IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

WATERS CORPORATION and WATERS TECHNOLOGIES CORPORATION,)
Plaintiff,)
v.) C.A. No. 18-1450 (MN)
AGILENT TECHNOLOGIES INC.,)
Defendant.	<i>)</i>)

MEMORANDUM ORDER

At Wilmington this 22nd day of November 2019:

As announced at the hearing on November 4, 2019, IT IS HEREBY ORDERED that the disputed claim terms of U.S. Patent No. 9,658,234 ("the '234 Patent") are construed as follows:

- 1. "substituent" means "an atom or group that replaces another atom or group in the Ar, [i.e. the aromatic carbocyclic group or aromatic heterocyclic group]" ('234 Patent, claims 1 & 2)
- 2. "said substituent contains [list of five groups]" has its plain and ordinary meaning ('234 Patent, claim 1)
- 3. "a compound with an amino group" means a "compound with amino group is used to designate a compound (which may be in a form of a salt) having one or more amino groups and/or one or more imino" ('234 Patent, claims 6, 9, 10, 14 & 15)

The parties briefed the issues (*see* D.I. 121), which included submission of declarations from experts for both sides. The parties also submitted a Joint Claim Construction Chart containing intrinsic evidence (*see* D.I. 97). Plaintiffs provided a tutorial describing the relevant technology (*see* D.I. 118). The Court carefully reviewed all submissions in connection with the parties' contentions regarding the disputed claim terms, heard oral argument (*see* D.I. 130), and applied the following legal standards in reaching its decision:

LEGAL STANDARDS

"[T]he ultimate question of the proper construction of the patent [is] a question of law," although subsidiary fact-finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015). "[T]he words of a claim 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, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (internal citations and quotation marks omitted). Although "the claims themselves provide substantial guidance as to the meaning of particular claim terms," the context of the surrounding words of the claim also must be considered. *Id.* at 1314. "[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted).

The patent specification "is always highly relevant to the claim construction analysis . . . [as] it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. "Even when the specification describes only a single embodiment, [however,] the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal quotation marks omitted) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)); *see also Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) ("It is

likewise not enough that the only embodiments, or all of the embodiments, contain a particular limitation.").

In addition to the specification, a court "should also consider the patent's prosecution history, if it is in evidence." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). The prosecution history, which is "intrinsic evidence, . . . consists of the complete record of the proceedings before the [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

In some cases, courts "will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva*, 135 S. Ct. at 841. Extrinsic evidence "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. Expert testimony can be useful "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Phillips*, 415 F.3d at 1318. Nonetheless, courts must not lose sight of the fact that "expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence." *Id.* Overall, although extrinsic evidence "may be useful to the court," it is "less reliable" than intrinsic evidence, and its consideration "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the

intrinsic evidence." *Id.* at 1318-19. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing *Vitronics*, 90 F.3d at 1583).

I. THE COURT'S RULING

The Court's rulings regarding the disputed claim terms of the '234 Patent were announced from the bench at the conclusion of the hearing as follows:

. . . At issue is United States Patent No. 9,658,234 titled "Method for Analysis of Compounds with Amino Group and Analytical Reagent Therefor."

There are three terms in dispute. I am prepared to rule on each of those disputes. I will not be issuing a written opinion, but I will issue an order stating my rulings. I want to emphasize before I announce my decisions that while I am not issuing a written opinion, we have followed a full and thorough process before making the decisions I am about to state. I have reviewed the '234 Patent and the portions of the prosecution history submitted. There was full briefing on each of the disputed terms. There was an extensive appendix that included expert declarations submitted by both Waters and Agilent. There has been argument as well as testimony from Dr. Van Breemen here today. There was also a tutorial on the technology submitted by Waters. All of that has been carefully considered.

Now as to my rulings. As an initial matter, I am not going to read into the record my understanding of claim construction law generally. I have a legal standard section that I have included in earlier opinions, including somewhat recently in *Omega Flex v. Ward Manufacturing*, Civil Action No. 18-1004. I incorporate that law and adopt it into my ruling today and will also set it out in the order that I issue.

As to the definition of a person of ordinary skill in the art, Waters, through its expert, Dr. Cummings, defined that person as "a laboratory chemist with a bachelor's degree or higher in organic chemistry, biochemistry, or a related field with two or more years of experience." Agilent, through its expert, Dr. Van Breemen, defined the person of ordinary skill as "a scientist with a master's degree or higher working in the field of chemistry, biochemistry, biophysics,

pharmacology, chemical engineering, or a related field, with two or more years of experience developing reagents and methods for analyzing organic compounds with liquid chromatography-mass spectrometry ("LC-MS") or tandem mass spectrometry ("MS/MS"), or a person with equivalent experience." The parties agree that the differences in these definitions are not material to the claim construction issue before me.

First, as to the term "substituent" in claims 1 and 2, Plaintiffs argue that it means "an atom or radical that replaces another in a molecule as the result of a reaction." Defendant argues that it means "an atom or a group that replaces a hydrogen atom on Ar."

In the parties' proposed language, there are two differences. The first, whether it is "an atom or radical" or "an atom or a group," appears to be resolved. Waters has agreed to the language "an atom or a group" and the Court will use that.

The second difference is whether that "atom or a group" replaces another "another [atom or group] in a molecule as a result of a reaction," as Waters proposes or whether it replaces "a hydrogen atom on Ar" as Agilent argues.

Here, I construed the term to mean "an atom or group that replaces another atom or group in the Ar, [i.e. the aromatic carbocyclic group or aromatic heterocyclic group]." Plaintiff has agreed that that does not refer to the replacement of one of the molecules – such as a carbon – in the backbone of the aromatic group.

