IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

DSM IP ASSETS, B.V.; DSM PURITY,

B.V.; DSM BIOMEDICAL, B.V.; & DSM \$

BIOMEDICAL, INC.,

Plaintiffs,

V.

HONEYWELL INTERNATIONAL, INC.,

Defendant.

S

Defendant.

MEMORANDUM OPINION AND ORDER

Defendant Honeywell International, Inc., has filed a motion to dismiss this patent infringement action brought by plaintiffs DSM IP Assets, B.V.; DSM Purity, B.V.; DSM Biomedical, B.V.; and DSM Biomedical, Inc. (collectively, "DSM"). The motion is granted in part and denied in part.

I. Background

A. The '532 Patent

DSM Purity, B.V., is the record owner of U.S. Patent No. 10,280,532 ("the '532 patent"), which is titled "Colored Suture." Although the specification refers to the invention as being related to colored medical sutures for use during surgery, the claims are not limited to that use. Instead, the claims are directed to a "colored multi-filament yarn comprising filaments that have been obtained by gel spinning a mixture containing ultra-high molecular weight polyethylene"

According to the complaint, DSM Purity, B.V., has transferred to DSM Biomedical, B.V., the exclusive right to exploit the '582 patent for the manufacture, marketing, and sale of the products covered by the '532 patent worldwide. DSM Biomedical, B.V., has in turn exclusively licensed DSM Biomedical, Inc., to sell those products in the United States. Complaint ¶¶ 39–40.

("UHMWPE"). Independent claim 1 of the patent recites that the mixture contains UHMWPE having "an intrinsic viscosity (IV) of between about 8 and 40 deciliters per gram, a spin solvent and a pigment." The filaments consist of UHMWPE, "between 0.1 and 7.0 wt. % of an inorganic chromium oxide-containing pigment, a residual amount of spin solvent of less than about 500 ppm, and less than 1000 ppm of further constituents." '532 patent, col. 6, line 67, through col. 7, line 5. The remaining eight claims all depend from claim 1 and recite different ranges in the percentage amounts of pigment (claims 2 and 3), a specific type of chromium oxide (claim 4), narrower ranges for the residual amounts of spin solvent (claims 5–7), a narrower range for the amount of further constituents (claim 8), and a specific range for the number of filaments constituting the multi-filament yarn (claim 9).

B. The Complaint

In its complaint, DSM alleges that it makes and sells blue-colored, implantable sutures under the trademarks DYNEEMA PURITY VG and DYNEEMA PURITY TG. Complaint ¶ 14. According to DSM, the DYNEEMA PURITY products were the first commercially available blue medical grade UHMWPE fiber products. *Id.* ¶ 15. DSM alleges that the products can be used in implantable applications and that they offer both strength and superior contrast during arthroscopic surgeries, enabling surgeons to differentiate among multiple sutures and multiple anchors. *Id.* ¶ 16. DSM asserts that the products can be used alone or in combination with conventional suture materials. *Id.* ¶ 17.

With respect to its claim of direct infringement, DSM alleges the following in its complaint:

(1) Several years ago, Honeywell launched a line of medical grade ultra-high-strength ultra-lightweight polyethylene multi-filament products, which it sold under the trademark SPECTRA MG Bio;

- (2) All of Honeywell's SPECTRA MG Bio products are manufactured using a gelspinning process;
- (3) Initially, Honeywell did not develop a blue-colored option in its line of SPECTRA MG
 Bio fiber products, but since at least April 12, 2022, it has advertised a line of bluehued medical grade fiber products, including SPECTRA MG10 BIO Blue, SPECTRA
 MG13 BIO Blue, and SPECTRA MG21 Bio Blue (collectively, the "SPECTRA Blue
 products") in the United States;
- (4) On information and belief, Honeywell has made those products commercially available to customers since the third quarter of 2022;
- (5) On information and belief, Honeywell knew of the '532 patent and incorporated the technology claimed in that patent in its SPECTRA Blue products;
- (6) The SPECTRA MG10 BIO Blue and SPECTRA MG13 BIO Blue products are blue-colored yarn containing about 40 filaments of UHMWPE;
- (7) The SPECTRA MG21 BIO Blue is a blue-colored yarn containing about 60 filaments of UHMWPE;
- (8) On information and belief, the filaments in the SPECTRA BIO Blue products are manufactured by a gel-spinning process;²

² In paragraph 44 of the complaint, DSM alleges (not on information and belief) that Honeywell's SPECTRA MG Bio products are all manufactured using a gel-spinning process. In in paragraph 51 of the complaint, DSM separately alleges, this time on information and belief, that the filaments in the SPECTRA Blue products are manufactured by a gel-spinning process. The distinction appears to rest on the difference between the SPECTRA MG Bio products, as to which DSM asserts actual knowledge of the manufacturing process, and the SPECTRA Blue products as to which DSM can assert such knowledge only on information and belief.

- (9) On information and belief, the gel-spinning process used to make the filaments in the SPECTRA Blue products includes gel-spinning UHMWPE and C.I. Pigment Blue 36 in a spin solvent;
- (10) The SPECTRA Blue products exhibit characteristics substantially similar to the multi-filament yarns described in the '532 patent, including tenacity, modulus, elongation at break, and, on information and belief, an intrinsic viscosity between 8– 40 deciliters per gram;
- (11) C.I. Pigment Blue 36 is a blue pigment containing a mixed oxide of cobalt, aluminum, and chromium; on information and belief, DSM alleges that the filaments in the SPECTRA Blue products contain about 1–2% by weight of C.I. Pigment Blue;
- (12) On information and belief, in light of the intended use of the Honeywell products in medical applications, the colored UHMWPE filaments in each SPECTRA Blue product are of high purity;
- (13) On information and belief, each SPECTRA Blue product contains fewer than 60 parts per million of residual spin solvent and fewer than 1000 parts per million of other components;
- (14) Based on those allegations, on information and belief the SPECTRA Blue products meet every limitation of claims 1–9 of the '532 patent, either literally or under the doctrine of equivalents.

Complaint ¶¶ 43–58. In addition, DSM alleges, on information and belief, that Honeywell makes, uses, sells, and offers to sell SPECTRA Blue products in the United States and imports SPECTRA Blue products into the United States. *Id.* ¶¶ 59–64.

With respect to its allegations of indirect and willful infringement, DSM alleges that Honeywell has been aware of the '532 patent since at least the date the complaint was filed and served on Honeywell and that Honeywell has actively encouraged others to make and use the SPECTRA Blue products in the United States, knowing that making and using the SPECTRA Blue products in the United States would infringe the '532 patent, and that Honeywell's encouragement has caused others to make and use the SPECTRA Blue products in the United States. Complaint ¶¶ 65–82.

II. Discussion

Citing the Supreme Court's opinions in *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007), and *Ashcroft v. Iqbal*, 556 U.S. 662 (2009), Honeywell argues that the complaint contains insufficient factual allegations regarding direct infringement, indirect infringement, and willful infringement, and that the complaint should be dismissed under Fed. R. Civ. P. 12(b)(6) for failure to state a claim on which relief can be granted.

The now-familiar Supreme Court decisions in *Twombly* and *Iqbal* stand for the proposition that while a complaint is not required to contain "detailed factual allegations," it must contain "more than an unadorned the-defendant-unlawfully-harmed-me accusation." *Iqbal*, 556 U.S. at 678 (quoting *Twombly*, 550 U.S. at 555). To survive a motion to dismiss, a complaint "must contain sufficient factual matter accepted as true, to 'state a claim to relief that is plausible on its face." *Iqbal*, 556 U.S. at 678 (quoting *Twombly*, 550 U.S. at 570). A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged. *Iqbal*, 556 U.S. at 678.

A. Direct Infringement

With respect to direct infringement, DSM has alleged that Honeywell's SPECTRA Blue products infringe each of the asserted claims of the '532 patent, and it has done so with detailed allegations, not simply by setting forth the elements of direct infringement and then stating that Honeywell's product satisfies those requirements. Rather, DSM's allegations provide a factual basis for its charge of infringement by specifically identifying the accused products and setting forth its infringement theory as to those products on a limitation-by-limitation basis. With respect to the limitations of claim 1, DSM alleges that Honeywell's SPECTRA MG BIO products are manufactured using a gel-spinning process, that those products have an intrinsic viscosity of between 8 and 40 deciliters per gram, that the components of the process of making the filaments include a spin solvent and a pigment, and that the filaments consist of UHMWPE between 0.7 and 7.0 % by weight of an inorganic Chromium oxide-containing pigment, a residual amount of spin solvent of less than about 500 parts per million, and less than 1000 parts per million of other components. DSM's allegations also cover most of the dependent claims, alleging that the SPECTRA MG Bio components fall within the concentration ranges set forth in each of those claims.3

The one exception is dependent claim 8 of the '532 patent. That claim recites the multifilament yarn according to claim 1, "wherein the filaments contain less than 500 ppm of further constituents." The complaint alleges that in addition to UHMWPE and less than 60 ppm of residual spin solvents, each SPECTRA Blue product contains "less than 1000 ppm of other components," Complaint ¶ 57, which is what claim 1 requires. The complaint does not, however, allege that the accused products contain less than 500 ppm of further constituents, which is what claim 8 requires. The only other relevant allegations in the complaint are that the colored filaments in the SPECTRA Blue products "are of high purity," *id.* at ¶ 56, and the summary assertion that the SPECTRA Blue products meet "each and every limitation of claims 1–9 of the '532 patent," *id.* at ¶ 58. Those allegations are insufficiently specific to claim infringement of the "further constituents" limitation of claim 8. The portions of the complaint directed to direct, indirect, and willful infringement of claim 8 are therefore dismissed.

