proof of reduction to practice before the critical date; or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention." *Id.* at 67-68.

In this case, the three Asserted Patents each claim one of two crystalline forms of NRCl, Form I and Form II. The Court has construed the word "Form" for these patents to mean "can be identified by one or more of the analytical methods described in the specification." D.I. 109. Elysium asserts that the Form I patents, which have a critical date of July 24, 2013, are invalidated by the on-sale bar because an allegedly commercial batch, Batch 13101, was manufactured by Grace in early 2013 in Albany, Oregon. D.I. 202 at 6-7. Elysium asserts that Grace provided samples of Batch 13101 to customer ChromaDex, and "after review and testing ChromaDex issued a Purchase Order on May 1, 2013 to buy [redacted]." *Id.* at 7. The Purchase Order is excerpted below:

Vendor:	Ship To:
W.R. Grace & Co. - Conn. (Synthetech, Inc.) 7500 Grace Drive Columbia, MD 21044 Fax: 541-967-9424	Chromadex, Inc. 10005 Muirlands Blvd Suite G Irvine, CA 92618

Vendor Item #	Description	Req Date	QTY	Unit Price	Extended Price
VEN#-00014315-000	NICOTINAMIDE RIBOSIDE CHLORIDE(DS) 1kg	5/1/2013	[redacted]	[redacted]	[redacted]
Quality per agreement with ChromaDex.					

D.I. 205, Ex. 25.

Grace asserts that there is a genuine issue of material fact here: that the parties disagree as to whether Batch 13101 was Form 1. D.I. 231 at 5. Grace provides multiple disputed facts in support of its request to the Court to deny this motion. First, Grace does not agree with Elysium that Form I and Form II are the only two forms of NRCl. *Id.* at 5-6. ("Elysium's own experts agree that at least one form disclosed by GSK is not Form I or II, and they also cited a Chinese patent that purportedly describes another form."). Second, Grace points to Dr. Rogers' testimony wherein Dr. Rogers proffers that the PXRD analysis of Batch 13101's retainer sample does not show definitively that Batch 13101 is Form I and, in fact "there are significant differences" and

"indicate that the two diffraction patterns do not represent the same solid-state form." D.I. 236, Ex. 1 (Rogers Rpt.) ¶ 189. Dr. Rogers also notes that Batch 13101 and Batch 13202 (a confirmed Form 1 NRCl) have differences in terms of water content and melting point, suggesting that Batch 13101 may be amorphous. D.I. 231 at 8 (citing D.I. 236, Ex. 1 (Rogers Rpt.) ¶ 199-206.

Grace also contends that, while Elysium asserts that "the patents' table of IR values for Form I align with the IR values from Batch 13101," the experts in this case agree that "a POSA would understand that IR cannot always be used to distinguish between crystalline forms." D.I. at 10 (citing D.I. 236, Ex. 1, (Rogers Rpt.) ¶¶364; Ex. 2, (Park Opening Rpt.) ¶¶55-56; Ex. 3, (Steed Tr.) 105:21-106:6; Ex. 6, (Perni Tr.) 220:5-13). Furthermore, there are factual disputes regarding whether the IR peak list in the Form I patents came from Batch 13101, D.I. 231 at 12, and whether the process used to make Batch 13101 necessarily makes Form I each time. D.I. 231 at 13. For all these reasons, the Court finds that there exists a genuine issue of material dispute regarding Batch 13101 being Form I and declines to grant Elysium's summary judgment on those grounds.

Elysium also raises an argument regarding Batch 13201, undisputed to be Form I, was offered for sale prior to the critical date. A copy of a purchase order, dated May 29, 2013, is excerpted below:

Vendor:

W.R. Grace & Co. - Conn. (Synthetech, Inc.)
7500 Grace Drive
Columbia MD 21044

Ship To:

*Address listed with item below.

Contract Number:

Shipping Method	Payment Terms		Confirm With		Page
	Net 30				1

L/N	Item Number	Description	Req. Date	U/M	Ordered	Unit Price	Ext. Price
Project Number		Cost Category ID	Billing Note				
Shipping Method		Reference Number	FOB				
1	VEN#-00014315-000		5/29/2013	[redacted]			
		VEN#-00014315-000	None				
	Per ChromaDex product specifications.						
	Deliver To:						

D.I. 236, Ex. 33.

While the purchase order above does not contain the chemical name, Grace provides the following chart showing that Batch 13201 was subject to a May 29, 2013 purchase order with a manufacturing start date on July 25, 2013:

Batch	Purchase Order Date	Manufacturing Start	Manufacturing Complete	Delivery
13101	May 1, 2013	April 15, 2013	April 27, 2013	May 24, 2013
13201	May 29, 2013	July 25, 2013	Aug. 18, 2013	Sept. 4, 2013

D.I. 231 at 3.

