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9	UNITED STATES DISTRICT COURT	
10	SOUTHERN DISTRIC	CT OF CALIFORNIA
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12	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA; BECTON,	Case No.: 17-cv-01394-H-NLS
13	DICKINSON AND COMPANY;	ORDER:
14	SIRIGEN, INC.; and SIRIGEN II LIMITED,	(1) DENYING DEFENDANTS'
15	Plaintiffs,	MOTION FOR SUMMARY
16	v.	JUDGMENT OF INVALIDITY OF THE '673 PATENT;
17	AFFYMETRIX, INC.; and LIFE	[Dag No. 262]
18	TECHNOLOGIES CORP.,	[Doc. No. 362.]
19	Defendants.	(2) GRANTING DEFENDANTS' MOTION FOR PARTIAL
20		SUMMARY JUDGMENT OF NON-
21		INFRINGEMENT OF CLAIM 2 OF THE '673 PATENT; AND
22		THE 075TATENT, AND
23		[Doc. No. 363.]
24		(3) ISSUING SUPPLEMENTAL
25		CLAIM CONSTRUCTION ORDER
26		[Doc. No. 364.]
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On February 25, 2019, Defendants Affymetrix, Inc. and Life Technologies Corp. filed: (1) a motion for summary judgment of invalidity of U.S. Patent No. 8,110,673; (2) a motion for partial summary judgment of non-infringement of Claim 2 of U.S. Patent No. 8,110,673; and (3) a motion for supplemental claim construction. (Doc. Nos. 362, 363, 364.) On March 8, 2019, Plaintiffs the Regents of the University of California, Becton, Dickinson and Company, Sirigen, Inc., and Sirigen II Limited filed responses in opposition to Defendants' motions. (Doc. Nos. 378-80.) On March 15, 2019, Defendants filed their replies. (Doc. No. 397-99.)

The Court held a hearing on the matter on March 21, 2019. Donald R. Ware, Barbara Fiacco, Marco Quina and Jesse Hindman appeared for Plaintiffs. Douglas E. Lumish and Brent T. Watson appeared for Defendants. For the reasons below, the Court: (1) denies Defendants' motion for summary judgment of invalidity of the '673 patent; (2) grants summary adjudication of non-infringement of claim 2 of the '673 patent; and (3) issues a supplemental claim construction order construing the claim term "n is an integer from 1 to about 10,000."

## Background

On February 9, 2018, Plaintiffs filed the operative complaint for patent infringement in this action against Defendants, alleging infringement of U.S. Patent No. 9,085,799, U.S. Patent No. 8,110,673, U.S. Patent No. 8,835,113, U.S. Patent No. 9,547,008, U.S. Patent No. 9,139,869, U.S. Patent No. 8,575,303, and U.S. Patent No. 8,455,613.<sup>1</sup> (Doc. No. 101, FAC.) Specifically, Plaintiffs allege that Defendants' "Super Bright Dyes" products infringe the patents-in-suit. (Id.  $\P\P 4, 41.$ )

On March 26, 2018, the Court issued a claim construction order, construing the disputed claim terms from the '799 patent, the '673 patent, and the '113 patent. (Doc. No. 138.) On May 1, 2018, the Court granted Defendants' motion for summary judgment of non-infringement of the '799 patent. (Doc. No. 170.) On May 14, 2018, the Court denied

Plaintiffs no longer assert infringement of the '869 patent in this action. (See Doc. No. 375 at 1.)

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Defendants' motion for summary judgment of non-infringement of the '673 patent and the 2 '113 patent. (Doc. No. 183.)

On September 4, 2018, the Court issued a second claim construction order, 4 construing the disputed claim terms from the '008 patent, the '869 patent, the '303 patent, and the '613 patent. (Doc. No. 274.) On November 13, 2018, the Court issued the current scheduling order for this action. (Doc. No. 331.) By the present motions, Defendants 6 move: (1) for summary judgment of invalidity of '673 patent for failure to satisfy the written description requirement; (2) for summary judgement of non-infringement of claim 2 of the '673 patent; and (3) for a supplemental claim construction order construing the term "n is an integer from 1 to about 10,000" from the '613 patent, the '303 patent, and the 10 '008 patent. (Doc. Nos. 363-1, 376, 376-1.)