On their face, those allegations are amply sufficient to satisfy the pleading requirements of Fed. R. Civ. P. 8, as applied in *Twombly*, *Iqbal*, and their progeny. Although Honeywell points out that the complaint lacks "proofs" or "claim charts," see Dkt. No. 14 at 4, 6, 8, Rule 8 imposes no such requirement. See Nalco Co. v. Chem-Mod, LLC, 883 F.3d 1337, 1350 (Fed. Cir. 2018) (A patentee need not "prove its case at the pleading stage.") (quoting In re Bill of Lading Transmission & Processing Sys. Patent Litig., 681 F.3d 1323, 1339 (Fed. Cir. 2012)). What is required is that the complaint contain "well-pleaded factual allegations"; the court must "assume the veracity" of those allegations and then determine "whether they plausibly give rise to an entitlement to relief." Igbal, 556 U.S. at 679. "Specific facts are not necessary; the statement need only 'give the defendant fair notice of what the . . . claim is and the grounds upon which it rests" Erickson v. Pardus, 551 U.S. 89, 93 (2007) (quoting Twombly). And as the Federal Circuit has explained, the principal objective of the complaint in a patent case is to ensure that the defendant is given "fair notice of infringement of the asserted patents." Disc Disease Sols. Inc. v. VGH Sols., Inc., 888 F.3d 1256, 1260 (Fed. Cir. 2018); see also Bot M8 LLC v. Sony Corp. of Am., 4 F.4th 1342, 1353 (Fed. Cir. 2021) ("[I]t is enough that a complaint place the alleged infringer on notice of what activity is being accused of infringement.") (cleaned up).⁴ Accepting the veracity of DSM's

⁴ Honeywell seeks to distinguish the Federal Circuit's decision in *Disc Disease*, in which the court found the allegations of infringement to be sufficient. Honeywell argues that the technology in *Disc Disease* was simple; that copies of the asserted patents were attached to the complaint in that case; that the complaint identified the accused products by name and included photographs of the product packaging; and that the complaint alleged that the accused products met all the elements of at least one claim of the asserted patents. Dkt. No. 21, at 2. Those purported distinctions of *Disc Disease* do not stand up. The complaint in this case identified the accused products by name, attached a copy of the asserted patent, and alleged that the products infringed each element of the asserted claims. As for the suggestion that *Disc Disease* is distinguishable because it involved simple technology, there is no suggestion in *Disc Disease* or any other case cited by Honeywell that the pleading rules apply differently for simple as opposed to complex technologies.

factual allegations, it is clear that they state a claim of infringement by providing notice to Honeywell of what it is being accused of and are sufficient to show that DSM has a plausible claim for relief.

The wrinkle in this case is that several of the allegations are stated to be "on information and belief." Honeywell argues (Dkt. No. 14 at 8) that it was inappropriate for DSM to rely on "information and belief" pleading in this case because the predicate for using that pleading convention was not satisfied here. I disagree.

Honeywell acknowledges that "information and belief" pleading is permissible "when the facts at issue are peculiarly within the defendant's possession." *Lincoln Benefit Life Co. v. AEI Life, LLC*, 800 F.3d 99, 107 n.31 (3d Cir. 2015); *see also In re Rockefeller Ctr. Props., Inc. Sec. Litig.*, 311 F.3d 198, 216 (3d Cir. 2002); *British Telecomms. PLC v. IAC/InteractiveCorp.*, 381 F. Supp. 3d 293, 299 (D. Del. 2019). The Third Circuit summarized the state of the law on this point nicely in *McDermott v. Clondalkin Grp., Inc.*, 649 F. App'x 263, 267–68 (3d Cir. 2016), as follows:

This Court has explained that pleading upon information and belief is permissible "[w]here it can be shown that the requisite factual information is peculiarly within the defendant's knowledge or control"—so long as there are no "boilerplate and conclusory allegations" and "[p]laintiffs . . . accompany their legal theory with factual allegations that make their theoretically viable claim plausible." . . . In fact, this Court has explained that "[s]everal Courts of Appeals accept allegations 'on information and belief' when the facts at issue are peculiarly within the defendant's possession."

In particular, there is no force to Honeywell's contention that *Bot M8* sets forth a more restrictive pleading rule for a case involving complex technology, such as this case. The court in *Bot M8* overturned the dismissal of the complaint with respect to two of the patents at issue, noting that the complaint plausibly alleged infringement of those two patents and supported its assertions with specific factual allegations. 4 F.4th at 1355–56. The court upheld the dismissal of the claims regarding two other patents in the case on the ground that Bot M8 had "essentially pleaded itself out of court," *id.* at 1354, and had "failed to offer factual allegations that support a plausible inference" of infringement, *id.* at 1355. That standard is the same as the standard applied in *Disc Disease*, i.e., the "plausibility standard of *Iqbal/Twombly*." *Disc Disease*, 888 F.3d at 1260.

Other circuits have adopted essentially the same standard for assessing "information and belief" allegations. In a recent and detailed treatment of the issue, the Eighth Circuit held that "information and belief" pleading is permissible under *Twombly* and *Iqbal* if "such allegations are based on information that is within the possession and control of the defendant or are supported by sufficient factual material that makes the inference of culpability plausible." *Ahern Rentals, Inc. v. EquipmentShare.com, Inc.*, 59 F.4th 948, 955 (8th Cir. 2023); *see also Inova Hosp. San Antonio, Ltd. P'ship v. Blue Cross & Blue Shield of Ga., Inc.*, 892 F.3d 719, 730 (5th Cir. 2018); *Pirelli Armstrong Tire Corp. Retiree Med. Benefits Tr. v. Walgreen Co.*, 631 F.3d 436, 442–43 (7th Cir. 2011); *Keiler v. Harlequin Enters. Ltd.*, 751 F.3d 64, 70 (2d Cir. 2014).

