IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

NUANCE COMMUNICATIONS, INC.,)
Plaintiff,)
v.) C.A. No. 17-1484 (MN)
MMODAL LLC,)
Defendant.)

MEMORANDUM ORDER

At Wilmington this 30th day of October 2020:

IT IS HEREBY ORDERED that the claim terms of U.S. Patent Nos. 6,766,295 ("the '295 Patent") and 7,379,946 ("the '946 Patent") with agreed-upon constructions are construed as follows (see D.I. 300 at 1-2):

- 1. the preamble of claim 1 of the '295 Patent is limiting
- 2. "sample of a speaker's speech" means "an amount of a speaker's speech" ('295 Patent, claim 1)
- 3. "speech recognition system" means "device or combination of devices, which could include general-purpose computers, special purpose computers, or dedicated hardware circuits, and the software thereon, that recognize speech" ('295 Patent, claims 1, 2, 56, 57, 66 & 68)
- 4. "speaker" means "the person who is doing the speaking" ('295 Patent, claims 1, 2, 57, 60, 66 & 68)
- 5. "speech samples" means "at least two samples of a speaker's speech" ('295 Patent, claim 2)
- 6. "latent information" means "relevant data identified within the input data stream" ('946 Patent, claim 1)
- 7. "said template" means "said report template" ('946 Patent, claim 1)
- 8. "report template" means "form for a report" ('946 Patent, claims 1 & 6)

9. "remote session" means "a session between devices in which the input voice device is at a different location from the rest of the speech recognition system" ('295 Patent, claims 1, 2, 9 & 68)¹

Further, as announced at the hearing on October 20, 2020, IT IS HEREBY ORDERED that the disputed claim terms of the '295 and '946 Patents are construed as follows:

- 1. "modifying the speech recognition system by incorporating the sample into the speech recognition system thereby forming a speaker specific modified speech recognition system" means "modifying the speech recognition system based upon the sample to form a speaker-specific modified speech recognition system" ('295 Patent, claim 1)
- 2. the performing step of claim 1 of the '946 Patent need not occur between the receiving step and first processing step ('946 Patent, claim 1)
- 3. "[a / the] report" will not be construed beyond its ordinary meaning at this time and the Court will address this term in connection with dispositive motions to the extent that the dispute remains ('946 Patent, claims 1 & 5)²

The parties briefed the issues (*see* D.I. 293) and submitted an appendix containing intrinsic evidence (*see* D.I. 294; *see also* D.I. 300),³ and both parties provided a tutorial describing the relevant technology (*see* D.I. 134 & 135). The Court carefully reviewed all submissions in connection with the parties' contentions regarding the disputed claim terms, heard oral argument (*see* D.I. 316) and applied the following legal standards in reaching its decision:

The parties reached agreement on this construction at the hearing. (*See* D.I. 316 at 28:14-30:12). To the extent Defendant later attempts to read a negative limitation into this term, Plaintiff may raise the issue in their dispositive motion briefing.

The Court is not convinced that there is any dispute between the parties as to the meaning of this term. To the extent necessary, the parties may present additional claim construction arguments on this term in their dispositive motion briefing.

The parties also engaged in claim-construction briefing during an earlier stage of the case before these proceedings were stayed pending resolution of the *inter partes* review. (*See* D.I. 104, 137, 138; *see also* D.I. 226 (staying case)). After the stay was lifted, the parties revised their claim-construction briefing. (*See* D.I. 278).

I. 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)).

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 PTO [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 ruling regarding the disputed claim terms of the '295 and '946 Patents was announced from the bench at the conclusion of the hearing as follows:

. . . At issue we have two patents and four disputed claim terms.

I am prepared to rule on each of those disputes. I will not be issuing a written opinion as to those four terms, but I will issue an order stating my rulings. I want to emphasize before I announce my decisions that although 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 each of the patents in dispute. I have also reviewed the portions of the prosecution history, the IPR, and the reexamination and a brief that Nuance submitted in another case, all of which were included in the Joint Appendix. There was full briefing on each of the disputed terms. There were also tutorials on the technology presented by the parties. And there has been argument here today. 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 *Best Medical International v. Varian Medical Systems, Inc.*, C.A. No. 18-1599. I incorporate that law and adopt it into my ruling today and will also set it out in the order that I issue.

Neither party has offered a definition of a person of ordinary skill in the art in their papers or the argument here today, but the parties seem to agree that there are no disputes as to who that person is that is relevant to the issues before me today.

Now the disputed terms:

The first term is "modifying the speech recognition system by incorporating the sample into the speech recognition system thereby forming a speaker-specific modified speech recognition system" in claim 1 of the '295 Patent. Plaintiff asserts that it means "modifying the speech recognition system based upon the sample to form a speaker-specific modified speech recognition system." Defendant argues that it means "modifying the speech recognition system to form a speaker-specific modified speech recognition system that includes the sample of the speaker's speech." The crux of the dispute is whether the modified system is "based upon the sample" or "includes the sample."

Here, I agree with Plaintiff and will construe the term to mean "modifying the speech recognition system based upon the sample to form a speaker-specific modified speech recognition system."

This construction is supported by the intrinsic evidence.

For example, at column 1, lines 42 through 46, the '295 Patent states that "[i]n the preferred embodiment, the samples are obtained without requiring the speaker to engage in a training session. The acoustic model is then modified based upon the samples thereby forming a modified model." At column 4, lines 28 to 31, the '295 Patent refers to a speaker-independent model, which is described as "a generalized acoustic model generated based upon samples of speech taken from multiple different representative persons."

At column 4, lines 47 through 56, the '295 Patent references a preferred embodiment in which the acoustic model is modified prior to termination of the remote session so that the modified model can immediately be put to use. At column 5, lines 20 through 50, the '295 Patent references a preferred embodiment in which "only a set of statistics which can be used to modify a pre-existing acoustic model[] is stored" and the patent notes that that method is preferable to conserve memory.

The claims of the '295 Patent also support my construction. Claim 1 itself says "incorporating the sample" not including the sample itself in the modified system. Additionally, dependent claims 70 and 71 refer back to the limitation at issue and reference ways in which the incorporation of the speech sample is accomplished. Claim 70 recites "[t]he method of claim 1, wherein incorporating the sample into the speech recognition system comprises modifying an acoustic model based on a sample." Claim 71 similarly recites "[t]he method of claim 1, wherein incorporating the sample into the speech recognition system comprises modifying an acoustic model by computing statistics based on the sample." These claims suggest that including the sample itself is not required.

The prosecution history also supports inclusion of the phrase "based upon" in the construction. During the reexamination of the '295 Patent and, more specifically, in the May 11, 2011, Amendment and Response, the patentee stated "[s]pecifically, claim 1 clearly relates to a method of 'adapting a speech recognition

system' based upon a sample of speech that is received during a remote session and recognized by the system."

Defendant's citation to the amendment and statements during the original prosecution about the Besling prior art does not change the result. In the amendment addressing modifying the speech recognition system, the applicant deleted the words "according to" and added "by incorporating the sample into the speech recognition system thereby forming a speaker-specific modified speech recognition system." I do not view this as a clear disclaimer of the "based upon" argument being made now. First, the applicant explained that the prior art did involve "modifying" as required by the claims and also explained that "Besling teaches that the input user sample is used to determine a best match adaptation profile, where the selected adaptation profile is preexisting. The adaptation profile is not modified in any way by the input user sample." Additionally, the applicant further noted that the '295 Patent invention "eliminates the inconvenience of requiring user feedback and as a result improves efficiency by automatically modifying the speaker-specific acoustic models based on the received samples of the specific speaker's speech."

The second term is "remote session" in claims 1, 2, 9 and 68 of the '295 Patent. During the argument today, the parties agreed to Defendant's proposal that the term means "a session between devices in which the input voice device is at a different location from the rest of the speech recognition system." I will adopt that construction. And in doing so, I will restate what I said earlier, that if Defendant attempts to read a negative limitation into the construction at a later date, I will allow Plaintiff to raise the issue again.

The third term is directed to the order of steps in claim 1 of the '946 Patent. Defendant asserts that the steps must be performed in the order in which they appear in the claim. Plaintiff does not dispute that "the receiving," first "processing," "activating," "populating," and second "processing" steps are performed in the order they are listed, but Plaintiff disputes that the "performing" step must occur between the "receiving" and first "processing" steps.

Here, I agree with Plaintiff and I will not construe the claim to require that the performing step be performed between the receiving and first processing step.

As an initial matter, "as a general rule [a method] claim is not limited to performance of the steps in the order recited, unless the claim explicitly or implicitly requires a specific order." That's from *Baldwin Graphic Systems, Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1345 (Fed. Cir. 2008).

Here, nothing in the claim itself or in the intrinsic record requires that the "performing" step occur prior to the first "processing" step. For example, at column 10, lines 33 to 37, the '946 Patent states that "[a]dditional processing may include, for example, normalization, validation, and extraction of relevant data. Any one of these processes may be used either along or in combination with other processing functions." Similarly, the description of Figure 2 of the '946 Patent at column 8, lines 10 through 28, states that "[t]he first step [of the initial processing] is the identification of a relevant portion of the generic data," which "may include latent information." This is a different order than the steps that are included in claim 1, where "identify[ing] latent information" is included in the "processing" step, which is listed after the "performing" step.

The fourth and final term is "[a/the] report" in claim 1 and 5 of the '946 Patent. Plaintiff asserts that no construction is necessary. Defendant asserts that it refers to "a or the report template in which the empty fields have been populated with template specified data."

The parties both agree that the report in the claim is ultimately generated from the information on the template. I am not convinced, however, that there is a dispute here that requires this term to be construed beyond its ordinary meaning. If it turns out that there is a real dispute, then the parties can address it in connection with summary judgment motions.

The Honorable Maryellen Noreika

United States District Judge