

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

NNCRYSTAL US CORPORATION AND  
THE BOARD OF TRUSTEES OF THE  
UNIVERSITY OF ARKANSAS,

Plaintiffs,

v.

NANOSYS, INC.,

Defendant.

Civil Action No. 19-1307-RGA

MEMORANDUM OPINION

Frederick L. Cottrell, III, Nicole K. Pedi, and Tyler E. Cragg, RICHARDS, LAYTON & FINGER, P.A., Wilmington, DE; Qingyu Yin, Brian Kacedon, and Rajeev Gupta, FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, Washington, D.C.; and Maximilienne Giannelli, FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, Reston, VA, Attorneys for Plaintiffs.

Karen E. Keller, David M. Fry and Nathan R. Hoeschen, SHAW KELLER LLP, Wilmington, DE; and John Christopher Rozendaal, Byron L. Pickard, Rob Esmond, Donald J. Featherstone, and Josephine Kim, STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., Washington, D.C., Attorneys for Defendant.

February 10, 2020

  
ANDREWS, UNITED STATES DISTRICT JUDGE:

Before me is Defendant's Motion to Dismiss Plaintiffs' First Amended Complaint. (D.I. 14). I have reviewed the parties' briefing. (D.I. 15, 19, 21). Because I find that Plaintiffs have sufficiently pleaded a claim for direct infringement, I will deny Defendant's motion as to direct infringement. But I will grant Defendant's motion as to indirect and willful infringement.

## I. BACKGROUND

Plaintiffs allege that Defendant infringes at least one claim of U.S. Patent No. 7,105,051 ("the '051 patent"), which is directed to a method of preparing colloidal nanocrystals using non-coordinating solvents. (D.I. 9). The '051 patent encompasses a "new synthetic method for the synthesis of substantially monodisperse colloidal nanocrystals using new preparative methods that afford tunable crystal size, shape, and size/shape distribution." (D.I. 1, Ex. 1 at 1:25-28). "[N]anocrystal-based emitters can be used for many purposes, such as light-emitting diodes, lasers, biomedical tags, photoelectric devices, solar cells, catalysts, and the like." (*Id.* at 1:51-54).

Plaintiffs accuse Defendant's "Nanosys Quantum Dot Products" of infringing at least claims 1 and 22 of the '051 patent. (D.I. 9 at ¶ 3). Defendant moves to dismiss the First Amended Complaint pursuant to Federal Rule of Civil Procedure 12(b)(6) for failure to state a claim upon which relief can be granted. (D.I. 14). Defendant argues that Plaintiffs fail to provide a plausible factual basis to support their direct infringement allegations, have not adequately pled Defendant's knowledge of the patent-in-suit prior to the complaint, and have not adequately pled indirect or willful infringement. (D.I. 15 at 1-2).

Claim 1 of the '051 patent is a two-step method, reciting:

A method of synthesizing colloidal nanocrystals, comprising:

- a) combining a cation precursor, a ligand, and a non-coordinating solvent to form a cation-ligand complex; and

- b) admixing an anion precursor with the cation-ligand complex at a temperature sufficient to form nanocrystals.

Claim 22 adds a third step to the claimed method:

A method of synthesizing colloidal nanocrystals, comprising:

- a) combining a cation precursor, a ligand, and a non-coordinating solvent to form a cation-ligand complex;
- b) admixing an anion precursor with the cation-ligand complex at a first temperature sufficient to induce reaction between the cation-ligand complex and the anion precursor; and
- c) adjusting the temperature of the mixture to a second temperature sufficient to form nanocrystals of the reaction product.

(D.I. 1, Ex. 1 at 19:25-33, 20:24-34).

## II. LEGAL STANDARD

### a. Rule 12(b)(6) Standard Generally

Rule 12(b)(6) permits a party to move to dismiss a complaint for failure to state a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6). When considering a Rule 12(b)(6) motion to dismiss, the court must accept as true all factual allegations in the complaint and view them in the light most favorable to the plaintiff. *Connelly v. Lane Constr. Corp.*, 809 F.3d 780, 790-91 (3d Cir. 2016).

To state a claim upon which relief can be granted pursuant to Rule 12(b)(6), a complainant must provide “a short and plain statement of the claim showing that the pleader is entitled to relief.” Fed. R. Civ. P. 8(a)(2). A Rule 12(b)(6) motion may be granted only if, accepting the well-pleaded allegations in the complaint as true and viewing them in the light most favorable to the complainant, a court concludes that those allegations “could not raise a claim of entitlement to relief.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 558 (2007).

“Though ‘detailed factual allegations’ are not required, a complaint must do more than simply provide ‘labels and conclusions’ or ‘a formulaic recitation of the elements of a cause of action.’” *Davis v. Abington Mem’l Hosp.*, 765 F.3d 236, 241 (3d Cir. 2014) (quoting *Twombly*, 550 U.S. at 555). I am “not required to credit bald assertions or legal conclusions improperly alleged in the complaint.” *In re Rockefeller Ctr. Props., Inc. Sec. Litig.*, 311 F.3d 198, 216 (3d Cir. 2002). A complaint may not be dismissed, however, “for imperfect statement of legal theory supporting the claim asserted.” *See Johnson v. City of Shelby*, 574 U.S. 10, 11 (2014).

A complainant must plead facts sufficient to show that a claim has “substantive plausibility.” *Id.* That plausibility must be found on the face of the complaint. *Ashcroft v. Iqbal*, 556 U.S. 662, 663 (2009). A claim is facially plausible when the factual allegations allow the court to draw the reasonable inference that the defendant is liable for the misconduct alleged. *Id.*; *Twombly*, 550 U.S. at 555-56. Deciding whether a claim is plausible will be a “context-specific task that requires the reviewing court to draw on its judicial experience and common sense.” *Iqbal*, 556 U.S. at 663-64.

### **III. DISCUSSION**

#### **a. Direct Infringement**

Plaintiffs allege that Defendant makes, uses, sells, and/or offers to sell various quantum-dot products. (D.I. 9 at ¶ 21). Defendant argues that Plaintiffs have failed to allege facts in their complaint that would make infringement plausible under theories of direct, indirect, and willful infringement, that Plaintiffs’ reliance on “information and belief” to plead infringement is misplaced, and Plaintiffs have not adequately pleaded Defendant’s knowledge of the asserted patent prior to the filing of the First Amended Complaint. (D.I. 15 at 1-2). Defendant also asserts

that the Federal Circuit case relied upon by Plaintiffs, *Disc Disease*, does not support denying Defendant's motion to dismiss. (D.I. 21 at 2).

In *Disc Disease Solutions Inc. v. VGH Solutions, Inc.*, the Federal Circuit reversed a district court's dismissal of the plaintiff's complaint on the basis that the plaintiff had failed to "explain how Defendants' products infringe on any of Plaintiff's claims" as it "merely allege[d] that certain of Defendants' products 'meet each and every element of at least one claim' of Plaintiff's patents." 888 F.3d 1256, 1260 (Fed. Cir. 2018). The Federal Circuit found that the plaintiff's allegations were sufficient under the plausibility standard set forth by *Iqbal/Twombly*, explaining that the complaint specifically identified the accused products and alleged that the accused products met each and every element of at least one claim of the patents-in-suit. *Id.* These disclosures and allegations were enough to provide the defendants with "fair notice" of infringement of the asserted patents. *Id.*

Defendant argues that there are important facts in this case which distinguish it from *Disc Disease*. (D.I. 21 at 2). Defendant posits that in contrast to the simple technology involved in the asserted patents in *Disc Disease*, the complexity of colloidal nanocrystal synthesis suggests a higher threshold for providing fair notice. (*Id.* at 3). Other than an Order from a case in the Northern District of Texas, granting a motion for a more definite statement and distinguishing *Disc Disease* on the basis that that case involved simple technology and the case at hand did not, Defendant does not offer relevant case law for that proposition. *See* D.I. 21 at 2-3, citing Order, *Lexington Luminance LLC v. Serv. Lighting & Elec. Supplies Inc. d/b/a 100bulbs.com* 3-18-cv-01074 (N.D. Tex. Oct. 9, 2018). Whether the technology in this case can be classified as simple or complex, as "fair notice" to the Defendant is at the heart of the 12(b)(6) inquiry, I find other aspects of the pleading to be highly relevant. *See Disc Disease*, 888 F.3d at 1260.

In *Disc Disease*, the complaint specifically identified the three accused products “by name and by attaching photos of the product packaging as exhibits.” *Id.* Here, the First Amended Complaint specifically identifies the accused products as Defendant’s “Quantum Dot Concentrate™, Heavy Metal Free Quantum Dots, Hyperion® Quantum Dots, and Quantum Dots.” (D.I. 9 at ¶ 3). Defendant argues, however, that the complaint fails to include adequate support for infringement because it does not identify the specific ligands, the non-coordinating solvent, or precise temperatures used by Defendant in its manufacturing of the colloidal nanocrystals. (D.I. 15 at 9, 13). Plaintiffs assert that this level of detail is not necessary at the pleading stage. (D.I. 19 at 9). “[T]he Federal Rules of Civil Procedure do not require a plaintiff to plead facts establishing that each element of an asserted claim is met.” *Nalco Co. v. Chem-Mod, LLC*, 883 F.3d 1337, 1350 (Fed. Cir. 2018). The precise details of Defendant’s infringing processes, Plaintiffs argue, are the proper subject of discovery. (D.I. 19 at 9).

The Federal Circuit in *Disc Disease* stated that the identification of three specific accused products and allegations that each accused product met “each and every element of at least one claim of the [ ] Patent” were “enough to provide [the defendant] fair notice of infringement of the asserted patents.” 888 F.3d 1256, 1260 (Fed. Cir. 2018). Here, Plaintiffs have specifically identified Defendant’s Nanosys Quantum Dot Products as the infringing products and allege that they practice each limitation of at least one claim in the asserted patent. (D.I. 9 at ¶¶ 21, 27). Therefore, Plaintiffs have sufficiently pleaded a claim of patent infringement for the Nanosys Quantum Dot Products.

Defendant asserts that Plaintiffs’ complaint fails to take into account the possibility that Defendant’s products were made by prior-art methods of quantum-dot synthesis, and not in the particular way that the ’051 patent’s claims require. (D.I. 15 at 9). Defendant states, “Basic facts

such as what ligand and solvents Nanosys uses, why the solvents are non-coordinating, and at what temperatures are the manufacturing steps carried out are all left unmentioned.” (*Id.*). It does not follow from this logic, however, that because there are many other possible explanations for how Defendant makes its low-cost quantum-dot products, the complaint falls short of the plausibility standard required to survive a 12(b)(6) motion to dismiss. *See Disc Disease*, 888 F.3d at 1260.

Although Defendant may be correct in concluding that there are many non-patented ways of synthesizing its products (D.I. 21 at 3), its assertion that Plaintiffs provide no grounds for concluding that Defendant uses the patented method other than assertions that the patented method results in cost savings and is suitable for large-scale production misrepresents the inquiry at the 12(b)(6) stage. *See id.* at 2. Plaintiffs have identified specific products in support of their allegation that Defendant performs processes that meet all limitations of at least claim 1 and/or claim 22 of the '051 patent. (D.I. 19 at 2; *see* D.I. 9 at ¶¶ 13-18, 22-26). Plaintiffs are not required to establish that the process claimed in the '051 patent is the only way to produce colloidal nanocrystals. *See* D.I. 15 at 10; *see also Disc Disease*, 888 F.3d at 1258-60 (where the court did not require allegations that the claimed method was the only way to produce the accused product). All that is required of Plaintiffs here is that they plead facts sufficient to show that their claim has “substantive plausibility.” *Johnson*, 574 U.S. at 11.

Defendant takes issue with Plaintiffs’ allegations on “information and belief” and contends that they should not be credited. (D.I. 15 at 10-11). “So long as plaintiffs do not use ‘boilerplate and conclusory allegations’ and ‘accompany their legal theory with factual allegations that make their theoretically viable claim plausible,’” pleading upon information and belief is permissible under *Twombly/Iqbal* where the requisite facts are peculiarly within the

defendant's knowledge or control. *Derma Focus LLC v. Ulthera, Inc.*, 201 F. Supp. 3d 465, 469 (D. Del. 2016) (citing *McDermott v. Clondalkin Grp., Inc.*, 649 F. App'x 263, 268 (3d Cir. 2016)). I find that the pertinent facts pled on information and belief here are within Defendant's knowledge and control, as they relate to processes performed by Defendant. (D.I. 9 at ¶¶ 24-27). I will not dismiss Plaintiff's First Amended Complaint on this basis.

In sum, I will deny Defendant's motion to dismiss as to a claim for direct infringement.

**b. Induced Infringement**

Having initially included a claim for induced infringement in their complaint, Plaintiffs do not oppose dismissal without prejudice of any claim of induced infringement. (D.I. 19 at 1, n.1). I will therefore dismiss Plaintiffs' claim for induced infringement without prejudice.

**c. Willful Infringement**

Plaintiffs allege that Defendant "has been and continues to be willful since at least the filing of the Original Complaint." (D.I. 9 at ¶ 30). To plead a claim of willful infringement, the complaint must allege that the accused infringer knew of the patent-in-suit, and knowingly or intentionally infringed the patent after acquiring that knowledge. *Eko Brands, LLC v. Adrian Rivera Maynez Enters., Inc.*, 946 F.3d 1367, 1378-79 (Fed. Cir. 2020).

While Plaintiffs argue that Defendant had knowledge of the asserted patent for the period between the filing of the original complaint on July 12, 2019 and when the First Amended Complaint was filed on September 11, 2019, the Defendant asserts that the original complaint was never served on Defendant. (D.I. 19 at 13; D.I. 21 at 10). Defendant argues that Plaintiffs thus cannot show that Defendant knew of the '051 patent before service of the first amended complaint. (D.I. 21 at 10). Plaintiffs' argument in support of the allegation of willfulness essentially is an argument that all Plaintiffs have to do is allege willfulness and that is sufficient



to state a claim. I do not agree. Therefore, I will grant Defendant's motion to dismiss as to a claim for willful infringement.

#### **IV. CONCLUSION**

For the reasons stated above, I will deny Defendant's motion as to direct infringement, and grant Defendant's motion as to indirect and willful infringement, with leave for Plaintiffs to amend their complaint. An accompanying order will be entered.