Thus, Batch 13201 appears to be the subject of a commercial offer for sale prior to July 24, 2013. Notably, however, the purchase order above does not request Form I specifically and does not include the requested chemical name. Thus, a genuine issue of material fact exists as to whether the offer for sale of Batch 13201 was an offer for sale of Form I. While it is known now that Batch 13201 is Form I, the manufacturing process may not have begun until after the critical date. *Sparton Corp. v. U.S.*, 399 F.3d 1321, 1325 (Fed. Cir. 2005) (finding there was not an offer for sale of the patented device where the release plates were ultimately included in the delivery, but not reflected in the offer); *Tec Air, Inc. v. Denso Mfg. Michigan Inc.*, 192 F.3d 1353, 1358 (Fed. Cir. 1999) ("the jury reasonably could have found that Tec Air's offers to []did not raise the on-sale bar because the subject matter of these offers does not fully anticipate the claimed invention."). The law requires that the invention must have been ready for patenting. *Pfaff*, 525 U.S. at 67.

In sum, the parties dispute (1) whether Batch 13101 is Form I, and (2) whether Form I was ready for patenting at the time Batch 13201 was offered for sale. Thus, genuine issues of material

fact exist and Elysium's motion for summary judgment as to invalidity of the Form I patents under 35 U.S.C. § 102 is denied.

IV. CONCLUSION

For the foregoing reasons, the Court grants-in-part Plaintiff's Motion to exclude the testimony of Robert Armitage (D.I. 206), grants-in-part Plaintiff's motion to exclude testimony of Dr. Robert Perni and Dr. Robert Steed (D.I. 207), denies Plaintiff's Motion to exclude the entire testimony of Dr. Perni (D.I. 208), denies Plaintiff's Motion to exclude the testimony of Alexander Clemons (D.I. 209), denies Plaintiff's motion to preclude the testimony of Dr. Ryan Dellinger (D.I. 210), denies Defendant's motion to preclude testimony of Dr. Aeri Park (D.I. 186), denies both of Defendant's motions to preclude the testimony of Kimberly Schenk regarding damages, (D.I. 187; D.I. 188), denies Grace's motion for summary judgment of no inequitable conduct, (D.I. 191), denies Grace's motions for summary judgment (D.I. 192, D.I. 193, D.I. 194), denies Elysium's motion for summary judgment of invalidity under 35 U.S.C. § 102 (D.I. 197) and denies Elysium's remaining motions for summary judgment (D.I. 198, D.I. 199, D.I. 200).

***

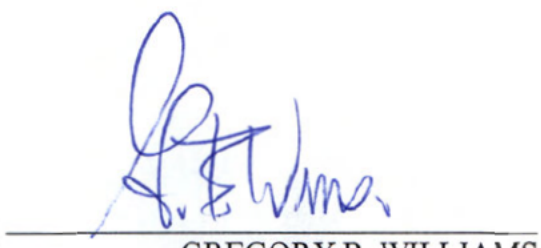
WHEREFORE, on this 3rd day of August, 2023, IT IS HEREBY ORDERED that:

1. Grace's *Daubert* Motion to Exclude the Testimony of Robert Armitage (D.I. 206) is **GRANTED-IN-PART, DENIED-IN-PART**.
2. Grace's *Daubert* Motion to Exclude Testimony of Dr. Robert Peri and Dr. Robert Steed, in part (D.I. 207) is **GRANTED-IN-PART**, **DENIED-IN-PART**. Drs. Perni and Steed are precluded from offering testimony and opinions expressed in Dr. Perni's Opening Report at paragraphs 186-187, 190-193, and 221-263, and in Dr. Steed's Opening Report

at paragraphs 173-174, 177-180, and 203-243 that opine on Grace's knowledge, intent, motivation, or state of mind.

3. Grace's *Daubert* Motion to Exclude Testimony of Dr. Perni in its Entirety (D.I. 208) is **DENIED**.
4. Grace's *Daubert* Motion to Exclude the Testimony of Alexander Clemons, in part, (D.I. 209) is **DENIED.**
5. Grace's *Daubert* Motion to Exclude the Testimony of Dr. Ryan Dellinger, in part, (D.I. 210) is **DENIED.**
6. Elysium's *Daubert* Motion to Exclude the Expert Testimony of Dr. Aeri Park (D.I. 186) is **DENIED**.
7. Elysium's *Daubert* Motions to Exclude the Expert Testimony of Ms. Kimberly Schenk (D.I. 187; D.I. 188) are **DENIED**.
8. Grace's Motion for Summary Judgment of No Inequitable Conduct (D.I. 191) is **DENIED**.
9. Grace's remaining Motions for Summary Judgment (D.I. 192; D.I. 193; D.I. 194) are **DENIED**.
10. Elysium's Motion for Summary Judgment that U.S. Patent Nos. 10,323,058 and 10,233,207 are Invalid Under 35 U.S.C. § 102(a) for Violating the on Sale Bar (D.I. 197) is **DENIED**.
11. Elysium's remaining Motions for Summary Judgment (D.I. 197, D.I. 198, D.I. 199, D.I. 200) are **DENIED**.
12. Because this Memorandum Order is filed under seal, the parties shall meet and confer and submit a joint proposed redacted version no later than seven (7) days after the date of this

Memorandum Order. In the absence of a timely request compliant with applicable standards, the Court will unseal the entire Memorandum Order.



GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE