

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

_____)	
BIO-RAD LABORATORIES, INC. and)	
PRESIDENT AND FELLOWS OF HARVARD)	
COLLEGE,)	
Plaintiffs,)	
)	
v.)	CIVIL ACTION
)	NO. 19-CV-12533-WGY
10X GENOMICS, INC.,)	
)	
Defendant.)	
_____)	

YOUNG, D.J.

April 30, 2020

MEMORANDUM AND ORDER OF DECISION

I. INTRODUCTION

In this motion to dismiss, 10X Genomics, Inc., ("10X") contests allegations of infringement on three patents. The President and Fellows of Harvard College ("Harvard") is the owner of two of these patents, U.S. Patent Nos. 9,919,277 (the "'277 patent"), and 8,871,444 (the "'444 patent"), both of which Bio-Rad Laboratories, Inc. ("Bio-Rad") licenses. Bio-Rad and Harvard together sue 10X for infringement of these two patents. Bio-Rad, owner of the U.S. Patent No. 10,190,115 (the "'115 patent") individually sues 10X for infringement of this patent.

10X moves to dismiss the claims of indirect infringement, willful infringement, and direct infringement under the doctrine of equivalents on the '277 and '444 patents. 10X moves to

dismiss claims relating to the '115 patent for improper venue, or in the alternative, to sever and transfer the claims to the Northern District of California.

This Court concludes that Bio-Rad and Harvard have sufficiently pled all of their claims, and the motion to dismiss is thus DENIED in its entirety. The '115 patent, however, would be more conveniently litigated with its parent patent in the Northern District of California, and this Court therefore TRANSFERS the applicable claims to that District.

A. Factual Background

Because this is a motion to dismiss, this Court takes plaintiff's factual assertions as true and summarizes them here. Thomas v. Rhode Island, 542 F.3d 944, 948 (1st Cir. 2008). This Court has no duty to take plaintiff's legal conclusions as true. Id.

Bio-Rad and Harvard's complaint alleges that 10X infringed the '444 patent and the '277 patent. Compl. ¶ 2, ECF No. 1. Bio-Rad alone claims that 10X infringed the '115 patent. Id. ¶ 3.

10X and Bio-Rad are competitors in the arena of life science research tools. Id. ¶ 14, 22. A large portion of Bio-Rad's products are built around "Droplet Digital" technology, which enables biological analysis by placing samples in individual microdroplets. Id. ¶ 15. Similarly, 10X's product

lines utilize droplet-based emulsion systems to conduct biological analysis. Id. ¶ 23.

Following Bio-Rad's victory in a previous patent infringement suit against 10X, 10X launched a new line of biological research products labeled the "Next GEM Platform" which was at the forefront of its September 2019 Initial Public Offering ("IPO"). Id. ¶¶ 24-27. This Next GEM Platform consists of a specialized instrument, the "Chromium Controller," along with specialized reagents for conducting reactions in microfluidic droplets. Id. ¶¶ 13, 25. It is this new platform that forms the basis of the alleged infringements. Id. ¶ 27.

Bio-Rad and Harvard allege 10X infringes on claims 1-2, 4, and 8 of the '444 patent pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, through its use of the Next GEM product line. Id. ¶ 32. Bio-Rad retains from Harvard an exclusive license to the '444 patent, which relates to the field of microfluidic systems, kits, and chips. Id. ¶ 31.

Bio-Rad also retains a license from Harvard for the '277 patent in the field of microfluidic systems, kits and chips. Id. ¶ 48. Bio-Rad and Harvard allege 10X infringes claims 1-6, 8-9, 11, and 13-14 of the '277 patent pursuant to 35 U.S.C. § 271(a) literally or under the doctrine of equivalents through its use of the Next GEM products. Id. ¶ 49.

Bio-Rad and Harvard further claim the infringement has been knowing and willful. Id. ¶¶ 33, 50.

Bio-Rad and Harvard allege 10X has induced infringement by selling, marketing, providing informational materials, and creating distribution channels for its Next GEM line with the intent that customers would use it to infringe the '444 and '277 patents. Compl. ¶¶ 37-41, 53-57.

Bio-Rad alleges that 10X knew of the '444 and '277 patents because the parties litigated a previous case in Delaware and through its own licensing agreements with Harvard. Id. ¶¶ 33-35, 50-52; see also RainDance Techs., Inc. v. 10X Genomics, Inc., Civ. A. No. 15-152-RGA, 2016 U.S. Dist. LEXIS 33875 (D. Del. March 4, 2016) (the "152 case"); Bio-Rad Labs., Inc. v. 10x Genomics, Inc., 322 F. Supp. 3d 537 (D. Del. 2018).¹

Furthermore, 10X's Co-Founder and Chief Scientific Officer, Dr. Hindson, stated that 10X knew of the work of Dr. Weitz, one of the inventors of the '444 and '277 patents. Compl. ¶¶ 33, 50. Additionally, Bio-Rad indicates that 10X has filed Information Disclosure Statements with the United States Patent Office citing to the U.S. Patent Application No. 2006/0078888, which is

¹ Bio-Rad substituted as the plaintiff in the 152 case after acquiring RainDance. See Compl. ¶ 20; Bio-Rad, 322 F. Supp. at 539.

a published version of the priority application that the '444 patent continues. Id. ¶ 34

Bio-Rad owns the '115 patent labeled "Methods and Compositions For Nucleic Acid Analysis." Id. ¶ 62. Bio-Rad claims that 10X infringed claims 1, 4-15, and 18-26 pursuant to 35 U.S.C. § 271(a) literally or under the doctrine of equivalents through its use of the Next GEM platform. Id. ¶ 64. Bio-Rad claims this infringement was knowing and willful. Id. ¶ 65.