DSM's use of "information and belief" pleading in its complaint satisfied that standard. Many of the factual allegations bearing on the issue of infringement were made directly, without use of the "information and belief" qualifier. Those included DSM's allegations (1) that Honeywell launched its SPECTRA MG Bio line of products in the United States several years ago; (2) that all of those products are manufactured using a gel spinning process; (3) that since April 2022 Honeywell has advertised three blue-hued, medical grade variations of the SPECTR MG Bio products in the United States; (4) that those products contain about 40 filaments of UHMWPE (in the case of SPECTRA MG10 BIO Blue and SPECTRA MG13 BIO Blue) and about 60 filaments of UHMWPE (in the case of SPECTRA MG21 BIO Blue); (5) that the SPECTRA Blue products exhibit characteristics substantially similar to the exemplary multi-filament years described in the '532 patent, including tenacity, modulus, and elongation at break; and (6) that C.I. Pigment Blue 36 is a blue pigment containing a mixture of cobalt, aluminum, and chromium.

Other allegations, which were made "on information and belief," included the allegations
(1) that the gel-spinning process used to make the filaments in the SPECTRA Blue products

"includes gel-spinning UHMWPE and C.I. Pigment Blue 36 in a spin solvent"; (2) that the SPECTRA Blue products have an intrinsic viscosity of between 8 and 40 deciliters per gram; (3) that the filaments of the SPECTRA Blue products contain about 1–2% by weight of Pigment Blue 36; and (4) that each SPECTRA Blue product contains less than 60 parts per million of residual spin solvent and less than 1000 parts per million of other components.⁵

The use of "information and belief" pleading in the complaint is consistent with the purposes previously approved by the Third Circuit and other courts. The "information and belief" allegations relate to limitations that address the process for manufacturing the accused products, information to which DSM is not privy, or details regarding the composition of Honeywell's products that may be difficult to ascertain by testing the finished products, but which would be readily known to the manufacturer. Those allegations are therefore made in circumstances in which the factual information in question is peculiarly within the defendant's knowledge or control. Moreover, the various other allegations that are not made on information and belief, such as the allegation that the SPECTRA Blue products exhibit characteristics substantially similar to the characteristics of the multi-filament yarns of the '532 patent, constitute factual allegations that make DSM's "theoretically viable claim plausible." *In re Burlington Coat Factory Sec. Litig.*, 114 F.3d 1410, 1420 (3d Cir. 1997).

Honeywell protests that DSM could have avoided pleading facts on an "information and belief" basis if DSM had simply approached Honeywell and requested either samples of its products or information as to their components and method of manufacture (Dkt. No. 14 at 3). DSM responds that it is unrealistic to believe that Honeywell, a competitor at risk of becoming a

⁵ The complaint alleges, on information and belief, that given their intended use in medical applications, the colored UHMWPE filaments in each SPECTRA Blue product are of high purity, Complaint ¶ 56, which is a reasonable assumption.

defendant in a patent suit, would volunteer information that could assist DSM in its litigation. Under the circumstances, it was reasonable for DSM to assume that Honeywell was not likely to cooperate in DSM's efforts to support its infringement claims.⁶

Honeywell also argues that DSM's complaint is insufficient because it contained "no citations, sources, weblinks . . . product guides, or videos to support its allegations." Dkt. No. 14 at 1, 3). But Honeywell does not suggest that any such materials exist, or that they contain information about the composition and manufacturing of the SPECTRA Blue products that would have been informative to DSM regarding the issue of infringement.

As for Honeywell's suggestion that DSM should have conducted its own testing on the materials in the SPECTRA Blue products, DSM points out that several of the limitations involve process steps that could not readily be discerned simply from examination of the final product. Moreover, DSM explains that Honeywell does not sell its SPECTRA Blue products on the open market but distributes them only to customers. Those products therefore would not have been available to DSM for direct purchase. Under all the circumstances, it was therefore reasonable for DSM to plead what it could without reliance on "information and belief" pleading, and to use "information and belief" pleading to fill in the gaps pending confirmation through discovery.

honeywell acknowledges that "DSM was not required to contact Honeywell before filing the lawsuit" (Dkt. No. 14 at 8), but nonetheless complains that DSM "never contacted Honeywell, through a notice letter or any other means, to inform Honeywell of its alleged infringement (*id.* at 3). Honeywell further contends that DSM "should have contacted the very same representatives with whom DSM has negotiated in the past to acquire sufficient information to prove or disprove its claim *before* it brought this matter to federal court" (*id.* at 9). While it may have been sensible for DSM to contact Honeywell in advance of filing its complaint for various reasons, such as to establish pre-filing knowledge of the patent on Honeywell's part, DSM was not required to do so in the hope of avoiding the need to file a lawsuit. Of course, if Honeywell can demonstrate that DSM's infringement theory is unfounded, it is not without recourse to obtain a prompt resolution of this action. It can informally seek to demonstrate to DSM that DSM's claims of infringement are baseless. Alternatively, if Honeywell can show that DSM has not conducted a reasonable pre-filing investigation, it can seek sanctions under Fed. R. Civ. P. 11.