#### Discussion

13 I.

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#### **Defendants' Motions for Summary Judgment** Legal Standards for a Motion for Summary Judgment A.

15 Summary judgment is appropriate under Rule 56 of the Federal Rules of Civil 16 Procedure if the moving party demonstrates that there is no genuine issue of material fact and that it is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a); Celotex Corp. 18 v. Catrett, 477 U.S. 317, 322 (1986). A fact is material when, under the governing 19 substantive law, it could affect the outcome of the case. Anderson v. Liberty Lobby, Inc., 20 477 U.S. 242, 248 (1986); Fortune Dynamic, Inc. v. Victoria's Secret Stores Brand Mgmt., Inc., 618 F.3d 1025, 1031 (9th Cir. 2010). "A genuine issue of material fact exists when the evidence is such that a reasonable jury could return a verdict for the nonmoving party." 23 Fortune Dynamic, 618 F.3d at 1031 (internal quotation marks and citations omitted); 24 accord Anderson, 477 U.S. at 248. "Disputes over irrelevant or unnecessary facts will not 25 preclude a grant of summary judgment." T.W. Elec. Serv., Inc. v. Pac. Elec. Contractors 26 Ass'n, 809 F.2d 626, 630 (9th Cir. 1987).

27 A party seeking summary judgment always bears the initial burden of establishing 28 the absence of a genuine issue of material fact. Celotex, 477 U.S. at 323. The moving

party can satisfy this burden in two ways: (1) by presenting evidence that negates an 1 2 essential element of the nonmoving party's case; or (2) by demonstrating that the 3 nonmoving party failed to establish an essential element of the nonmoving party's case that 4 the nonmoving party bears the burden of proving at trial. Id. at 322-23; Jones v. Williams, 791 F.3d 1023, 1030 (9th Cir. 2015). Once the moving party establishes the absence of a 5 6 genuine issue of material fact, the burden shifts to the nonmoving party to "set forth, by 7 affidavit or as otherwise provided in Rule 56, 'specific facts showing that there is a genuine issue for trial." T.W. Elec. Serv., 809 F.2d at 630 (quoting former Fed. R. Civ. P. 56(e)); 8 9 accord Horphag Research Ltd. v. Garcia, 475 F.3d 1029, 1035 (9th Cir. 2007). To carry this burden, the non-moving party "may not rest upon mere allegation or denials of his 10 pleadings." Anderson, 477 U.S. at 256; see also Behrens v. Pelletier, 516 U.S. 299, 309 (1996) ("On summary judgment, . . . the plaintiff can no longer rest on the pleadings."). 12 Rather, the nonmoving party "must present affirmative evidence . . . from which a jury 13 14 might return a verdict in his favor." Anderson, 477 U.S. at 256.

When ruling on a summary judgment motion, the court must view the facts and draw all reasonable inferences in the light most favorable to the non-moving party. Scott v. Harris, 550 U.S. 372, 378 (2007). The court should not weigh the evidence or make credibility determinations. See Anderson, 477 U.S. at 255. "The evidence of the nonmovant is to be believed." Id. Further, the Court may consider other materials in the record not cited to by the parties, but it is not required to do so. See Fed. R. Civ. P. 56(c)(3); Simmons v. Navajo Cnty., 609 F.3d 1011, 1017 (9th Cir. 2010).

Defendants' Motion for Summary Judgment of Invalidity of the '673 Patent B. Defendants move for summary judgment of invalidity of claims 1 and 2 of the '673 patent on the grounds that those claims fail to satisfy the written description requirement. (Doc. No. 376 at 10.) In response, Plaintiffs argue that the Court should deny Defendants' motion because there are genuine issues of material fact as to the written description issue that preclude summary judgment. (Doc. No. 379 at 1.)

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## i. Legal Standards

The first paragraph of 35 U.S.C. § 112 provides that the "specification shall contain a written description of the invention . . . ." 35 U.S.C. § 112 ¶ 1. "'[T]he test for sufficiency' of a patent's written description 'is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." <u>Centrak, Inc. v. Sonitor Techs., Inc.,</u> 915 F.3d 1360, 1365 (Fed. Cir. 2019) (quoting <u>Ariad Pharms., Inc. v. Eli Lilly & Co.,</u> 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)). The Federal Circuit has explained that "the test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." <u>Ariad, 598 F.3d at 1351</u>.

