UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

LECAT'S VENTRILOSCOPE,	)	
	)	
Plaintiff,	)	
	)	**No. 16 C 5298**
v.	)	
	)	**Chief Judge Rubén Castillo**
MT TOOL AND MANUFACTURING,	)	
	)	
Defendant.	)	

MEMORANDUM OPINION AND ORDER

Lecat's Ventriloscope ("Plaintiff") filed this suit against MT Tool and Manufacturing ("Defendant") for alleged infringement of U.S. Patent No. 7,645,141 ("the '141 Patent"). (R. 1, Compl.) Generally speaking, the invention disclosed and claimed in the '141 Patent is a device to help train physicians and other medical professionals in the use of "auscultation" devices (*e.g.*, stethoscopes) to evaluate and diagnose patients. The language of the claims defines the scope of a patent, and here, as happens in most patent infringement cases, the parties dispute the meaning of certain terms in the claims. Specifically, the parties dispute whether the terms "auscultation device" and "stethoscope" include simulation or "dummy" devices that look like stethoscopes (or other auscultation devices) but cannot function as such. They also dispute whether the terms "operator," "user," and "patient"—which appear together in certain claims—refer to three distinct persons or instead refer simply to different roles. The parties have submitted competing briefs urging their respective interpretations of these terms, and the Court construes them as set forth below.

BACKGROUND

The '141 Patent issued from non-provisional U.S. Patent Application Serial No. 11/523,224 ("the '224 Application") and relates to an "arrangement for auscultation training." (R. 68-1 at 2, '141 Patent, at [21], [54]; *see also id.* col. 1 ll. 41-42 ("The present application discloses an arrangement and method for auscultation training.").) As defined in the patent specification, auscultation is "the act of listening to sounds within the body as a method of diagnosis." (*Id.* col. 1 ll. 13-14.) According to the specification, a stethoscope is an example of an auscultation device, as it may be used to "listen to internal sounds in the human body, such as for example heart sounds, breathing (breath sounds), intestinal noises, and blood flow in arteries and veins." (*Id.* col. 1 ll. 14-18.) The specification explains as background that "[u]sing a stethoscope or other auscultation device to diagnos[e] a patient requires training in detecting and identifying . . . abnormal auditory findings." (*Id.* col. 1 ll. 25-27.) "[S]imulators and mannequins are often used to train or test students on auscultation devices," and in order to train students in detecting and identifying abnormal auditory findings, such simulators and mannequins may be equipped with "a sound generating device embedded within the body . . . to produce sounds consist[ent] with an abnormal physical condition, which students must detect and identify." (*Id.* col. 1 ll. 31-37.)

The invention disclosed in the '141 Patent is an arrangement for auscultation training that "provides for the transmission of audio signals to an auscultation device for medical simulation." (*Id.* col. 1 ll. 42-45.) The claimed arrangement, according to the patent's Abstract, "allow[s] for the broadcast of simulated medical sounds to a generally, normal appearing auscultation device for the purposes of teaching or testing using simulated patient scenarios, while allowing for normal person-to-person interaction between the simulated patient and physician." (*Id.* at [57].)

In one exemplary embodiment of the invention that is described in the specification, a transmitter "sends a wireless signal to [an] auscultation device." (*Id.* col. 1 ll. 49-53.) The auscultation device, in turn, has an associated "receiver for receiving the audio signal from the transmitter" and a "speaker for relaying the sound to the end user." (*Id.*)

The principal embodiment described in the specification comprises an audio device, an FM transmitter, and a modified standard acoustic stethoscope. (*Id.* col. 3 l. 45 – col. 4 l. 5.) In this embodiment, the audio device is one capable of generating an audio signal, such as "a compact disc player, a cassette player, a digital audio player (e.g. MP3 player, IPod player from Apple Computers), a person[a]l digital assistant (PDA), a computer, or other suitable device." (*Id.* col. 3 ll. 7-15.) The audio device includes "an output, such as a headphone output jack."[1] (*Id.* col. 3 l. 45 – col. 4 l. 5.) An FM transmitter "attach[es] to the audio device via a wire that plugs into the output" of the audio device. (*Id.* col. 3 ll. 50-51.) The FM transmitter can be "similar to those used to transmit audio signal[s] from a portable compact disc player to a[n] automobile stereo," however "[a]ny suitable FM radio transmitter" could be used. (*Id.* col. 3 ll. 55-59.) The stethoscope, in turn, has an FM radio receiver and a speaker mounted to it. (*Id.* col. 3 ll. 51-54.) The FM receiver can attach to the stethoscope "in any convenient location," for example, at approximately "the location where the tubing assembly branches to each of the ear pieces" of the stethoscope. (*Id.* col. 4 ll. 27-31.) A speaker is connected to the FM receiver and mounted "in the space between the diaphragm and the body portion" of the stethoscope headpiece such that it is "concealed within the head piece assembly." (*Id.* col. 4 ll. 17-21.) In this way, "sound generated by the speaker travels through the stethoscope in the same manner as sound generated by the diaphragm would, thus providing a realistic simulation of an auscultatory finding." (*Id.* col. 4 ll.

[1] For readability, the Court's quotations from the specification may omit numerals that refer to corresponding items in the patent's figures, without noting the omission.

21-25.) Alternatively, the FM receiver—if small enough—may be mounted between the diaphragm and the body portion of the stethoscope headpiece, such that both the speaker and the FM receiver would be "concealed within the head piece assembly of the stethoscope." (*Id.* col. 4 ll. 37-43.) This exemplary embodiment is depicted in Figure 2 of the '141 Patent.

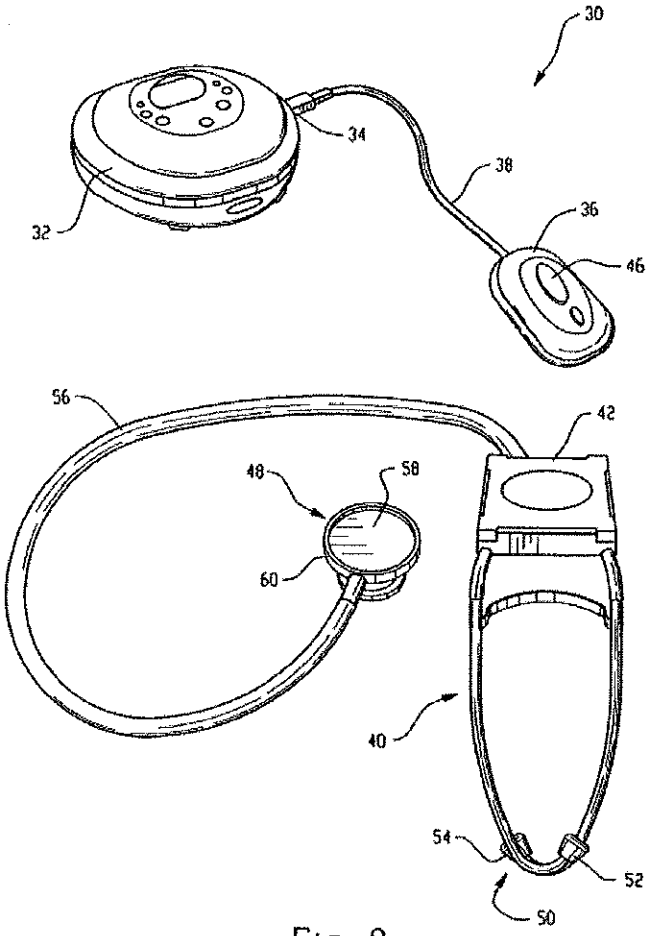

Fig. 2

(*Id.* fig.2.) In Figure 2, item 32 is the audio device, 36 is the FM transmitter, 34 is the output of the audio device to which the FM transmitter attaches via a wire 38, 40 is the stethoscope, and 42 is the FM receiver, which is mounted at the location where the tubing assembly of the stethoscope branches to each of the ear pieces 52 and 54. (*Id.* col. 3 ll. 45-54; col. 4 ll. 27-31.) Figure 3 shows the headpiece 48 of the stethoscope of this embodiment in cross-section:

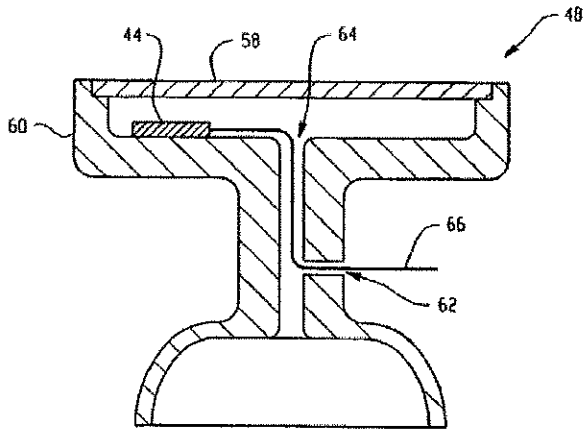

Fig. 3

(*Id.* fig.3.) In Figure 3, 58 is the diaphragm, which mounts to the body portion 60 of the stethoscope headpiece. (*Id.* col. 4 ll. 15-17.) The sound passageway 62 connects to the tubing assembly of the stethoscope to carry sound to the stethoscope earpieces. (*Id.* col. 4 ll. 13-15.) The speaker 44 is shown mounted in the space between the diaphragm and the body of the headpiece. (*Id.* col. 4 ll. 17-19.) The speaker is connected via a wire 66 to the FM receiver (not shown in Figure 3), and the wire may be mostly concealed within the hollow tubing of the stethoscope, protruding from the tubing only to connect to the FM receiver. (*Id.* col. 4 ll. 26-27, 32-34.)

When in use, the audio device is "loaded with audio files of abnormal auscultatory findings." (*Id.* col. 4 ll. 53-60.) "When the user places the headpiece assembly of the stethoscope in the proper location on the patient, an operator of the audio device may play the appropriate audio file." (*Id.* col. 5 ll. 6-8.) The signal representing the auscultatory sound is then broadcast from the FM transmitter to the FM receiver located on the stethoscope, and in turn, played through the speaker mounted within the stethoscope. "The sound transmitted through the speaker blocks out other normally heard sounds from the patient such that the user hears only the simulated sounds through the stethoscope." (*Id.* col. 5 ll. 9-11.)

The patent also describes and claims methods for using the claimed apparatuses in auscultation training. Claim 1 of the patent, for example, reads:

> 1. An arrangement for auscultation training, comprising:
>
> a signal generator capable of generating an audio signal representing at least one sound, the signal generator being controlled by a human operator, wherein the human operator plays one or more appropriate audio files according to a user's placement of a stethoscope headpiece on a patient;
>
> a transmitter associated with the device for transmitting an audio signal corresponding to the at least one sound;
>
> an auscultation device, comprising a stethoscope, remote from the transmitter, the auscultation device comprising:
>
> a receiver adapted to receive the audio signal from the transmitter; and
>
> a speaker adapted to audibly communicate the audio signal received by the receiver to the user.

(*Id.* col. 5 l. 54 – col. 6 l. 7.) Claims 1 and 12 are independent claims; claims 2-11 and 13-16 are dependent claims. (*Id.* col. 5 l. 54 – col. 6 l. 61.)

Defendant has filed an opening claim construction brief, (R. 68, Br.), Plaintiff filed a responsive brief, (R. 70, Resp.), and Defendant filed a reply, (R. 72, Reply). On May 17, 2017, the Court ruled that it would proceed to construe the claims without holding an evidentiary, or "Markman," hearing. (R. 74, Min. Entry.)