Citing *Uniloc 2017 LLC v. ZenPayroll, Inc.*, No. 19-1075, 2021 WL 271800 (D. Del. Jan. 27, 2021), and *DIFF Scale Operation Research, LLC*, No. 19-2109, 2020 WL 2220031 (D. Del. May 7, 2020), Honeywell contends that the allegations in DSM's complaint do nothing more than "repeat the claim limitations and then baldly state that Honeywell's Accused Products somehow practice them." Dkt. No. 14, at 7–8. That is not so. The allegations in the complaint identify the accused products by name and set forth in considerable detail the features of those accused products and the method used to produce them. *See* Dkt. No. 1, at ¶¶ 43–57. Those allegations contain far more detail than the allegations in the cases cited by Honeywell. Rather than simply reciting the claim limitations and stating in conclusory fashion that Honeywell's products infringe the claims of the '532 patent, the complaint alleges facts about the accused products that show "why it is *plausible* that the products infringe." *DIFF*, 2020 WL 2220031, at *2. The allegations of direct infringement (with the exception of claim 8, as discussed in footnote 3, above) are therefore sufficient to survive Honeywell's motion to dismiss.

B. Indirect Infringement

In addition to moving to dismiss the complaint with regard to its allegations of direct infringement, Honeywell seeks dismissal of DSM's allegations that Honeywell committed indirect infringement by inducing its customers (medical equipment manufacturers) to infringe the '532 patent.

First, Honeywell contends that the complaint fails to sufficiently plead that Honeywell was aware of the '532 patent. As a result, Honeywell argues that knowledge of the patent—an essential element of indirect infringement—has not been adequately alleged.

In response, DSM notes that in addition to pleading on information and belief that Honeywell was aware of the '532 patent, DSM has alleged facts strongly suggesting that

Honeywell was aware of the '532 patent from the date the application was published or at least from the date the patent issued. Complaint ¶¶ 65–67. In particular, DSM has alleged that as a direct competitor in a highly specialized market, Honeywell closely monitors DSM's publicly available patent applications and granted patents relating to DSM UHMWPE fiber technologies. *Id.* at ¶ 65.7 As a result, DSM contends, Honeywell was almost certainly aware of the '532 patent prior to the filing of this lawsuit.⁸ In addition, DSM alleged that Honeywell postponed launching its SPECTRA Blue products until it became clear that DSM's competing products were a commercial success. The inference from that allegation, according to DSM, is that Honeywell was likely aware that the DSM product was patent-protected, and that Honeywell hesitated to enter the market until it determined to do so despite the risk of an infringement action because it did not want to cede the field to DSM on a profitable product.

Finally, DSM alleges that, at the latest, Honeywell was aware of the patent at the time the complaint was filed and served on it. *Id.* at ¶ 69. For that reason, DSM contends that, at minimum, the knowledge element of indirect infringement has been adequately pleaded with respect to post-filing infringement. And because the complaint sets out a plausible basis for concluding that Honeywell's SPECTRA Blue products infringe the patent, the complaint adequately pleaded that Honeywell's conduct in encouraging its customers to make and use the SPECTRA Blue products

⁷ Honeywell confirms that it has competed with DSM in the industry for many years and that the two companies have been involved in previous intellectual property disputes. Dkt. No. 14 at 9.

⁸ Citing Malvern Panalytical Ltd. v. Ta Instruments-Waters LLC, No. 19-2157, 2021 WL 3856145, at *3 (D. Del. Aug. 27, 2021), Honeywell contends Honeywell's alleged monitoring of DSM's patenting activity is insufficient to support DSM's allegation that Honeywell became aware of the '532 patent after it issued. While an allegation of monitoring may not always support an assertion that the defendant was aware of a patent, such allegations have been held to be sufficient in cases such as this one, in which the parties are direct competitors in a niche market. See Align Tech., Inc. v. 3Shape A/S, 339 F. Supp. 3d 435, 447–48 (D. Del. 2018); Groove Digital, Inc. v. Jam City, Inc., No. 19-862, 2019 WL 351254, at *4 (D. Del. Jan. 29, 2019).

in the United States would constitute indirect infringement. Honeywell does not address that issue directly in its briefs, but it identifies the filing date of the complaint as one of the three dates as of which DSM claims Honeywell had knowledge of the '507 patent, and then contends that the complaint fails to adequately allege that Honeywell had actual knowledge of the patent on any of those three dates. *See* Dkt. No. 14 at 10–11.

Judges in this district have on several occasions addressed the question whether knowledge of a patent gained as of the time of the infringement complaint can serve as knowledge of the patent for purposes of proving indirect infringement. *See SoftView LLC v. Apple Inc.*, No. 10-389, 2012 WL 3061027, at *7 n.8 (D. Del. July 26, 2012) (recognizing the split in authority and collecting cases). One line of cases holds that knowledge for purposes of an indirect infringement claim is not established where "the defendant's alleged knowledge of the asserted patents is based solely on the content of that complaint or a prior version of the complaint filed in the same lawsuit." *ZapFraud, Inc. v. Barracuda Networks, Inc.*, 528 F. Supp. 3d 247, 252 (D. Del. 2021); *see also Xpoint Techs., Inc. v. Microsoft Corp.*, 730 F. Supp. 2d 349, 357 (D. Del. 2010); *Mallinckrodt, Inc. v. E-Z-Em Inc.*, 670 F. Supp. 2d 349, 354 n.1 (D. Del. 2009).