The Federal Circuit has further explained that "determining whether a patent complies with the written description requirement will necessarily vary depending on the context. Specifically, the level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology." <u>Id.</u> (citation omitted).

"Compliance with the written description requirement is a question of fact, but is amenable to summary judgment in cases where no reasonable fact finder could return a verdict for the non-moving party." <u>ScriptPro LLC v. Innovation Assocs., Inc.</u>, 833 F.3d 1336, 1340 (Fed. Cir. 2016) (quoting <u>PowerOasis, Inc. v. T–Mobile USA, Inc.</u>, 522 F.3d 1299, 1307 (Fed. Cir. 2008)); <u>see also Ariad Pharms.</u>, 598 F.3d at 1351 (The written description "inquiry, as we have long held, is a question of fact."); <u>Amgen Inc. v. Hoechst</u> <u>Marion Roussel, Inc.</u>, 314 F.3d 1313, 1330 (Fed. Cir. 2003) (characterizing the written description inquiry as "fact intensive"). "To overcome the presumption of validity of patents, the accused [infringer] must show that the claims lack a written description by clear and convincing evidence." <u>Hynix Semiconductor, Inc. v. Rambus, Inc.</u>, 645 F.3d 1336, 1351 (Fed. Cir. 2011); <u>see WBIP, LLC v. Kohler Co.</u>, 829 F.3d 1317, 1338 (Fed. Cir. 2016); see also Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95 (2011).

ii. Analysis

Defendants argue the Court should grant summary judgment of invalidity of the '673 patent because the specification fails to provide an adequate written description disclosure for the following claim limitation: that the "aggregation sensor compris[e] at least three first optically active units per second optically active unit." (Doc. No. 376 at 1-2, 5-10.) In response, Plaintiffs argue that Defendants' motion should be denied because disputed issues of fact exist as to this written description issue. (Doc. No. 379 at 5-10.)

Claim 1 of the '673 patent claims "a[n] aggregation sensor soluble in a polar medium" that contains "at least three first optically active units per second optically active units." '673 Patent at 37:46-58. The parties agree that this claim language, in other words, permits the claimed polymer to contain up to 25% (a 1:3 ratio) second optically active units. (Doc. No. 376 at 2; Doc. No. 379 at 1.)

Defendants argue that the '673 patent fails to provide an adequate written description because the patents' specification discloses that the inventors only possessed a polymer with up to 7% second optically active units, not up to 25% as claimed. (Doc. No. 376 at 5-10.) In making this argument, Defendants primarily rely on the disclosure contained in example 6 of the '673 patent's specification. In example 6, the patentees describe that "PFPB polymers were prepared with 1, 2.5, 5, and 7% BT[, i.e., second optically active units]," but that their efforts to obtain a polymer with 9% second optically active units "were unsuccessful." '673 Patent at 32:6-9.

In response, Plaintiffs argue that disputed issues of fact exist as to the written description issue. (Doc. No. 379 at 5-10.) The specification of the '673 patent discloses: "The aggregation sensor can comprise a ratio of first optically active units to second optically active units of at least three, at least four, at least six, at least nine, or at least nineteen, or more, so long as a sufficient quantity of second optically active units is provided so that energy may be transferred effectively when the sensor is aggregated." '673 Patent at 10:22-28. In his report, Plaintiffs' expert, Dr. Swager, opines that this

disclosure is sufficient to convey to a person of ordinary skill in the art that the inventors 1 were in possession of the claimed subject matter. (Doc. No. 389-4, Swager Rebuttal Report 2 3 ¶ 333-36.) Dr. Swager further provides an explanation of how a person of ordinary skill would have recognized that the inventors possessed the claimed polymer with up to 25% 4 second optically active units despite the description contained in example  $6.^2$  This 5 6 evidence when credited and viewed in the light most favorable to Plaintiffs is sufficient to 7 create triable issues of fact precluding summary judgment of the written description issue. See Crown Packaging Tech., Inc. v. Ball Metal Beverage Container Corp., 635 F.3d 1373, 8 9 1384 (Fed. Cir. 2011) ("Where there is a material dispute as to the credibility and weight that should be afforded to conflicting expert reports, summary judgment is usually 10 11 inappropriate.").