Bio-Rad alleges 10X has induced infringement of this patent by selling, marketing, providing informational materials, and creating distribution channels for its Next GEM line, intending that customers would use it to infringe the '115 patent. Compl. ¶¶ 69-73.

Bio-Rad alleges that 10X knew of the '115 patent because its sole inventor, Serge Saxonov ("Saxonov"), was a former Bio-Rad employee who left to co-found 10X. Id. ¶¶ 63, 65. Furthermore, 10X knew about the '115 patent at least from December 4, 2015, because it filed Information Disclosure Statements with the United States Patent Office citing to the U.S. Patent Publication No. 2015/0376609, a published version of the application that resulted in the '115 patent. Id. ¶ 66.

B. Procedural History

The Plaintiffs Bio-Rad and Harvard originally filed suit on the '444, '277, and '115 patents in the District of Delaware. See Am. Compl. ¶ 11; Bio-Rad Labs., Inc. v. 10X Genomics, Inc. ("Bio-Rad Del. Docket"), Civ. A. No. 19-01699-RGA (D. Del. Dec. 18, 2019), ECF No. 8. In that case, 10X argued that a license from Harvard entitled it to the use of the '444 and '277 patents and that this license agreement included a forum selection clause which required litigation to take place in the District of Massachusetts. Def.'s Opening Br. Supp. Mot. Dismiss 2, Bio-Rad Del. Docket, ECF No. 13; see also Decl. Jennifer K. Robinson, Ex. 3, License Agreement ¶ 11.6, Bio-Rad Del. Docket, ECF No. 18-1. Bio-Rad then voluntarily dismissed the Delaware claims and filed here. Pl.'s Notice Voluntary Dismiss, Bio-Rad Del. Docket, ECF No. 20.

Bio-Rad and Harvard filed the complaint against 10X in this District on December 18, 2019. See generally Compl. On January 21, 2020 Defendant 10X filed a motion to dismiss, and as to the '115 patent, a motion in the alternative to transfer the case. Def.'s Mot. Dismiss, ECF No. 24; Mem. Supp. Def.'s Mot. Dismiss ("Def.'s Mem."), ECF No. 25; Def.'s Mot. Transfer, ECF No. 26; Def.'s Mem. Supp. Mot. Transfer ("Def.'s Transfer Mem."), ECF No. 27. The parties fully briefed the motions. Pls.' Opp'n Def.'s Mot. Dismiss ("Pls.' Opp'n"), ECF No. 50; Pl.'s Opp'n

Def.'s Transfer, ECF No. 51; Def.'s Reply Resp. Mot. Dismiss ("Def.'s Reply"), ECF No. 61; Def.'s Reply Resp. Def.'s Mot. Transfer, ECF No. 63.

10X has additionally filed a partial answer to the complaint as well as antitrust and patent infringement counterclaims against Bio-Rad. Def.'s Partial Answer & Countercl., ECF No. 32; Def.'s Am. Partial Answer Compl. Am. Counterclaim ("Def.'s Answer & Countercl."), ECF No. 53. Bio-Rad also filed a motion to sever and stay 10X's antitrust and patent infringement counterclaims, which the parties fully briefed. Pl.'s Mot. Sever & Stay 10X Antitrust Countercl., ECF No. 70; Pls.' Mem. Supp. Mot. Sever & Stay 10X Antitrust Countercl., ECF No. 71; Pl.'s Mot. Sever & Stay 10X Patent Infringement Countercl., ECF No. 73; Mem. Law Supp. Pl.'s Mot. Sever & Stay Patent Infringement Countercl., ECF No. 74; Def.'s Opp'n Pl.'s Alt. Mot. Sever & Stay Def.'s Antitrust Countercl., ECF No. 76; Def.'s Opp'n Pl.'s Mot. Sever & Stay Patent Infringement Countercl., ECF No. 79.

While this Court is not severing 10X's antitrust counterclaims, it will address them in a separate memorandum and order. As to 10X's patent infringement counterclaims, this Court has previously denied without prejudice the Motion to Stay and Sever. See Order, ECF No. 80.

II. ANALYSIS

10X argues that the claims of indirect infringement, willful infringement, and direct infringement under the doctrine of equivalents should be dismissed because Bio-Rad and Harvard do not plead sufficient facts to make these claims plausible. Def.'s Mem. 10-11. Specifically, 10X claims that there are insufficient facts to "make it plausible that 10X had actual knowledge of the Asserted Patents required for indirect and willful infringement," that Bio-Rad and Harvard allege nothing but legal conclusions for willful blindness, and that they do not show that 10X intended others to infringe. Id. at 11.

A. Standard of Review

For Bio-Rad and Harvard's claims to survive the motion to dismiss pursuant to Federal Rule of Civil Procedure 12(b)(6), its complaint must contain "enough facts to state a claim to relief that is plausible on its face." Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007). This Court is limited to those "facts and documents that are part of or incorporated into the complaint." Trans-Spec Truck Serv., Inc. v. Caterpillar Inc., 524 F.3d 315, 321 (1st Cir. 2008). "[F]actual allegations need only be enough 'to place the alleged infringer on notice. This requirement ensures that the accused infringer has sufficient knowledge of the facts alleged to enable it to answer the complaint and defend itself.'" Simplivity Corp. v.

Springpath, Inc., Civ. A. No. 4:15-13345-TSH, 2016 U.S. Dist. LEXIS 155017, at *10 (D. Mass. July 15, 2016) (Hennessy, M.J.) (quoting OpenTV, Inc. v. Apple Inc., Case No. 15-cv-02008, 2016 U.S. Dist. LEXIS 10445, at *9 (N.D. Cal. Jan. 28, 2016)).

This Court must “assume the truth of all well-pleaded facts [in the complaint] and give the plaintiff the benefit of all reasonable inferences therefrom.” Thomas, 542 F.3d at 948 (citing Clark v. Boscher, 514 F.3d 107, 112 (2008)). It must do so only after “ignor[ing] statements in the complaint that simply offer legal labels and conclusions or merely rehash cause-of-action elements.” Schatz v. Republican State Leadership Comm., 669 F.3d 50, 55 (1st Cir. 2012) (citing Ocasio-Hernandez v. Fortuño-Burset, 640 F.3d 1, 12 (1st Cir. 2011)). There must be sufficient “factual content” to permit the court reasonably to infer that the defendant is liable for the alleged unlawful conduct. Ocasio-Hernandez, 640 F.3d at 12. “[D]etailed factual allegations” are not necessary. Twombly, 550 U.S. at 555.

B. Knowledge

10X claims that Bio-Rad and Harvard fail to plead actual knowledge of any of the patents. Def.’s Mem. 3. Knowledge is a required element for indirect and willful infringement. See Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1273 (Fed. Cir. 2004); WBIP, LLC v. Kohler Co., 829 F.3d 1317,

1340 (Fed. Cir. 2016) (explaining the importance of “assessing the infringer’s knowledge at the time of the challenged conduct”). Additionally, this Court has previously determined that plaintiffs must allege pre-filing knowledge to properly plead induced infringement. Zond, Inc. v. Fujitsu Semiconductor Ltd., 990 F. Supp. 2d 50, 58 (D. Mass. 2014).

As a preliminary matter, the Court may impute to 10X knowledge of the ‘444, ‘277, and ‘115 patents due to the Delaware litigation that Bio-Rad filed on September 11, 2019, see Am. Compl., Bio-Rad Del. Docket, ECF No. 8, but that would confine damages to the post-filing period. See Zond, Inc., 990 F. Supp. 2d at 58 (holding courts may impute post-filing knowledge to the defendant, but damages will be confined to the post-filing period.) After examining all the factors, though, this Court rules that Bio-Rad has pled sufficient facts to show knowledge on all three patents prior to that filing.

1. The ‘444 and ‘277 Patents

Bio-Rad and Harvard state the following to support their claim of 10X’s knowledge of the ‘444 patent: 10X cited a parent application of this patent, 10X licensed other patents from Harvard and was therefore aware of its patent portfolio, 10X was involved in prior litigation with Bio-Rad regarding other patents, and 10X was familiar with one of the named inventors of the ‘444 patent, Dr. Weitz. Compl. ¶¶ 33-36. Bio-Rad and

Harvard allege the same for the '277 patent except that 10X did not cite to any parent application. Id. ¶¶ 50-52.

10X argues that these allegations are insufficient. Def.'s Mem. 12. 10X cites Finjan, Inc. v. Juniper Networks, Inc. which ruled that knowledge of a company's patent portfolio does not translate to actual knowledge of a patent. Id. (citing Civ. A. No. 17-05659 WHA, 2018 WL 905909, at *3 (N.D. Cal. Feb. 14, 2018)). 10X also relies on Bayer Healthcare, LLC v. Baxalta Inc. which ruled that knowledge of a parent application, alone, is not sufficient for knowledge of the patent in suit. Civ. A. No. 16-1122-RGA, 2017 U.S. Dist. LEXIS 126904, at *3 (D. Del. Aug. 10, 2017). The Federal Circuit, however, has cast doubt on these types of decisions.² In WCM Industries, Inc. v. IPS Corp.,

² 10X also quotes Master Lock Co., LLC v. Toledo & Co in which the court relied on the Federal Circuit case State Indus., Inc. v. A.O. Smith Corp., for the proposition that "[t]o willfully infringe a patent, the patent must exist and one must have knowledge of it . . . Filing an application is no guarantee any patent will issue and a very substantial percentage of applications never result in patent." Def.'s Mem. 13 (quoting No. 13-1658 (PAD), 2014 U.S. Dist. LEXIS 185302, at *6-7 (D.P.R. June 12, 2014) (Delgado-Hernández, J.) (citing 751 F.2d 1226, 1236 (Fed. Cir. 1985))). Courts, however, have since accepted circumstantial evidence to prove knowledge. See WCM Indus., Inc. v. IPS Corp., 721 F. App'x 959, 970 (Fed. Cir. 2018) (citing Shiley, Inc. v. Bentley Labs., Inc., 794 F.2d 1561, 1568 (Fed. Cir. 1986)). WCM Industries noted that willful infringement must be evaluated under the totality of circumstances and distinguished State Indus., Inc. because it was decided prior to the enactment of 35 U.S.C. § 122(b)(1)(A) in 1999. 721 Fed. App'x at 970 n.4. That statute provided for the publication of patent applications 18 months after their filing, meaning the details of an application are no longer

the court stated that there was no per se rule regarding knowledge and stressed a totality of the circumstances analysis. 721 F. App'x 959, 971 (Fed. Cir. 2018). The court in that case allowed circumstantial evidence to prove knowledge of patents, including testimony from an employee that he monitored the patent holder's products, noted when some of the patent holder's patents were pending, and a "culture of copying" of the infringer. Id. at 971-72. Another session of this court cited to WCM Industries to cast doubt on Finjan and Bayer and determined that direct evidence of knowledge is not required. SiOnyx, LLC v. Hamamatsu Photonics K.K., 330 F. Supp. 3d 574, 608-10 (D. Mass. 2018) (Saylor, J.).

Similarly, another session of this court denied a motion to dismiss because it ruled the plaintiff had pled enough facts to go forward on the issue of knowledge by alleging that defendant and plaintiff were competitors, the ease of online patent research, the defendant's pre-suit investigations at a trade show where plaintiff's technology was displayed, and the defendant's later creation of a product which mimicked the technology of the patent at issue. Simplivity Corp., 2016 U.S. Dist. LEXIS 155017, at 30. The court determined that

"secret" as they were before its passage, and a factfinder can thus permissibly infer knowledge of these details based on their open publication. Id.

“knowledge of the patents may be proven by either direct or circumstantial evidence.” Id. at *34 (quoting SynQor, Inc. v. Artesyn Techs., Inc., Case No. 07-cv-497-TJW, 2011 U.S. Dist. WL 3624957 (E.D. Tex. Aug. 17, 2011), aff'd, 709 F.3d 1365 (Fed. Cir. 2013)).

This Court concludes that Bio-Rad has pled sufficiently that 10X had knowledge of the '444 and '277 patents because it is plausible that 10X knew of these patents given their nature as competitors in a specialized market, previous patent litigation between 10X and Bio-Rad, and access to Harvard's droplet patent portfolio.

2. The '115 Patent

Bio-Rad alleges the following to show knowledge of the '115 patent: Serge Saxonov was a former employee of Bio-Rad and the sole named inventor of the '115 patent. Compl. ¶ 65. Saxonov then left Bio-Rad and co-founded 10X. Id. Furthermore, 10X has cited the application which became the '115 patent in Information Disclosure Statements before the United States Patent Office. Id. ¶ 66. Bio-Rad contends, relying on the facts in Simplivity, that a sophisticated competitor's recruitment of the patentee's employees is enough to plausibly indicate pre-suit knowledge. Pl.'s Opp'n 17.

This Court agrees. It is true that a patent application often differs from the final granted patent. Def.'s Mem. 14

(citing Bayer at *3 (quoting State Indus., 751 F.2d at 1236)). It is plausible, however, that a sophisticated competitor in this unique market, led by the inventor of the patent, would investigate and monitor the patent application process. Thus, these allegations are even stronger than those made for the prior two patents, and Bio-Rad and Harvard have pled sufficient facts to establish knowledge of the '115 patent.

C. Willful Infringement

10X claims that Bio-Rad and Harvard did not plead sufficient facts to establish a claim for willful infringement. Def.'s Mem. 17. This type of claim asks the court to apply enhanced damages to an underlying infringement claim. Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923, 1930 (2016).³

Halo's guidance for willful infringement cases is that courts should "limit[] the award of enhanced damages to egregious cases of misconduct beyond typical infringement." Id. at 1935. Halo also noted that "culpability is generally measured against the knowledge of the actor at the time of the challenged conduct." Id. at 1933. In Simplivity, the court

³ See generally Veena Tripathi, Halo from the Other Side: An Empirical Study of District Court Findings of Willful Infringement and Enhanced Damages Post-Halo, 103 Minn. L. Rev. 2617 (2019)(describing the evaluation of enhanced damages post-Halo).

allowed a willful infringement claim to go forward because the complaint alleged "escalation of infringing activities after receipt of the original Complaint." 2016 U.S. Dist. LEXIS 155017, at *61.

In this case, Bio-Rad and Harvard argue that "10X was aware of and monitored Harvard's patent portfolios and technology, was formed by former Bio-Rad employees, competed with Bio-Rad in the next generation sequencing market, and launched droplet-based sequencing systems incorporating Plaintiffs' patented technology." Pl.'s Opp'n 18. Bio-Rad and Harvard also point to Deere & Co. v. AGCO Corp., see id., which states that "deliberate copying, concealment, and conduct 'outside [industry] standards' of morality are illustrative of the egregious behavior that the Court in Halo contemplated as deserving of enhanced damages awards under § 284 . . . [however] an allegation of willful infringement can be based on much less culpable conduct." Civ. A. No. 18-827-CFC, 2019 WL 668492, at *5 (D. Del. Feb. 19, 2019) (internal citations omitted).

Lexington Luminance LLC v. TCL Multimedia Tech. Holdings, Ltd. is instructive here. Civ. A. No. 16-11458-DJC, 2017 WL 3795769 (D. Mass. Aug. 30, 2017) (Casper, J.). In that case, defendants similarly argued that plaintiff's only allegation to support their claim of willful infringement was pre-suit knowledge of the patent and the continued sale of the infringing

product despite this knowledge. Id. at *6. The court denied defendants' motion to dismiss, stating "[w]hether [plaintiff] can ultimately show that it is entitled to enhanced damages for Defendants' 'egregious infringement behavior' is not relevant to the Court's consideration of a motion to dismiss At this juncture, a plaintiff is not required to allege more than knowledge of the patent and of infringement." Id. (citing Halo, 136 S. Ct. at 1932.)

This Court has already determined that Bio-Rad and Harvard pled enough information to plausibly indicate 10X's knowledge of the patents. They have also pled that 10X continued to sell its materials after the current filing, meeting the standard in Lexington Luminance, 2017 WL 3795769. See Compl. ¶¶ 36, 52, 68. Therefore, this Court will allow the claim of willful infringement (which is more of a question of damages) to go forward.

D. Direct and Induced Infringement

Induced infringement is a claim for indirect infringement, which necessarily requires direct infringement. In re Bill of Lading Transmission & Processing Sys. Patent Litig., 681 F.3d 1323, 1333 (Fed. Cir. 2012). Bio-Rad and Harvard have pled direct infringement through three claims charts detailing which patent claims are infringed. Compl. ¶¶ 32, 49, 64; id., Ex. 5, '444 Infringement Analysis ("'444 Claim Chart"), ECF No. 1-7;

id., Ex. 16, '277 Infringement Analysis ("'277 Claim Chart"), ECF No. 1-18; id., Ex. 17, '115 Infringement Analysis ("'115 Claim Chart"), ECF No. 1-19.

"To establish inducement the plaintiff must show that the alleged inducer: '[1] knew of the patent, [2] knowingly induced the infringing acts, and [3] possessed a specific intent to encourage another's infringement of the patent." Zond, 990 F. Supp. 2d at 55 (quoting Vita-Mix Corp. v. Basic Holding, Inc., 581 F.3d 1317, 1328 (Fed. Cir. 2009)). As this Court has already established that Bio-Rad and Harvard pled knowledge sufficiently, it looks now to the second and third elements.

An alleged inducer must have "an intent to cause the infringing acts, for example, by providing third-parties with a product which does not have any substantial non-infringing uses." Id. at 56 (citing Hughes Aircraft Co. v. National Semiconductor Corp., 857 F.Supp. 691, 699-700 (N. D. Cal. 1994)).

The complaint states the following with regard to inducement: 10X has induced infringement of specific claims of the '444, '277, and '115 patents by:

controlling the design and manufacture of, offering for sale, and selling the Next GEM platform and/or its individual components with the knowledge and specific intent that its customers will use the Next GEM platform to infringe the '444 patent, literally or under the doctrine of equivalents, by performing the claimed method for detecting a product of an enzymatic

reaction.

Compl. ¶¶ 37, 53, 69. The complaint goes on to allege that promotional materials distributed by 10X about the Next GEM platform, the "creation of distribution channels" and the "distribution of other instructional materials, product manuals, and technical materials" have induced infringement. Id. ¶¶ 38-40, 54-56, 70-72.

Bio-Rad and Harvard allege a lack of other non-infringing uses for the '444 patent by stating: "As documented above and in Exhibit 5, the Next GEM platform consists of a specialized microfluidic device along with specialized reagents for conducting reactions in microfluidic droplets. As such, no part of the Next GEM platform is a staple article of commerce suitable for substantial non-infringing use." Id. ¶ 43. These allegations are repeated for the '277 and '115 patent. Id. ¶¶ 59, 75. Taking as true that the specialized microfluidic device can only carry out the stated reactions and that these reactions infringe on Bio-Rad's license and Harvard's patents, Bio-Rad and Harvard have properly alleged no non-infringing use.