A contrary line of cases, including most of the more recent decisions, holds that the initial complaint may serve to provide the required knowledge for a claim of post-suit indirect infringement. See, e.g., ESCO Grp. LLC v. Deere & Co., No. 20-1679, 2023 WL 4199413, at *7–8 (D. Del. June 22, 2023); MG Freesites Ltd. v. ScorpCast LLC, No. 20-1012, 2023 WL 346301, at *10 (D. Del. Jan. 20, 2023); PPG Indus. Ohio, Inc. v. Axalta Coating Sys., LLC, No. 21-346, 2022 WL 610740, at *6 (D. Del. Jan. 26, 2022); EyesMatch Ltd. v. Facebook, Inc., No. 21-111, 2021 WL 4501858, at *2–3 (D. Del. Oct. 1, 2021); IOENGINE, LLC v. PayPal Holdings, Inc., No. 18-452, 2019 WL 330515, at *4 (D. Del. Jan. 25, 2019); Groove Digital, Inc. v. King.com, Ltd.,

No. 18-836, 2018 WL 6168615, at *2 (D. Del. Nov. 26, 2018); Collabo Innovations, Inc. v. Omnivision Techs., Inc., No. 16-197, 2017 WL 374484, at *9 (D. Del. Jan. 25, 2017), report and recommendation adopted, 2017 WL 603471 (D. Del. Feb. 14, 2017); Telecomm Innovations, LLC v. Ricoh Co., 966 F. Supp. 2d 390, 393–94 (D. Del. 2013); Versata Software, Inc. v. Callidus Software Inc., 944 F. Supp. 2d 357, 362–63 (D. Del. 2013); Execware, LLC v. Staples, Inc., No. 11-836, 2012 WL 6138340, at *5 (D. Del. Dec. 10, 2012); Apeldyn Corp. v. Sony Corp., 852 F. Supp. 2d 568, 573–74 (D. Del. 2012); Walker Digital, LLC v. Facebook, Inc., 852 F. Supp. 2d 559, 565 (D. Del. 2012); SoftView, 2012 WL 3061027, at *7.

The majority position among courts in other districts aligns with the latter line of cases. See, e.g., RightQuestion, LLC v. Samsung Elecs. Co., No. 2:21-cv-238, 2022 WL 507487, at *2 (E.D. Tex. Feb. 18, 2022); Merrill Mfg. Co. v. Simmons Mfg. Co., 553 F. Supp. 3d 1297, 1302–03 (N.D. Ga. 2021); Uni-Sys., LLC v. U.S. Tennis Ass'n, Inc., 350 F. Supp. 3d 143, 167 (E.D.N.Y. 2018); Meetrix IP, LLC v. Cisco Sys., Inc., No. 1:18-cv-309, 2018 WL 8261315, at *3 (W.D. Tex. Nov. 30, 2018); Script Sec. Sols. L.L.C. v. Amazon.com, Inc., 170 F. Supp. 3d 928, 937 (E.D. Tex. 2016) (citing cases); Regents of Univ. of Minn. v. AT&T Mobility LLC, 135 F. Supp. 3d 1000, 1010–12 (D. Minn. 2015); MyMedicalRecords, Inc. v. Jardogs, LLC, 1 F. Supp. 3d 1020, 1024–25 (C.D. Cal. 2014). Contra, e.g., GoTV Streaming, LLC v. Netflix, Inc., No. 2:22-cv-7556, 2023 WL 2627016, at *2–3 (C.D. Cal. Feb. 16, 2023); Sonos, Inc. v. Google LLC, 591 F. Supp. 3d 638, 647–48 (N.D. Cal. 2022); Brandywine Commc'ns Techs., LLC v. T-Mobile USA, Inc., 904 F. Supp. 2d 1260, 1268–69 (M.D. Fla. 2012).

As I explained in *IOENGINE LLC v. PayPal Holdings, Inc., supra*, the issue of post-suit knowledge of a patent typically arises "when an amended complaint is filed, so that the allegations of knowledge and continuing infringement refer, at minimum, to the period between the filing of

the original complaint and the filing of the amended complaint." 2019 WL 330515, at *4 n.1. However, it would serve little purpose to require the plaintiff to go through the formality of "fil[ing] an amended complaint in order to be allowed to assert knowledge of the patents during the period following the filing of the original complaint." *Id.* In addition, as Judge Stark noted in *SoftView*, to adopt the contrary view "would seem to have the effect of prohibiting patentees from stating a claim for indirect infringement when an assert[ed] patent is issued on the same date the lawsuit is filed and when an additional patent is issued during the pendency of litigation." 2012 WL 3061027, at *7 n.9. Accordingly, I will follow the majority rule as adopted in *SoftView* and *IOENGINE*. Based on that authority, I reject Honeywell's suggestion in its brief that a claim of post-suit indirect infringement cannot be based on knowledge obtained from the complaint that initiated the lawsuit.

As for the allegations regarding Honeywell's inducement of others to make or use the SPECTRA Blue products, the allegations in the complaint are all set out in "information and belief" format. See Complaint ¶¶ 70–75. That is permissible, however, because a competitor such as DSM is not likely to be privy to transactions between Honeywell and parties with whom Honeywell is dealing. Moreover, the complaint contains detailed allegations regarding the way the SPECTRA Blue products purportedly adhere to the precise manufacturing protocol and components spelled out in the '532 patent. For that reason, the allegation that Honeywell was aware of the '532 patent supports the allegation that Honeywell knew that its products infringed the patent. If it is true that Honeywell is aware of the '532 patent, as DSM adequately alleges, and if it is true that the SPECTRA Blue products infringe at least some of the asserted claims of the '532 patent, as DSM also adequately alleges, then it is entirely reasonable to infer that by selling the SPECTRA Blue products to customers in the United States for them to use there, Honeywell

has knowingly induced those customers to engage in direct infringement of the patent. The indirect infringement allegations (except as to claim 8, s discussed in footnote 3, above) are therefore sufficient to withstand the motion to dismiss the claim of indirect infringement.