LEGAL STANDARDS

The specification of a U.S. patent concludes with particularized claims that specify "the subject matter which the inventor . . . regards as the invention." 35 U.S.C. § 112(b). These claims "define the invention to which the patentee is entitled the right to exclude." *Aventis Pharms. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc)). Claim construction is the process of adjudicating the meaning of claim language, thereby clarifying the scope of the invention. *See*

Terlep v. Brinkmann Corp., 418 F.3d 1379, 1382 (Fed. Cir. 2005). It is "simply a way of elaborating the normally terse claim language in order to understand and explain . . . the scope of the claims." *Id.* (citation omitted). The correct construction of claim terms is a question of law for the Court to decide. *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*, 824 F.3d 1344, 1350 (Fed. Cir. 2016).

Several longstanding principles guide claim construction. 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, 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). When construing claim terms, the Court first considers intrinsic evidence, which consists of the words of the claims themselves, the remainder of the specification, and the prosecution history of the patent.[2] *Id.* at 1314. "[P]rior art cited during the examination of the patent" is deemed part of the prosecution history and therefore constitutes intrinsic evidence. *Id.* at 1317; *see also Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003) ("Our cases . . . establish that prior art cited in a patent or cited in the prosecution history of the patent constitutes intrinsic evidence."). The Court may also consider extrinsic evidence, which consists of "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317 (citation omitted). Ultimately, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316 (citation omitted).

[2] The prosecution history of a patent is "the complete record of the proceedings before the PTO" relating to the issuance of the patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc).

In the hierarchy of probative evidence, the specification ranks first; it is "the single best guide to the meaning of a disputed term" and is therefore usually dispositive. *Id.* at 1315 (citation omitted). The prosecution history is the next best source of meaning. Though it often "lacks the clarity of the specification and thus is less useful," it is still highly relevant because it was generated by the applicant in attempting to explain and obtain the patent, and therefore provides evidence of how both the applicant and the U.S. Patent & Trademark Office ("PTO") understood the claimed invention. *Id.* at 1317.

If the claim language "remains genuinely ambiguous after consideration of the intrinsic evidence," the Court may also consider and rely on extrinsic evidence. *Bell & Howell Document Mgmt. Prods. Co. v. Altek Sys.*, 132 F.3d 701, 706 (Fed. Cir. 1997). However, extrinsic evidence is generally "less reliable" as a guide to meaning. *Phillips*, 415 F.3d at 1318. Among other reasons for its subordinate status is that "there is a virtually unbounded universe of potential extrinsic evidence of some marginal relevance" and "[i]n the course of litigation, each party will naturally choose the . . . extrinsic evidence most favorable to its cause, leaving the court with the considerable task of filtering the useful extrinsic evidence from the fluff." *Id.* Nevertheless, extrinsic evidence may be useful. Relevant dictionaries and treatises, for example, can be useful because they "endeavor to collect the accepted meanings of terms used in various fields of science and technology." *Id.* Expert testimony can also be useful—to provide background on the technology at issue, explain how an invention works, or establish that a term has a particular meaning in the relevant field. *Id.* But "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court." *Id.*; *see also Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1585 (Fed. Cir. 1996) (cautioning that "opinion testimony on claim construction should be treated with the utmost caution, for it is no better than opinion

testimony on the meaning of statutory terms"). A court should be cautious to avoid undue reliance on extrinsic evidence, for that "poses the risk that [extrinsic evidence] will be used to change the meaning of claims in derogation of the indisputable public records consisting of the claims, the specification and the prosecution history, thereby undermining the public notice function of patents." *Phillips*, 415 F.3d at 1319 (citation and internal quotation marks omitted). Ultimately, "[t]he sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law." *Id.* at 1324.

ANALYSIS

The parties offer competing constructions for five claim terms: (1) "auscultation device"; (2) "stethoscope"; (3) "operator"; (4) "user"; and (5) "patient." The Court addresses each in turn.

I. "Auscultation Device"

Defendant contends that the term "auscultation device" should be construed as "a device that has structure which allows a user to perform the act of listening to sounds arising within a human body or a thing (such as equipment or engines) as a method of diagnosis." (R. 68, Br. at 14.) Plaintiff contends that this term should be construed as "a training or simulation device that imitates the appearance of an auscultation device." (R. 70, Resp. at 3.) The crux of the dispute between the parties, as reflected in their competing constructions, is whether an "auscultation device" must actually be capable of allowing a user to listen to sounds arising within a human body. Under Plaintiff's construction, the term "auscultation device" would encompass non-functional devices as well, so long as they "imitate[] the appearance" of a real, functional auscultation device. Considering all of the intrinsic evidence, as well as the extrinsic evidence submitted by the parties, and giving each its due weight, the Court is persuaded that Defendant's proposed construction is correct.

A. '089 Patent and EP Application

Before turning to the merits, the Court addresses a dispute between the parties concerning the weight to be given certain allegedly "related" patents and applications. In support of its arguments relating to this term, Defendant relies on statements made by Plaintiff during prosecution of U.S. Patent No. 8,257,089 ("the '089 Patent") and European Patent Application No. 08847944.9 ("the EP Application"), arguing that they constitute admissions as to the meaning of "auscultation device." (R. 68, Br. at 9-12, 17.) Specifically, Defendant contends that in the course of distinguishing prior art during prosecution of these "related applications," Plaintiff made statements that now preclude its proposed construction. (*Id.*) Plaintiff acknowledges that the '089 Patent and EP application prosecution histories may be considered as extrinsic evidence, but argues they cannot be given the conclusive weight that Defendant demands. (R. 70, Resp. at 12.) The Court concludes that it need not give conclusive weight to the prosecution histories of either the '089 Patent or the EP Application because, as Plaintiff correctly points out, neither are "related" to the '141 Patent in the legally required sense. At best, they constitute extrinsic evidence.

As a general matter, the prosecution history of patents and applications unrelated to the patent in suit "are not relevant to claim construction." *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1312 (Fed. Cir. 2014), *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015); *see also Pfizer, Inc. v. Ranbaxy Labs. Ltd.*, 457 F.3d 1284, 1290 (Fed. Cir. 2006) (explaining that "statements made during prosecution of [a] later, unrelated [U.S.] patent cannot be used to interpret claims of" the patent in suit). To be considered "related," a patent or application must have a "formal relationship" with the patent in suit. *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1167-68 (Fed. Cir. 2004) (holding that district court erred in relying on unrelated patent's prosecution history because "[t]he [two] applications were

filed separately and therefore lack the formal relationship necessary for free license to use the contents of the [first] patent and prosecution history when construing the claims of the [second] patent"). Generally, this means that the patent in suit and the putatively "related" patent or application must be traceable to a common ancestor application through continuations, continuations-in-part, or divisionals. *See Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1342, 1349-50 (Fed. Cir. 2004) (relying on prosecution history of one patent to construe common terms in two other patents where all three were "sibling" patents, *i.e.*, "derive[d] from the same parent application"); *Abbott Labs. v. Dey, L.P.*, 287 F.3d 1097, 1104-05 (Fed. Cir. 2002) (explaining that patent applications that were "not filed as a continuation, continuation-in-part, or divisional" of each other have "no formal relationship"). Foreign applications such as the EP Application must likewise have an avowed relationship as the patent in suit, such as a claim of priority, and the same specification in order to be considered "related." *See Apple Inc.*, 757 F.3d at 1312-13 (relying on prosecution history of Japanese patent application because it "claim[ed] priority to the PCT application that issued in the United States as the [patent in suit]" and "[b]oth the Japanese application and the [U.S.] patent have the same specification"); *Starhome GmbH v. AT&T Mobility LLC*, 743 F.3d 849, 856, 858 (Fed. Cir. 2014) (relying on prosecution history of European patent application to construe claims where the European application "claim[ed] priority to the same provisional application as the [patent in suit]").