Courts have also determined that advertising one's product for a specific use constitutes induced infringement: "[e]vidence of active steps taken to induce infringement, such as advertising an infringing use, can support a finding of an intention for the product to be used in an infringing manner."

Lucent Techs., 580 F.3d at 1322 (citing DSU Med. Corp., 471 F.3d at 1306). Bio-Rad and Harvard note in their complaint that 10X has advertised and promoted the Next GEM platform. Compl. ¶ 10.

10X cites to this Court's case of Bonutti Skeletal Innovations, LLC v. Depuy Synthes Sales, Inc., ("Bonutti") in which it claims that this Court decided to dismiss inducement claims for scant conclusory pleadings. Def.'s Mem. 17 (citing Def.'s Mem. Supp. Mot. Dismiss 13, Civ. A. No. 14-14680-WGY, ECF No. 10; Order, Bonutti, ECF No. 74). This Court in Bonutti did not, however, analyze the inducement claims specifically but rather concluded that the entire complaint was scant and conclusory, with little factual allegations throughout. Tr. Mot. Dismiss Hearing, Bonutti, ECF No. 75. The Court then allowed the plaintiff to amend the complaint. Id. The facts in that case, therefore, are very different from the one before the Court today. Among other problems with the Bonutti case, the complaint is silent as to which claims are asserted against each of the accused products. Id. at 3-4; Compl., Bonutti, ECF No. 1. Here, in contrast, Bio-Rad and Harvard utilize claims charts to plead with specificity exactly which claims infringe their patents, as well as 10X's requisite knowledge of infringement.

Thus, this Court allows the inducement claims to go forward because they meet the standard for pleading an inducement claim.

E. Doctrine of Equivalents

10X argues that Bio-Rad's claims for direct infringement under the doctrine of equivalents are insufficient because they are solely conclusory and one-line phrases. Def.'s Mem. 19-20. Bio-Rad counters that the claim chart provides specificity and that courts have allowed lesser pleadings on this doctrine to go forward. Pl.'s Opp'n 19.

The doctrine of equivalents may apply when "an accused product or process is the substantial equivalent of a patented invention or process. The essential inquiry is whether the accused product or process contains elements identical or equivalent to each claimed element of the patented invention." Trustees of Columbia Univ. in N. Y. v. Roche Diagnostics GmbH, 272 F. Supp. 2d 90, 102 (D. Mass. 2002) (Gertner, J.). Essentially, the doctrine accounts for trivial changes from the patent. See Purdue Pharma L.P. v. Collegium Pharm., Inc., 335 F. Supp. 3d 149, 161-62 (D. Mass. 2018) (Saylor, J.).

Bio-Rad cites Disc Disease Sols. Inc. v. VGH Sols., Inc. which allowed a claim of infringement to go forward based solely on the fact that the complaint "identified the three accused products - by name and by attaching photos of the product packaging as exhibits - and alleged that the accused products meet 'each and every element of at least one claim of the [asserted patents], either literally or equivalently.'" Id. at

19-20 (citing 888 F.3d 1256, 1260 (Fed. Cir. 2018)). Disc Disease stressed that the complaint need only put a defendant on notice of the claims it would pursue. 888 F.3d at 1260.

Bio-Rad also cites Agrophresh Inc. v. Hazel Techs., in which defendants unsuccessfully argued that claims for infringement under the doctrine of equivalent should be dismissed because the plaintiff "merely parrots the language of the asserted patent claims." Pl.'s Opp'n. 20 (citing Civ. A. No. 18-1486, 2019 U.S. Dist. LEXIS 70570, at *1 (D. Del. Apr. 25, 2019)). The court in that case found a complaint had properly alleged infringement when it stated that defendant had infringed literally, or under the doctrine of equivalents, specific claims of their patent and went on to explain the specific infringements. Agrophresh Inc., U.S. Dist. LEXIS 70570 at *5. The pleading here is very similar. For the '444 patent, for example, Bio-Rad and Harvard in their complaint stated that "10X . . . continues to infringe at least claims 1-2, 4, and 8 of the '444 patent . . . literally or under the doctrine of equivalents, by using without authority the Next GEM products." Compl. ¶ 32. The Claim Chart explains that the '444 patent covers:

A method for detecting a product of an enzymatic reaction, comprising the steps of [] providing a droplet generator to produce, under microfluidic control, a plurality of aqueous microcapsules surrounded by an immiscible continuous phase that

comprises a fluorinated oil that comprises a fluorinated polymer surfactant, each of the plurality of microcapsules comprising an enzyme, a genetic element, and reagents for the enzymatic reaction. . .

'444 Claim Chart. The Claim Chart compares this to 10X's product, stating that "10X's Next GEM platform performs a method for detecting a product of an enzymatic reaction, either literally or under the doctrine of equivalents. 10X's Next GEM platform conducts enzymatic barcoding reactions in microfluidic droplets and detects the products of those reactions using DNA sequencing." Id.