Defendants note that the '673 patent's specification never describes any 12 13 experimental work with a polymer with a BT content over 9%, and the '673 patent's 14 inventors never made a polymer with a BT content higher than 7%. (Doc. No. 376 at 1-3; Doc. No. 407 at 1.) But "the written description requirement does not demand either 15 16 examples or an actual reduction to practice." Ariad, 598 F.3d at 1352; see Alcon Research Ltd. v. Barr Labs., Inc., 745 F.3d 1180, 1189 (Fed. Cir. 2014) ("It is well settled that an 17 18 invention may be patented before it is actually reduced to practice. Similarly, a patentee is 19 not required to provide actual working examples." (citation omitted)); LizardTech, Inc. v. 20 Earth Res. Mapping, Inc., 424 F.3d 1336, 1345 (Fed. Cir. 2004) ("A claim will not be 21 invalidated on section 112 grounds simply because the embodiments of the specification 22 do not contain examples explicitly covering the full scope of the claim language."). In 23 sum, the Court denies Defendants' motion for summary judgment of invalidity of the '673 24 patent.

<sup>&</sup>lt;sup>2</sup> Defendants argue that Dr. Swager's testimony regarding example 6 is not credible in light of the testimony from Dr. Guillermo Bazan, one of the named inventors of the '673 patent. (Doc. No. 376 at 9-10.) But at the summary judgment stage, the Court cannot make credibility determinations, and the testimony of Dr. Bazan must be viewed in the light most favorable to Plaintiffs. See Anderson, 477 U.S. at 255; Scott, 550 U.S. at 378.

C. Defendants' Motion for Partial Summary Judgment of Noninfringement of Claim 2 of the '673 Patent

Defendants move for partial summary judgment of noninfringement of claim 2 of the '673 patent. (Doc. No. 363-1 at 1.) Defendants argue that Plaintiffs have failed to offer any evidence of infringement as to this particular claim. (<u>Id.</u>) Defendants explain that although Plaintiffs identified claim 2 of the '673 patent in their infringement contentions, Plaintiffs' infringement expert, Dr. Swager, failed to offer any infringement analysis or opinion for claim 2 of the '673 patent in his expert report. (<u>Id.</u>)

In response, Plaintiffs explain that in an effort to streamline their case at the expert report stage, they elected not to offer any expert testimony on claim 2 of the '673 patent in his expert report, in effect, moving claim 2 into their pool of unelected claims. (Doc. No. 378 at 1.) Plaintiffs argue that they should be permitted to narrow their case without the Court entering a summary judgment of non-infringement. (<u>Id.</u>)

"A patentee ordinarily bears the burden of proving infringement." <u>Medtronic, Inc.</u> <u>v. Mirowski Family Ventures, LLC</u>, 134 S. Ct. 843, 846 (2014). This is true even in declaratory judgment actions. "[W]hen [an accused infringer] seeks a declaratory judgment against a patentee to establish that there is no infringement, the burden of proving infringement remains with the patentee." <u>Id.</u>

Here, Plaintiffs specifically alleged infringement of claim 2 of the '673 patent in the operative complaint, (Doc. No.  $101 \ \mbox{\ }61$ ), and, in response, Defendants filed a counterclaim for a declaration of non-infringement of the '673 patent. (Doc. No.  $104 \ \mbox{\ }138-41$ .) Plaintiffs then elected not to present any infringement evidence for claim 2 of the '673 patent in this action. (Doc. No.  $378 \ \mbox{\ }1.$ )

The Court recognizes that it is often helpful to allow parties in an action for patent infringement to narrow the scope of their dispute by dropping certain patent claims from the action. Nevertheless, under these circumstances where Plaintiffs specifically alleged infringement of the claim at issue and included the claim in both its infringement contentions and its election of asserted claims, Defendants brought a counterclaim for a

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declaratory judgment of non-infringement, and Plaintiffs then declined to present any
infringement evidence as to the claim, it is appropriate to grant summary adjudication of
that claim. As such, the Court enters summary adjudication of Plaintiffs' assertion of
infringement as to claim 2 of the '673 patent. <u>See Alcon Research Ltd. v. Barr Labs., Inc.,</u>
745 F.3d 1180, 1193 (Fed. Cir. 2014) ("If an accused infringer has filed a counterclaim,
then the patentee has notice that, even if it drops its infringement claims, the issue of
infringement remains to be litigated.").