The '089 Patent is not relevant here because it has no formal relationship to the '141 Patent. The '089 patent issued from U.S. Patent Application Serial No. 12/206,131 ("the '131 Application"), which was a continuation of U.S. Patent Application Serial No. 11/935,468 ("the '468 Application"). (R. 68-1 at 58, '089 Patent, at [21], [63].) Neither the '131 Application nor the '468 Application is in the priority chain of the '141 Patent, (R. 68-1 at 2, '141 Patent, at [21],

[60]), and there is no other formal relationship apparent between the '089 and '141 Patents. The EP Application is also not relevant because it too has no formal relationship to the '141 Patent. Instead, the EP Application appears to be a sibling counterpart to the '089 Patent.[3]

Defendant recognizes that the '089 Patent and the EP Application are not formally related but argues they are nevertheless relevant based on having a "common disclosure" with the '141 Patent. (R. 72, Reply at 9-10.) Defendant cites *Microsoft Corp. v. Multi-Tech Systems, Inc.*, 357 F.3d 1340 (Fed. Cir. 2004), as supporting reliance on unrelated patents where they share a "common disclosure" with the patent in suit, (R. 72, Reply at 9-10), but the prosecution history relied upon in *Microsoft* was of a formally related "sibling" to the two patents in suit—one that "derive[d] from the same parent application" as the patents in suit and thus had an identical specification. *Microsoft Corp.*, 357 F.3d at 1342, 1349-50. By contrast, the specifications of the '089 Patent and the EP Application are not even substantially the same as the specification of the '141 Patent: some figures are the same, but several are not; and numerous paragraphs in the '141 Patent are either different or not found at all in the '089 Patent and the EP Application. While the subject matter—devices and methods for auscultation training—is generally the same across all three, that is not a sufficient basis to rely on the '089 Patent and the EP Application in construing claims of the '141 Patent. *See Abbott Labs.*, 287 F.3d at 1105; *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*, 500 F. Supp. 2d 922, 933-34 (N.D. Ill. 2007), *aff'd*, 683 F.3d 1356 (Fed. Cir. 2012) (declining to rely on statements made during prosecution of a second patent despite it being "directed toward very similar inventions" as the patent in suit). For these reasons, the

[3] The EP application claims priority to the '468 Application. (R. 68-1 at 95, Int'l Pub. No. WO 2009/061772, at [30].) As noted above, the '468 Application is the grandparent application of the '089 Patent. (R. 68-1 at 58, '089 Patent, at [63].)

Court declines to give any conclusive weight to the prosecution histories of either the '089 Patent or the EP application.

B. Intrinsic Evidence

The Court first considers the intrinsic evidence. Looking at the claim language itself, Defendant's construction is straightforward and logical. "Auscultation" in the term "auscultation device" is an adjective that describes the function of the otherwise generic term "device." The specification explains that auscultation is "the act of listening to sounds within the body as a method of diagnosis."[4] (R. 68-1 at 2, '141 Patent col. 1 ll. 13-14.) Logically, then, "auscultation device" refers to a device that can be used for auscultation, *i.e.*, to listen to sounds within the body as a method of diagnosis. *See Joao Control & Monitoring Sys., LLC v. Chrysler Grp. LLC*, No. 13-CV-13957, 2015 WL 5063260, at *4 (E.D. Mich. Aug. 26, 2015) (explaining that "'control device' uses the adjective 'control' to modify 'device'" and therefore means "a device that controls or directs the activity of another device"); *Robinson v. Advanced Decoy Research, Inc.*, 519 F. Supp. 2d 1087, 1098 (S.D. Cal. 2007) (explaining that "connecting" in "flexible connecting device" is "an adjective describing the function of the generic phrase 'device'").