The Claims Charts for the other patents are similarly detailed. See '277 Claims Chart, '115 Claims Chart. This specificity is more than enough to put 10X on notice, in compliance with the Twombly pleading standard. See Agrophresh Inc., Civ. A. U.S. Dist. LEXIS 70570, at *5-6. Therefore, this Court will allow forward the claims under the doctrine of equivalents as well.

F. Transfer of the '115 Patent

10X argues the claims relating to the '115 patent have no connections to this district, and that the patent is not subject to the forum selection clause of the '444 and '277 patents, and thus venue is improper. See Def.'s Transfer Mem 1, 1 n.1. 10X asks this court to dismiss the '115 claims, or alternatively

sever them for transfer to the Northern District of California. Def.'s Transfer Mem. 1.

Under 28 U.S.C. § 1404, a court may transfer "any civil action. . . [f]or the convenience of parties and witnesses, in the interest of justice." The Federal Rules of Civil Procedure allow a court to sever and transfer any case of misjoinder. Fed. R. Civ. P. 21.

In patent cases, venue must conform exclusively with 28 U.S.C § 1400, which states that suit may be brought "in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business." 28 U.S.C § 1400(b). The Supreme Court in TC Heartland LLC v. Kraft Foods Grp. Brands LLC held that a corporation is a resident only of its state of incorporation, confirming that amendments liberalizing the general venue statute, 28 U.S.C. § 1391, did not modify section 1400(b). 137 S. Ct. 1514, 1517 (2017) (citing Fourco Glass Co. v. Transmirra Products Corp., 353 U.S. 222, 226 (1957) (holding that "residence" referred only to the state of incorporation)). To establish venue for a suit outside the state of residence, "(1) there must be a physical place in the district; (2) it must be a regular and established place of business; and (3) it must be the place of the defendant. If any statutory requirement is not satisfied, venue is improper under § 1400(b)." See In re

Cray Inc., 871 F.3d 1355, 1360 (Fed. Cir. 2017). Thus, 10X must either "reside" in this district or it must have a regular place of business here for venue to be proper under section 1400.

For determining venue in general, courts have long utilized the doctrine of pendent venue which applies "when one or more claims arising out of a common nucleus of operative facts do not satisfy the requirements of the applicable venue statute."

Beattie v. United States, 756 F.2d 91, 100 (D.C. Cir. 1984), abrogated on other grounds, Smith v. United States, 507 U.S. 197, 113 S. Ct. 1178 (1993).

It is undisputed in this case that 10X has its principal place of business in California and is incorporated in Delaware. Compl. ¶ 6. It therefore does not reside in this district. Bio-Rad has also not pled any facts to suggest that 10X maintains a physical location in this district. Bio-Rad therefore relies solely on pendent venue for the '115 claims. Compl. ¶ 13.

Bio-Rad pleads that the same "nucleus of operative facts" exists between all three patents here because

10X's Next GEM Platform is the product accused of infringing each of the '444, '277, and '115 patents. The technology underlying the Next GEM Platform and each of the asserted patents is the use of droplet-based emulsions for next generation sequencing and single-cell analysis. Because all three causes of action require assessment of how the Next GEM Platform generates and utilizes droplet-based emulsions to prepare samples for next generation sequencing and

single-cell analysis, the witnesses and documentary evidence relevant to each cause of action are expected to be the same.

Compl. ¶ 13. 10X has also brought counterclaims which involve Bio-Rad's entire droplet portfolio, including the '115 patent. See generally Def.'s Answer & Countercl.

Other courts have determined that the doctrine of pendent venue does not extend to patent claims. 10X refers to ARP Wave, LLC v. Salpeter, which states that "[e]very court that has addressed the issue following [TC Heartland] has found that there is no 'pendent' venue over a patent-infringement claim unless there is 'original' venue over a separate patent-infringement claim under § 1400(b)." Def.'s Mem. 7-8 (citing 364 F. Supp. 3d 990, 997 (D. Minn. 2019) (listing cases)).

Here, venue for the '444 and '277 patents is based on a forum selection clause in a contract 10X claims it has with Harvard (rather than on section 1400), but the dispute over the '115 patent is solely between Bio-Rad and 10X, so the forum selection clause is inapplicable. See Compl. ¶ 12. Bio-Rad argues that the Next GEM platform nonetheless infringed all three of their patents, so a common nucleus of operative fact exists that allows pendent venue. Compl. ¶¶ 26-27.

