IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

JAWBONE INNOVATIONS, LLC,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Case No. 2:21-CV-00186-JRG-RSP
	§	
SAMSUNG ELECTRONICS CO. LTD. and	§	
SAMSUNG ELECTRONICS AM., INC.	§	
	§	
Defendants.	§	

CLAIM CONSTRUCTION ORDER

Jawbone Innovations, LLC, accuses Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc., (together, "Samsung") of infringing claims of U.S. Patents 7,246,058 (the "'058 Patent"); 8,019,091 (the "'091 Patent"); 8,467,543 (the "'543 Patent"); 8,503,691 (the "'691 Patent"); 10,779,080 (the "'080 Patent"); and 11,122,357 (the "'357 Patent"). Each of these patents relates to noise suppression in acoustic signal processing.

The parties present seven disputes about claim scope. Having considered the parties' briefing, along with arguments of counsel during an August 2, 2022 hearing, the Court resolves the disputes as follows.

I.   **LEGAL STANDARDS**

        A.   **Generally**

"'[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure-Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). As such, if the parties dispute the scope of the claims, the court must determine their meaning. *See, e.g.*, *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1317 (Fed. Cir. 2007); *see*

also Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996), *aff'g*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc).

Claim construction, however, "is not an obligatory exercise in redundancy." *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). Rather, "[c]laim construction is a matter of [resolving] disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims . . . ." *Id.* A court need not "repeat or restate every claim term in order to comply with the ruling that claim construction is for the court." *Id.*

When construing claims, "[t]here is a heavy presumption that claim terms are to be given their ordinary and customary meaning." *Aventis Pharm. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) (citing *Phillips*, 415 F.3d at 1312–13). Courts must therefore "look to the words of the claims themselves . . . to define the scope of the patented invention." *Id.* (citations omitted). "[T]he ordinary and customary meaning of a claim term 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*, 415 F.3d at 1313. This "person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.*

Intrinsic evidence is the primary resource for claim construction. *See Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citing *Phillips*, 415 F.3d at 1312). For certain claim terms, "the ordinary meaning of claim language as understood by a person of skill in the art 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." *Phillips*, 415 F.3d at 1314; *see also Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed.

Cir. 2005) ("We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history."). But for claim terms with less-apparent meanings, courts consider "'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] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.'" *Phillips*, 415 F.3d at 1314 (quoting *Innova*, 381 F.3d at 1116).

B.   Indefiniteness

"[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). "A patent must be precise enough to afford clear notice of what is claimed," but that consideration must be made while accounting for the inherent limitations of language. *Id.* at 908–09. "Indefiniteness must be proven by clear and convincing evidence." *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

II.   THE LEVEL OF ORDINARY SKILL IN THE ART

The level of ordinary skill in the art is the skill level of a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In resolving the appropriate level of ordinary skill, courts consider the types of and solutions to problems encountered in the art, the speed of innovation, the sophistication of the technology, and the education of workers active in the field. *Id.* Importantly, "[a] person of ordinary skill in the art is also a person of ordinary creativity, not an automaton." *KSR Int'l Co. v.*

Teleflex Inc., 550 U.S. 398, 421 (2007).

Here, the parties generally agree on the appropriate level of ordinary skill in the art. Jawbone, through its expert, contends a skilled artisan at the time of invention "would have a bachelor's degree in . . . electrical engineering, computer engineering, or equivalent, with one to two years of experience in the area of real-time signal processing and signal processing for acoustic signals." Brown Decl., Dkt. No. 67-1 ¶ 58. Samsung's proffered skill level is similar: "a bachelor's degree in electrical engineering, computer science, audio engineering or a similar field and two years of experience in a relevant field, such as, acoustics, speech recognition, speech detection, signal processing, and/or designing microphone arrays." Dkt. No. 71 at 3 (citing Kiaei Decl., Dkt. No. 67-4 ¶ 26). Neither party contends the differences in their respective skill levels, if any, are material to resolving the disputes they present.

III.   THE DISPUTED TERMS

A.   **"a signal processor coupled with the first and second microphone signals and operative . . . to apply a varying linear transfer function between the first and second microphone signals" ('357 Patent, Claim 1); "a processing component . . . applying a varying linear transfer function between the acoustic signals" ('080 Patent, Claim 14)**

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning except for "transfer function"	"a signal processor coupled with the first and second microphone signals and operative . . . to apply a varying linear transfer function to the first microphone signal and to apply the varying linear transfer function to the second microphone signal" Otherwise indefinite.

These patents disclose "[a] dual omnidirectional microphone array (DOMA) that provides improved noise suppression" in a speech-communications system. '357 Patent at 5:8–9; *see also*

'080 Patent at 3:49–50 (same). Generally, they teach configuring two virtual directional microphones to have similar noise responses but dissimilar speech responses. *See* '357 Patent at 5:11–15; '080 Patent at 3:52–56. The system then uses involved math and information from a voice activity detector (VAD)[1] to reduce the noise in the signal without distorting the speech. *See* '357 Patent at 5:16–21; '080 Patent at 3:57–60.
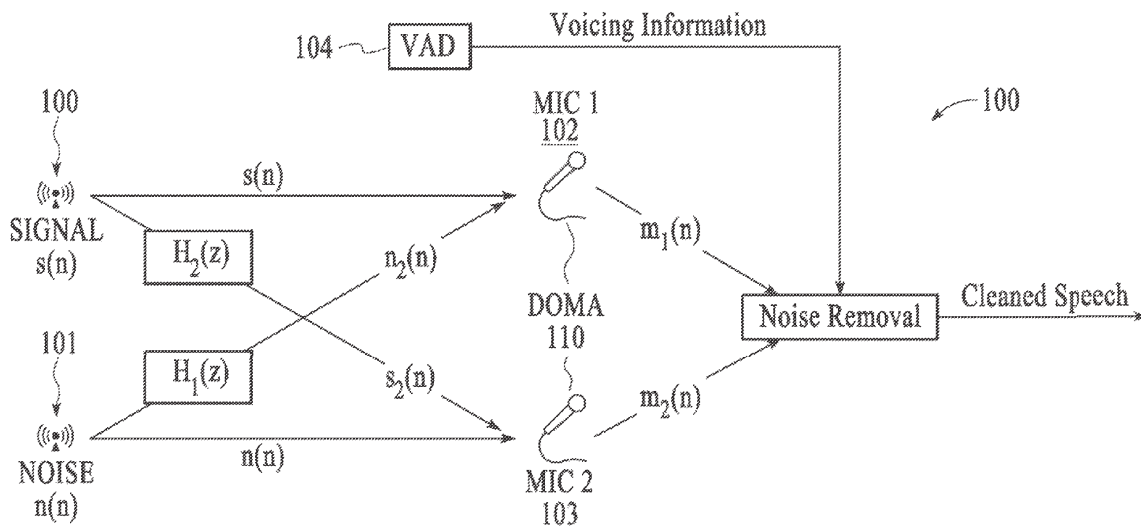

Fig. 1 of the '357, '691, and '080 Patents

The '357 Patent describes a suitable algorithm with reference to Fig. 1. After explaining the math, the patent provides a formula for removing noise while leaving the original signal:

$$S(z) = (M_1(z) - M_2(z)\, H_1(z)) / (1 - H_2(z)\, H_1(z)), \qquad \text{(Eq. 3)}$$

where $M_1(z)$ and $M_2(z)$ are the total acoustic information (i.e., noise and signal) received by MIC 1 and MIC 2, respectively, and $H_1(z))$ and $H_2(z)$ are transfer functions. '357 Patent at 7:40–43. Equation 3 can be simplified in "well-performing systems" where "there is little or no leakage

---

[1] The '091 Patent describes a typical VAD, which "uses physiological information to determine when a speaker is speaking." *See* '091 Patent at 3:39–50. In general, the VAD outputs a "0" when there is no speech and a "1" when speech is produced. *Id.* at 3:65–4:2.

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.

fastcase®
Smarter legal research.