By contrast, Plaintiff's construction is circular, providing an interpretation of "auscultation device" that itself relies on the term "auscultation device." A circular claim construction will not assist the jury as factfinder in understanding this claim term and determining whether the allegedly infringing product includes an "auscultation device." *See Harris Corp. v. IXYS Corp.*, 114 F.3d 1149, 1152 (Fed. Cir. 1997) (finding circularity of proposed construction a "compelling reason" to reject it); *Univ. of Fla. Research Found. v.*

[4] The Court notes that this explanation is consistent with dictionary definitions of the term. *See, e.g.*, *Auscultation*, OXFORD ENGLISH DICTIONARY (2d ed. 1989) ("The action of listening, with ear or stethoscope, to the sound of the movement of heart, lungs, or other organs, in order to judge their condition of health or disease."), http://www.oed.com/oed2/00014944 (last visited January 4, 2017).

Motorola Mobility, LLC, 3 F. Supp. 3d 1374, 1377 (S.D. Fla. 2014) (rejecting proposed construction that "in effect us[ed] the word 'wireless' to define 'wireless'" as "circular and unhelpful" because it did not actually define the claim term "wireless").

The specification's examples of auscultation devices are fully consistent with Defendant's interpretation. As noted earlier, the specification explains that "[a] stethoscope is an example of an auscultation device that is used . . . to listen to internal sounds in the human body, such as for example heart sounds, breathing (breath sounds), intestinal noises, and blood flow in arteries and veins." (R. 68-1 at 2, '141 Patent col. 1 ll. 14-18.) The specification identifies an "electronic stethoscope"—as contrasted with an acoustic stethoscope—as another example of an auscultation device. (*Id.* col. 4 ll. 3-5.) These two examples of "auscultation devices," which are the only ones given in the specification, are clearly functional devices that can be used for auscultation.

In addition, the specification implicitly equates an "auscultation device" with a functional device that can actually be used to detect sounds. In explaining alternative configurations that are considered to be within the scope of the claims, the specification explains that "the *device used to detect the sound on the person or thing being diagnosed* need not necessarily be a stethoscope, but can be any suitable *auscultation device* or sound detecting device." (*Id.* col. 2 ll. 29-43 (emphases added).) Although not an express definition, this statement equates the term "auscultation device" with a "device used to detect . . . sound on the person or thing being diagnosed"—that is, a functional device.

The principal embodiment disclosed in the specification also supports Defendant's proposed construction. As discussed above, in this embodiment, "the auscultation device is a stethoscope modified to include a [FM] receiver and speaker." (*Id.* col. 1 ll. 54-56.) More

specifically, the FM receiver is mounted to the stethoscope, and the speaker, which is connected to the FM receiver, is mounted "in the space between the diaphragm and the body portion" of the stethoscope headpiece. (*Id.* col. 3 ll. 51-54; *id.* col. 4 ll. 17-21.) The speaker plays pre-recorded auscultatory sounds received via the FM receiver, which then "travel[] through the stethoscope in the same manner as sound generated by the diaphragm would, thus providing a realistic simulation of an auscultatory finding." (*Id.* col. 4 ll. 21-25.) Importantly, the specification explains that the sound transmitted by the speaker "blocks out other *normally heard sounds from the patient* such that the user hears only the simulated sound through the stethoscope." (*Id.* col. 5 ll. 9-11 (emphasis added).) This passage makes clear that the auscultation device in this embodiment is an otherwise normal, functioning stethoscope: if not for the embedded speaker playing simulated auscultatory sounds, a user of the stethoscope would "normally hear[] sounds from the patient," (*id.*), which of course could occur only if it was a functional device.

By contrast, Plaintiff's proposed construction finds little, if any, support in the intrinsic evidence. Neither the specification nor the prosecution history disclose embodiments utilizing mock, imitation, dummy, simulation, or otherwise non-functional devices, or discuss such devices as examples of "auscultation devices." Nor do they suggest that whether something qualifies as an auscultation device depends only on "imitat[ing] the appearance of an auscultation device"—the only criterion in Plaintiff's proposed construction.