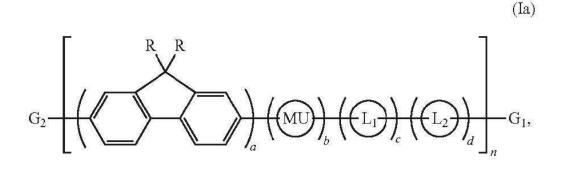
# II. Defendants' Motion for Supplemental Claim Construction

Defendants move for a supplemental claim construction order. (Doc. No. 376-1.) Specifically, Defendants argue that a dispute has arisen between the parties regarding the proper scope of the claim term "n is an integer from 1 to about 10,000" from Structure Patents (the '613 patent, the '303 patent, and the '008 patent), and, thus, the Court should enter a supplemental claim construction order construing the claim term and resolving the parties' dispute. (<u>Id.</u> at 1-4.)

<u>A.</u> The Structure Patents (the '613 patent, the '303 patent, and the '008 patent) The invention disclosed in the '613 patent, the '303 patent, and the '008 patent relate to "neutral conjugated water-soluble polymers with linkers along the polymer main chain structure and terminal end capping units." '613 Patent at (57) (abstract).

As an exemplary claim, Claim 1 of the '303 Patent provides:

1. A water soluble conjugated polymer having the structure of Formula (Ia):



wherein:

each R is independently a non-ionic side group capable of imparting solubility in water in excess of 10 mg/mL;

MU is a polymer modifying unit or band gap modifying unit that is evenly or randomly distributed along the polymer main chain and is optionally substituted with one or more optionally substituted substituents selected from halogen, hydroxyl,  $C_1$ - $C_{12}$  alkyl,  $C_2$ - $C_{12}$  alkene,  $C_2$ - $C_{12}$  alkyne,  $C_3$ - $C_{12}$  cycloalkyl,  $C_1$ - $C_{12}$  haloalkyl,  $C_1$ - $C_{12}$  alkoxy,  $C_2$ - $C_{18}$  (hetero)aryloxy,  $C_2$ - $C_{18}$  (hetero)arylamino, (CH<sub>2</sub>)<sub>x'</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>y'</sub>OCH<sub>3</sub> where each x' is independently an integer from 0-20, y' is independently an integer from 0 to 50, or a  $C_2$ - $C_1^{18}$  (hetero)aryl group;

each optional linker  $L_1$  and  $L_2$  are aryl or heteroaryl groups evenly or randomly distributed along the polymer main chain and are substituted with one or more pendant chains terminated with a functional group selected from amine, carbamate, carboxylic acid, carboxylate, maleimide, activated esters, N-hydroxysuccinimidyl, hydrazines, hydrazids, hydrazones, azide, alkyne, aldehydes, thiols, and protected groups thereof for conjugation to another substrate, molecule or biomolecule;

G<sub>1</sub> and G<sub>2</sub> are each independently selected from hydrogen, halogen, alkyne, optionally substituted aryl, optionally substituted heteroaryl, halogen substituted aryl, boronic acid substituted aryl, boronic ester substituted aryl, boronic esters, boronic acids, optionally substituted fluorine and aryl or heteroaryl substituted with one or more pendant chains terminated with a functional group, molecule or biomolecule selected from amine, carbamate, carboxylic carboxylate, maleimide. activated acid. esters. Nhydroxysuccinimidyl, hydrazines, hydrazids, hydrazones, azide, alkyne, aldehydes, thiols, and protected groups thereof for conjugation to another substrate, molecule or biomolecule;

wherein the polymer comprises at least 1 functional group selected from amine, carbamate, carboxylic acid, carboxylate, maleimide, activated esters, N-hydroxysuccinimidyl, hydrazines, hydrazids, hydrazones, azide, alkyne, aldehydes, and thiols within  $G_1$ ,  $G_2$ ,  $L_1$  or  $L_2$  that allows, for functional conjugation to another molecule, substrate or biomolecule;

n is an integer from 1 to about 10,000; and

a, b, c and d define the mol % of each unit within the structure which each can be evenly or randomly repeated and where a is a mol % from 10 to 100%, b is a mol % from 0 to 90%, and each c and d are mol % from 0 to 25%.