C. Willfulness

Regarding willfulness, DSM's allegations are set forth in the "information and belief" format and are not particularly detailed. *See* Complaint ¶ 77–82. DSM alleges that Honeywell's infringement was "deliberate and intentional"; that Honeywell has no reasonable noninfringement or invalidity defense; and that Honeywell "decided to develop with the intent to commercialize the SPECTRA Blue Products despite its knowledge that such actions infringe the '532 patent." *Id.* at ¶ 80. As noted in the discussion of indirect infringement, DSM's allegations are sufficient with respect to Honeywell's awareness of the '532 patent and Honeywell's awareness that the SPECTRA Blue products infringe the patent. However, proof of willfulness requires more. As the Supreme Court has held, willfulness entails conduct that is "willful, wanton, malicious, badfaith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate." *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 579 U.S. 93, 103–04 (2016).

Paragraph 82 of the complaint that echoes the words of the Supreme Court in *Halo*, alleging on information and belief that Honeywell's infringement "has been and continues to be deliberate, intentional, egregious, willful, and in reckless disregard of the valid patent claims of the '532 patent." Complaint ¶ 82. The complaint does not expand upon those allegations, however, by setting forth any factual basis for its assertion that Honeywell's conduct is egregious. DSM simply alleges that Honeywell was aware of the '532 patent, was aware that its products infringed the claims of that patent and was aware that there was no viable claim of invalidity with regard to the '532 patent. Honeywell contends that those allegations are insufficient because DSM has not

provided a sufficient factual basis for its allegation that Honeywell's conduct was flagrant and egregious.

Some courts have held that a claim of willful infringement cannot be supported in the absence of factual allegations supporting the assertion that the defendant's conduct was flagrant or egregious. See Dali Wireless, Inc. v. Corning Optical Commc'ns LLC, 638 F. Supp. 3d 1088, 1100 (N.D. Cal. 2022); Fortinet, Inc. v. Forescout Techs., Inc., No. 20-cv-3343, 2020 WL 6415321, at *15 (N.D. Cal. Nov. 2, 2020); Software Research, Inc. v. Dynatrace LLC, 316 F. Supp. 3d 1112, 1137 (N.D. Cal. 2018); Cont'l Circuits LLC v. Intel Corp., 2017 WL 2651709, at *8 (D. Ariz. June 19, 2017); Finjan, Inc. v. Cisco Sys., Inc., No. 17-cv-72, 2017 WL 2462423, at *5 (N.D. Cal. June 7, 2017). Other courts, however, including courts in this district, have held that while the plaintiff must ultimately prove that the defendant's conduct was flagrant or egregious in order to establish willfulness, it is not necessary for the plaintiff to plead that element. See TC Tech LLC v. Sprint Corp., No. 16-153, 2019 WL 529678, at *3 (D. Del. Feb. 11, 2019); IOENGINE, 2019 WL 330515, at *7 (citing numerous cases); Align Tech., Inc. v. 3Shape A/S, 339 F. Supp. 3d 435, 448–49 (D. Del. 2018); Välinge Innovation AB v. Halstead New England Corp., No. 16-1082, 2018 WL 2411218, at *13 (D. Del. May 29, 2018) (citing numerous cases); Bio-Rad Lab'ys Inc. v. Thermo Fisher Sci. Inc., 267 F. Supp. 3d 499, 501 (D. Del. 2017) ("At the pleading stage, it is not necessary to show that the case is egregious."); Kyowa Hakka Bio, Co. v. Ajinomoto Co., No. 17-313, 2018 WL 834583, at *13 (D. Del. Feb. 12, 2018) (same); *Rhodes Pharms. L.P. v. Indivior*, Inc., No. 16-1308, 2018 WL 326405, at *9 (D. Del. Jan. 8, 2018) ([G]eneralized allegations of willfulness are sufficient to withstand a motion to dismiss."); see also BSD Crown, Ltd. v. Amazon.com, Inc., No. 3:23-cv-57, 2023 WL 6519752, at *7 (N.D. Cal. July 27, 2023); Therabody, *Inc. v. Tzumi Elecs. LLC*, No. 21-CV-7803, 2022 WL 17826642, at *5 (S.D.N.Y. Dec. 19, 2022);

ACQIS LLC v. Wiwynn Corp., 614 F. Supp. 3d 499, 506 (W.D. Tex. 2022); Sonos, Inc. v. Google LLC, 591 F. Supp. 3d 638, 644–45 (N.D. Cal. 2022) ("[O]nce willfulness is adequately pled, the complaint need not go further and specify the further aggravating circumstances warranting enhanced damages. . . . It would be unreasonable to expect patent plaintiffs to be in a position to plead the full extent of egregious misconduct."); Longhorn Vaccines & Diagnostics, LLC v. Spectrum Sols. LLC, 564 F. Supp. 3d 1126, 1147 (D. Utah 2021); Core Optical Techs., LLC v. Juniper Networks Inc., 562 F. Supp. 3d 376, 381 (N.D. Cal. 2021); Lexington Luminance LLC v. TCL Multimedia Tech. Holdings, Ltd., No. 16-cv-11458, 2017 WL 3795769, at *6 (D. Mass. Aug. 30, 2017).9