This construction is consistent with the ordinary meaning of the term, as seen for example in the Hawley's Condensed Chemical Dictionary cited by the parties. I understand that Agilent cites to IUPAC. But I do not find that sufficiently clear to be used as a definition in this case, particularly when, as Plaintiffs point out, the IUPAC example of a "substitution reaction" is not the substitution of a hydrogen but rather of a chlorine for an OH group. And it seems that Dr. Van Breemen today agreed that the OH group on the CH₃OH group that resulted would be recognized as a substituent whether it replaced the original hydrogen on the group or a chlorine.

Agilent's argument appears to be that in the examples of the patent, the unsubstituted molecules of the Ar group have hydrogens bound to them and the substituted compounds have one of those hydrogens replaced. That may be true, but the language describing

substituents is broader and there is ... no special definition of the term or disavowal of the ordinary meaning in the intrinsic record. Thus, I view Defendant's proposal as an invitation to read limitations from embodiments into the claims contrary to the Federal Circuit's caution against doing so in *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) and *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). I decline to do so.

The second disputed term is "said substituent contains [list of five groups]" in claim 1. Plaintiffs assert that it should have its plain and ordinary meaning. Defendant asserts that that means "said substituent is [list of five groups]." I agree with Plaintiffs and will give the term its ordinary meaning in which contains is open ended.

The crux of the dispute is the meaning of the word "contains." Here, I note, as I did in the preliminary injunction opinion, that the Federal Circuit in *Epistar Corp. v. International Trade Commission*, 566 F.3d 1321, 1334 (Fed. Cir. 2009) has held that there is "a heavy presumption that claim terms carry their full ordinary and customary meaning, unless [it is shown that] the patentee expressly relinquished claim scope."

Here, it is well-established that transitional terms such as "comprising," and "containing" are inclusive or open-ended and do not exclude additional, unrecited elements or method steps. The MPEP states that "the transitional term 'comprising', which is synonymous with 'including,' 'containing,' or 'characterized by,' is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. Manual of Patent Examining Procedures, 9th ed., rev. 8 § 2111.3 (Jan. 2018). Similarly, in *Mars, Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1375 (Fed. Cir. 2004), the Federal Circuit stated that "like the term 'comprising,' the terms 'containing' and 'mixture' are open-ended."

Similarly, Dr. Van Breemen agreed that the ordinary meaning of contains is "typically open-ended."

Although it is true that that is simply a presumption, and there may be times when "containing" is not open-ended, I do not find that [it is open-ended] in this case. Here, the patentee used the word containing consistent with its ordinary meaning as an open-ended term in the specification of the '234 Patent. For example, it referred to "a sample containing at least a compound with amino group" at column 3, lines 50 to 51 and lines 62 to 63, and to a

"substrate containing a stable isotope having a low naturally existing rate" at column 15, lines 60 to 61. It similarly used the word "contains" consistent with its ordinary, open-ended meaning at column 8, line 33, column 11, lines 17 through 18, and column 18, lines 64 to 66.

I also do not find that the use of "containing at least" in claim 6 is a clear disavowal of a broader meaning of the word "containing" when looking at the intrinsic evidence overall. To the contrary, the specification, at column 3, lines 50 to 59, uses the phrase "containing at least" in the same way — and essentially interchangeably — with the way it uses the word "containing."

The prosecution history also supports the Court's construction. As the parties discussed in their briefing, claim 19 of the original application used traditional Markush language to limit the groups claimed. In the preliminary amendment, in which claim 1 was added, the patentees used very different language – they removed the Markush language and added contains, which is generally not limiting. It thus appears that the patentees wanted to claim something different than they had previously.

As with the first term, Agilent points out the examples in specification that include the listed groups and only those, but again, I do not find this to be sufficient lexicography (either explicit or implicit) to rewrite the claims.

I recognize that it may be that this construction leads to issues with enablement or written description, but those issues are not directly before me and have not been proven by clear and convincing evidence at this stage. I will thus heed the Federal Circuit's caution in *Hill-ROM Service, Inc. v. Stryker Corp.*, 755 F.3d 1367, 1374 (Fed. Cir. 2014) against district courts allowing "claim construction to morph into a mini-trial on validity." Agilent may raise those issues as appropriate at a later date.

The third term is "a compound with an amino group in claims 6, 9, 10, 14 and 15. Plaintiffs again assert that this term should have its plain and ordinary meaning. Defendant asserts it means "a compound or salt thereof that has or is one or more of a primary amine, a secondary amine, a tertiary amine, a quaternary ammonium, an amino acid, a peptide, a protein, and/or one or more imino groups."

Defendant asserts the Plaintiffs acted as their own lexicographer in column 6, which states: "In the present invention, 'compound with amino group' is used to designate a compound (which may be in a form of a salt) having one or more amino groups and/or one or more imino groups in the molecule and the compound with an amino group in a sample may be one type or a mixture of a plurality of types."

Both parties here today agree that that is a definition provided in the specification. I will adopt that definition. I note that there is no dispute here that the amino groups may be a primary amine, a secondary amine, a tertiary amine, which are additions that the Defendant proposes. Defendant today raised an issue as to which salts are included. That was not clearly briefed prior to today and it is not clear what Defendant is seeking in the construction or whether whatever that is, is actually disputed by Plaintiffs. In any event, as to the current language Defendant proposes to add, I find that it does not add anything to the definition provided and will not assist, and instead may confuse, the jury. To the extent an issue arises with that term later, we will address it at that time.

The Honorable Maryellen Noreika

United States District Judge