## '303 Patent at 239:29-240:56.

## B. Legal Standards for Claim Construction

Claim construction is an issue of law for the court to decide. <u>Teva Pharm. USA, Inc.</u> <u>v. Sandoz, Inc.</u>, 135 S. Ct. 831, 838 (2015); <u>Markman v. Westview Instr., Inc.</u>, 517 U.S. 370, 372 (1996). Although claim construction is ultimately a question of law, "subsidiary factfinding is sometimes necessary." <u>Teva</u>, 135 S. Ct. at 838.

"The purpose of claim construction is to 'determin[e] the meaning and scope of the patent claims asserted to be infringed." <u>O2 Micro Int'l Ltd. v. Beyond Innovation Tech.</u> <u>Co.</u>, 521 F.3d 1351, 1360 (Fed. Cir. 2008). "It is a 'bedrock principle' of patent law that the 'claims of a patent define the invention to which the patentee is entitled the right to exclude." <u>Phillips v. AWH Corp.</u>, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

Claim terms "'are generally given their ordinary and customary meaning[,]" which "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." <u>Id.</u> at 1312–13. "In some cases, the ordinary meaning of claim language as understood by a [PHOSITA] may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." <u>Id.</u> at 1314. "However, in many cases, the meaning of a claim term as understood by persons of skill in the art is not readily apparent." <u>O2 Micro</u>, 521 F.3d at 1360. If the meaning of the term is not readily apparent, the court must look to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean," including intrinsic and extrinsic evidence. <u>See Phillips</u>, 415 F.3d at 1314. A court should begin with the intrinsic record, which consists of the language of the claims, the patent specification, and, if in evidence, the prosecution history of the asserted patent. <u>Id.</u>; <u>see also Vederi, LLC v</u>.

<u>Google, Inc.</u>, 744 F.3d 1376, 1382 (Fed. Cir. 2014) ("In construing claims, this court relies
 primarily on the claim language, the specification, and the prosecution history.").

3 In determining the proper construction of a claim, a court should first look to the 4 language of the claims. See Vitronics, 90 F.3d at 1582; see also Comark Commc'ns v. Harris Corp., 156 F.3d 1182, 1186 (Fed. Cir. 1998) ("The appropriate starting point . . . is 5 6 always with the language of the asserted claim itself."). The context in which a disputed 7 term is used in the asserted claims may provide substantial guidance as to the meaning of 8 the term. See Phillips, 415 F.3d at 1314. In addition, the context in which the disputed 9 term is used in other claims, both asserted and unasserted, may provide guidance because 10 "the usage of a term in one claim can often illuminate the meaning of the same term in 11 other claims." Id. Furthermore, a disputed term should be construed "consistently with its 12 appearance in other places in the same claim or in other claims of the same patent." Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed. Cir. 2001); accord 13 14 Microprocessor Enhancement Corp. v. Texas Instruments Inc., 520 F.3d 1367, 1375 (Fed. 15 Cir. 2008); see also Paragon Sols., LLC v. Timex Corp., 566 F.3d 1075, 1087 (Fed. Cir. 2009) ("We apply a presumption that the same terms appearing in different portions of the 16 claims should be given the same meaning." (internal quotation marks omitted)). Moreover, 17 18 "[a] claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so." Vederi, 744 F.3d 1383. 19

A court must also read claims "in view of the specification, of which they are a part." <u>Markman</u>, 52 F.3d at 979; <u>see</u> 35 U.S.C. § 112(b) ("The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention."). "'Apart from the claim language itself, the specification is the single best guide to the meaning of a claim term."' <u>Vederi</u>, 744 F.3d at 1382. For example, "a claim construction that excludes [a] preferred embodiment [described in the specification] 'is rarely, if ever, correct and would require highly persuasive evidentiary support.'" <u>Adams Respiratory Therapeutics, Inc. v. Perrigo</u> <u>Co.</u>, 616 F.3d 1283, 1290 (Fed. Cir. 2010).

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But "[t]he written description part of the specification does not delimit the right to exclude. That is the function and purpose of claims." Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc). Therefore, "it is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1327 (Fed. Cir. 2012); see also Kara Tech. Inc. v. Stamps.com Inc., 582 F.3d 1341, 1348 (Fed. Cir. 2009) ("The patentee is entitled to the full scope of his claims, and we will not limit him to his preferred embodiment or import a limitation from the specification into the claims.").