As explained in *IOENGINE*, 2019 WL 330515, at *8, the facts bearing on willfulness are likely to be mainly in the possession of the defendant and available to the plaintiff only through discovery. If discovery fails to produce facts that would support a finding of willfulness, the defendant can seek to have the willfulness allegations dismissed on summary judgment. For pleading purposes, however, DSM has made sufficient allegations of willfulness.¹⁰

As in the case of indirect infringement, courts are divided as to whether allegations of willfulness are sufficient to withstand a motion to dismiss when the element of knowledge of the

⁹ In one post-*Halo* case, *Varian Med. Sys., Inc. v. Elekta AB*, No. 15-871, 2016 WL 3748772, at *8 (D. Del. July 12, 2016), a court in this district held that it was necessary to plead egregious conduct in order to survive a motion to dismiss a willfulness claim. The author of the opinion in that case, however, has since stated that he now believes there should be no such requirement in order to successfully plead willfulness. *See Välinge*, 2018 WL 2411218, at *6. The opinion in the latter case provided a thorough and persuasive explanation for the revision in the judge's views. *Id.* at 6–9.

Boston Sci. Corp. v. Nevro Corp., 415 F. Supp. 2d 482 (D. Del. 2019), on which Honeywell relies, Dkt. No. 14, at 14, noted that the plaintiff failed to allege any facts showing that the defendant knew that its systems infringed the asserted patents and that it merely stated that the defendant's "infringement is reckless, knowing, deliberate, and willful." *Id.* at 495. That was not enough, in the court's view, to plead a cognizable claim of willfulness. In this case, the complaint contained considerably more: In addition to pleading that Honeywell knew that the SPECTRA

patent is based on the filing of the complaint in the case in which willfulness is alleged. Again, a majority of courts that have addressed that issue have held that a charge of post-filing willfulness can properly be predicated on knowledge of the patent as a result of the filing of either the original complaint or an amended complaint. *See IOENGINE*, 2019 WL 330515, at *7–8 (Plaintiff need not plead additional facts "beyond knowledge of the patent and continuing infringement despite that knowledge to prove post-suit willfulness."); *Softex LLC v. HP Inc.*, No. 1:22-CV-1311, 2023 WL 2392739, at *2 (W.D. Tex. Mar. 7, 2023); *Therabody*, 2022 WL 17826642, at *10; *ZitoVault*, *LLC v. Int'l Bus. Machines Corp.*, No. 3:16-CV-962, 2018 WL 2971131, at *3 (N.D. Tex. Mar. 29, 2018); *contra*, *iFIT Inc. v. Peloton Interactive*, *Inc.*, No. 21-507, 2022 WL 609605, at *2 (D. Del. Jan. 28, 2022) (citing *Wrinkl*, *Inc. v. Facebook*, *Inc.*, No. 20-cv-1345, 2021 WL 4477022, at *7 (D. Del. Sept. 30, 2021)). I agree with that line of cases, and for the reasons stated above, Honeywell's motion to dismiss DSM's willfulness allegations is denied, except as to claim 8, as discussed in footnote 3, above.

III. Conclusion

In summary, the allegations in claims 1 through 7 and 9 of the complaint are sufficient to support DSM's theories of direct infringement, indirect infringement, and willfulness. Were it not for the fact that some of DSM's allegations in the complaint are made "on information and belief," there would be no question that the allegations are sufficient. Because I conclude that the use of "information and belief" allegations in the critical portions of the complaint is justified under the

Blue products infringed the '532 patent and that its infringement was egregious, Complaint ¶¶ 77, 80, 81, the complaint alleged that Honeywell knew that the making of the SPECTRA Blue products by others would constitute infringement, id. at ¶¶ 78–79, and that, with knowledge of the '532 patent, Honeywell "incorporated the technology disclosed and claimed in the '532 patent into its line of Medical Grade Bio fiber products," id. at ¶ 48. Those allegations are considerably more specific than the allegations the court found insufficient in *Boston Scientific Corp*.

case law authorizing the use of that pleading convention in appropriate circumstances, the

complaint is sufficient to allege direct infringement with respect to claims 1 through 7 and 9 of the

complaint, and the portion of the motion to dismiss the allegations of direct infringement as to

those claims is denied. With respect to the allegations that Honeywell is liable for indirect

infringement and that its infringement was willful, the complaint sufficiently alleges that

Honeywell was aware of the '532 patent and knew that it was infringing that patent as to claims 1

through 7 and 9. That is sufficient at the pleading stage to support claims of indirect infringement

and willfulness. Therefore, the motion to dismiss the claims of indirect infringement and willful

infringement as to claims 1 through 7 and 9 of the '532 patent are also denied. The motion to

dismiss is granted as to claim 8 of the '532 patent, and all claims of direct, indirect, and willful

infringement with respect to that claim are dismissed.

IT IS SO ORDERED.

SIGNED this 2d day of November, 2023.

WILLIAM C. BRYSON

UNITED STATES CIRCUIT JUDGE

Wellin C. Pryson