Bio-Rad cites to Omega Patents, LLC v. Calamp Corp. as a case possessing a similar fact pattern. Pl.'s Opp'n 4 (citing Civ. A. No. 6:13-1950-Orl-40DCI, 2017 U.S. Dist. LEXIS 186645

(M.D. Fl. Sep. 22, 2017) (aff'd in part, rev'd in part on other grounds, 920 F.3d 1337, 1341 (Fed. Cir. 2019)). In Omega Patents, the court determined that a common nucleus of operative fact existed where a party alleged that the sale of a single product by the defendant infringed several patents. 2017 U.S. Dist. LEXIS 186645, at *8. Noting that the parties had a prior agreement with a forum selection clause that created proper venue for one patent, the court determined pendent venue could apply to the other patents as well. Id. at *3, *9. The Omega Patents court distinguished TC Heartland by explaining, "TC Heartland established how venue is to be determined in these actions in the absence of a stipulation to venue accompanied by pendent venue." Id. at *9-10. In the present case, Bio-Rad and Harvard sued on infringement of multiple patents, two of which anchored venue to this district through a forum selection clause, a fact pattern essentially identical to that in Omega Patents. Id. at *3-5.

This court agrees with the logic in Omega Patents, rendering pendent venue proper on the '115 claim. The other cases which have refused to allow pendent venue involved plaintiffs who brought non-patent claims and sought to use pendent venue to skirt section 1400's requirements for the patent claims. Cf. NextEngine Inc. v. NextEngine, Inc., Civ. A. No. 17-CV-9785, 2019 U.S. Dist. LEXIS 584, at *5 (S.D.N.Y. Jan.

2, 2019), Jenny Yoo Collection, Inc. v. Watters Design Inc., U.S.P.Q. 2D (BNA) 1553, 1561 (S.D.N.Y. 2017), Nat'l Prods. v. Arkon Res., Inc., 2018 U.S. Dist. LEXIS 48563, at *18-20 (W.D. Wash. Mar. 23, 2018). This is not the case here. The primary claims are patent claims and are properly venued, thus this Court can exercise pendent venue over the '115 patent.

1. Convenience

This Court nonetheless may transfer a claim for convenience of the parties under 28 U.S.C. § 1404.

10X argues that the Northern District of California is a more convenient venue for the litigation of the '115 patent. See generally Def.'s Transfer Mem. This is because, 10X argues, Harvard is not a co-plaintiff on the '115 claims, 10X and Bio-Rad maintain their headquarters in the Northern District of California, and the sole named inventor on the '115 patent -- Saxonov -- lives in the Northern District of California. Id. at 1-2.

Most importantly, 10X points out that these same two parties are currently litigating U.S. Patent No. 9,347,059 (the "'059 patent") in the Northern District of California, and the '115 patent is derivative of the '059 patent. Id. at 3; see also Bio-Rad Laboratories, Inc. v. 10X Genomics, Inc., No. 3:17-cv-04339 (N.D. Cal. July 31, 2017). The California case has been stayed pending resolution of some of the patents (not

including the '059 patent) at the International Trade Commission ("ITC") and remained closed as of the time of this order. See Order, Bio-Rad Laboratories, Inc., No. 3:17-cv-04339, ECF No. 48; Status Report re: Dkt. 51, Bio-Rad Laboratories, Inc., No. 3:17-cv-04339, ECF No. 52.

In considering whether to exercise its discretion in transferring venue, a court considers "the convenience of parties and witnesses, in the interest of justice." 28 U.S.C. § 1404. This convenience analysis consists of an "individualized, case-by-case consideration of convenience and fairness," Stewart Org., Inc. v. Ricoh Corp., 487 U.S. 22, 29 (1988), and includes practical considerations such as "the availability of documents; the possibility of consolidation; and the order in which the district court obtained jurisdiction." Coady v. Ashcraft & Gerel, 223 F.3d 1, 11 (1st Cir. 2000).

Here, the '059 and '115 patents will likely raise extremely similar issues and require similar analysis, so the need for judicial efficiency and reduction of the risk of inconsistent judgment counsels transfer. The balance of other practical considerations appears neutral. This is particularly true given the fact the parties are currently pursuing litigation in both California and Massachusetts that touches on this very patent. Bio-Rad is the plaintiff in the Northern District of California suit concerning the parent to the '115 patent, see Compl., Bio-

Rad Laboratories, Inc., No. 3:17-cv-04339, ECF No. 1, while 10X brought antitrust counterclaims in this District concerning the patent portfolio Bio-Rad acquired from RainDance that includes the '115 patent. See Def.'s Answer & Countercl., Antitrust Counterclaims ¶ 6. Clearly, both parties are fully capable of litigating this patent in either forum.

This Court therefore finds that the '115 patent claims ought be litigated alongside its parent patent, the '059, in the Northern District of California.

III. CONCLUSION

"At the motion to dismiss stage a complaint generally will only be dismissed where it is 'entirely implausible' or impossible for the grouped defendants to have acted as alleged." Zond, Inc., 990 F. Supp. 2d at 53. Bio-Rad and Harvard need only put 10X on notice of the infringement alleged and nudge their claims into the range of plausibility. They have done so. Therefore, this court DENIES the motion to dismiss in its entirety.

As to the motion to transfer the '115 patent claims to the Northern District of California, this court may use pendent venue over this claim, but it would be more convenient to litigate it in the Northern District of California. Therefore, the court TRANSFERS the '115 claims to that district.

SO ORDERED.

/s/WILLIAM G. YOUNG
DISTRICT JUDGE