11 In most situations, analysis of the intrinsic evidence will resolve claim construction disputes. See Vitronics, 90 F.3d at 1583; Teva, 135 S. Ct. at 841. However, "[w]here the 12 13 intrinsic record is ambiguous, and when necessary," district courts may "rely on extrinsic 14 evidence, which 'consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises."" Power 15 Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 711 F.3d 1348, 1360 (Fed. Cir. 16 2013) (quoting Phillips, 415 F.3d at 1317). A court must evaluate all extrinsic evidence in 17 18 light of the intrinsic evidence. Phillips, 415 F.3d at 1319. "Extrinsic evidence may not be used 'to contradict claim meaning that is unambiguous in light of the intrinsic evidence." 19 20 Summit 6, LLC v. Samsung Elecs. Co., 802 F.3d 1283, 1290 (Fed. Cir. 2015); see also Bell 21 Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc., 262 F.3d 1258, 1269 (Fed. Cir. 2001) ("[E]xtrinsic evidence . . . may not be used to vary, contradict, expand, or limit the 22 23 claim language from how it is defined, even by implication, in the specification or file history."); Vederi, 744 F.3d at 1382 ("[E]xtrinsic evidence may be less reliable than the 24 25 intrinsic evidence."). In cases where subsidiary facts contained in the extrinsic evidence "are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence." Teva, 135 S. Ct. at 841.

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"[D]istrict courts are not (and should not be) required to construe every limitation

present in a patent's asserted claims." O2 Micro, 521 F.3d at 1362. In certain situations, 2 it is appropriate for a court to determine that a claim term needs no construction and its 3 plain and ordinary meaning applies. See id.; Phillips, 415 F.3d at 1314. But "[a] determination that a claim term 'needs no construction' or has the 'plain and ordinary 4 meaning' may be inadequate when a term has more than one 'ordinary' meaning or when 5 6 reliance on a term's 'ordinary' meaning does not resolve the parties' dispute." O2 Micro, 521 F.3d at 1361. If the parties dispute the scope of a certain claim term, it is the court's duty to resolve the dispute. Id. at 1362; accord Eon Corp. IP Holdings v. Silver Spring 8 9 Networks, 815 F.3d 1314, 1318 (Fed. Cir. 2016).

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## C. Analysis of the Claim Term "n is an integer from 1 to about 10,000"

Defendants propose that the term "n is an integer from 1 to about 10,000" be construed as "the average number of repeat units, which may be calculated from the average molecular weight: n=M/M0."<sup>3</sup> (Doc. No. 376-1 at 1, 5; Doc. No. 407-1 at 1.) Plaintiffs propose that the term be construed as "n is the number of repeat units in an individual polymer molecule." (Doc. No. 389 at 3 & n.1.) Because the parties dispute the scope of this claim term, the Court must resolve the parties' dispute. See O2 Micro, 521 F.3d at 1361; Eon, 815 F.3d at 1318.

The Court begins its analysis of the parties' dispute by analyzing the intrinsic record, the claim language and the specification. The intrinsic record does not support Defendants' proposed construction. Defendants propose that the Court construe the term "n is an integer from 1 to about 10,000" to be the average number of repeat units, which can be calculated from the average molecular weight as represented by the formula "n=M/M0." (Doc. No. 376-1 at 5.) But neither the claims nor the specification of the Structure Patents ever define

<sup>25</sup> The Court notes that Defendants' claim construction briefing contains typographical errors for the 26 claim language at issue. Defendants at times write the claim term at issue as "n is an integer from about 1 to about 10,000." (See, e.g., Doc. No. 376-1 at 1.) At other times, Defendants write the claim term as 27 "n is an integer from about 1 to 10,000." (See, e.g., Doc. No. 407-1 at 1, 3.) Both of these are incorrect. The claim term as written in claim 1 of the '303 patent is "n is an integer from 1 to about 10,000." '303 28 Patent at 240:51; see also id. at 3:1, 24:5.

or refer to the term "n is an integer from 1 to about 10,000" as representing the average number of repeat units. Further, the formula "n=M/M0" is found nowhere is either the claim language or the specification of the Structure Patents.

Plaintiffs argue that the claim language's use of the word "integer" actually counsels against Defendants' proposed construction. The Court agrees. An "integer" is defined as "[a] number which is not a fraction; a whole number." OED ONLINE <u>available at</u> https://en.oxforddictionaries.com/definition/integer (March 2019); <u>see also</u> THE AMERICAN HERITAGE DICTIONARY OF ENGLISH LANGUAGE 909 (4th Ed. 2000) ("integer . . . 1. A member of the set of positive whole numbers  $\{1, 2, 3, ...\}$ , negative whole numbers  $\{-1, -2, -3, ...\}$ , and zero  $\{0\}$ "). (See also Doc. No. 407-1 at 3 ("an integer, i.e., a whole number").) Plaintiffs correctly explain that this contradicts Defendants' proposed construction because an average number of repeat units calculated based on an entire polymer sample can, and mostly likely would, be a fraction, not a whole number. (Doc. No. 389 at 5.)

In response, Defendants argue that the claim language's use of the word "integer" does not negate their proposed construction. (Doc. No. 407-1 at 3-4.) Defendants explain that although the claim language uses the word "integer," the claim term in full states that "'n is an integer from about 1 to 10,000." (Id. at 3.) Defendants argue that the phrase "from about" clarifies that the term integer is intended to be a rounded off approximation. (Id.) But the problem with this argument is that the claim language at issue does not actually contain the phrase "from about." Claim 1 of the '303 patent actually states: "n is an integer from 1 to about 10,000." '303 Patent at 240:51. The word "about" only modifies the second number in the claim language and not the first number. Thus, the claim language does not imply that the word "integer" is only meant to represent a rounded off approximation. Further, Defendants fail to explain why if the claimed term "integer" rather than a different word like "number." As such, the Court rejects Defendants' argument.

1 Defendants argue that the language in dependent claim 25 of the '303 Patent supports 2 their proposed construction. (Doc. No. 376-1 at 8-9.) Dependent claim 25 of the '303 3 Patent claims: "The water soluble conjugated polymer of claim 1, comprising a minimum 4 number average molecular weight of greater than 40,000 g/mol and a water solubility of 5 greater than 50 mg/mL in pure water or a phosphate buffered saline solution." '303 Patent 6 at 254:12-16. This claim language does not support Defendants' proposed construction. 7 To the contrary, this claim language shows that when the inventors wanted to claim an average molecular weight, they used the term "average molecular weight." Further, it is 8 9 of no consequence that dependent claim 25 utilizes the term "average molecular weight" because "[u]nder the doctrine of claim differentiation, dependent claims are presumed to 10 11 be of narrower scope than the independent claims from which they depend." AK Steel 12 Corp. v. Sollac & Ugine, 344 F.3d 1234, 1242 (Fed. Cir. 2003); see Trustees of Columbia 13 Univ. in City of New York v. Symantec Corp., 811 F.3d 1359, 1370 (Fed. Cir. 2016). Thus, 14 an independent claim is not restricted by an added limitation in a dependent claim. Trustees 15 of Columbia Univ., 811 F.3d at 1370. As a result, Defendants cannot rely a limitation 16 contained in dependent claim 25 in an effort to restrict the scope of independent claim 1 of 17 the '303 patent. 18

In support of their proposed construction for this claim term, Defendants primarily rely on extrinsic evidence, specifically a Polymer Chemistry textbook. (Doc. No. 376-1 at 20 5 (citing Doc. No. 368-11, Ex. N at 3).) But "extrinsic evidence . . . may not be used to vary, contradict, expand, or limit the claim language from how it is defined, even by implication, in the specification or file history." Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc., 262 F.3d 1258, 1269 (Fed. Cir. 2001). As explained above, the 23 24 definition provided in Defendants' extrinsic evidence contradicts the language contained 25 in the claims, in particular the claimed requirement that "n" be an "integer."

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In sum, the Court adopts Plaintiffs' proposed construction for this claim term, and the Court rejects Defendants' proposed construction. The Court construes the claim term "in is an integer from 1 to about 10,000" as "in is the number of repeat units in an individual

polymer molecule."

## **Conclusion**

For the reasons above, the Court denies Defendants' motion for summary judgment of invalidity of the '673 patent, and the Court grants Defendants' motion for partial summary judgment of non-infringement of claim 2 of the '673 patent. In addition, the Court issues the above supplemental claim construction order.

## IT IS SO ORDERED.

DATED: March 21, 2019

MARILYN L? HUFF, District Gudge UNITED STATES DISTRICT COURT