Plaintiff argues that the specification's reference to a "generally, normal appearing stethoscope" supports its construction by suggesting that the term "auscultation device" includes devices that appear to be, but do not function as, stethoscopes. (R. 70, Resp. at 4.) Plaintiff relies similarly on references to a "virtually normal appearing stethoscope" and a "relatively normal appearing stethoscope" in the '141 Patent's parent provisional application, U.S. Provisional

Patent Application Serial No. 60/718,368 ("the '368 Provisional Application"). (*Id.*) Understood in context, however, none of these references support Plaintiff's construction. Referring to the embodiment shown in Figure 2, the specification explains that "[t]he arrangement [shown in Figure 2] . . . provides for the broadcast of abnormal simulated medical sounds to *a generally, normal appearing* stethoscope for the purposes of teaching or testing." (R. 68-1 at 2, '141 Patent col. 5 ll. 19-24 (emphasis added).) The qualifier "generally, normal appearing" on which Plaintiff relies merely recognizes that the auscultation device in the principal embodiment is "a stethoscope *modified* to include a receiver and speaker." (*Id.* col. 1 ll. 54-56 (emphasis added).) The stethoscope, in other words, appears only "generally" normal because an FM receiver is visibly mounted to it at approximately the location where the tubing assembly branches to each of the ear pieces—as is evident from Figure 2. (*Id.* col. 4 ll. 27-31; *id.* fig.2.) The statements in the '368 Provisional Application that Plaintiff relies upon fail to support its construction for the same reason.[5] The '368 Provisional Application explains that the applicants "developed a system which allows for FM radio transmission of abnormal auditory findings to a *modified* stethoscope," and describes the invention as "an inexpensive method of broadcasting abnormal auditory findings to a *relatively normal* stethoscope." (R. 71, '141 Patent Pros. History at 4-5 (emphases added).) The stethoscope, the provisional application explains, is "modified by placing a small earphone speaker under the diaphragm and running the wire through the tubing

[5] The '141 Patent claims priority to and expressly incorporates by reference "the entire disclosure" of the '368 Provisional Application. (R. 68-1 at 2, '141 Patent col. 1 ll. 6-9.) In addition, the '368 Provisional Application is part of the '141 Patent's prosecution history. (R. 71, '141 Patent Pros. History at 2-13.) Under these circumstances, the Court finds it appropriate to treat the '368 Provisional Application as intrinsic evidence. *See dunnhumby USA, LLC v. emnos USA Corp.*, No. 13-CV-0399, 2015 WL 1542365, at *9 (N.D. Ill. Apr. 1, 2015) ("Although the Federal Circuit has not directly addressed the issue, the case law implies that a provisional application becomes intrinsic evidence where the prosecution history incorporates it by reference or where the examiner considered it during examination."); *Vederi, LLC v. Google, Inc.*, 744 F.3d 1376, 1383 (Fed. Cir. 2014) (relying on provisional application, which was "incorporated by reference" into the patent's specification, in construing claim term).

to a small FM radio receiver attached below the spring of the stethoscope." (*Id.* at 6; *see also id.* at 4 ("[T]he stethoscope is easily modified to fit the FM receiver."); *id.* at 5 (same).) The '368 Provisional Application also includes a photo of a prototype that highly resembles Figure 2 of the issued '141 Patent. (*Id.* at 8.) It is clear from these explanations and the photo that "virtually normal appearing," "relatively normal appearing," and similar qualifiers used in the '368 Provisional Application merely recognize that an FM receiver is visibly mounted to the stethoscope. (*Id.* at 8.) Beyond not supporting Plaintiff's construction, the '368 Provisional Application affirmatively supports Defendant's construction.[6] Like the specification, the provisional application explains that the sounds played through the embedded speaker "block[] out other normally heard sounds from the patient," (*id.* at 5), which could occur only if the stethoscope in that embodiment was a functional device.

Plaintiff also argues that the prosecution history supports its construction because it demonstrates that the PTO understood "auscultation device" to encompass non-functional devices. (R. 70, Resp. at 4-6.) Plaintiff cites an Office Action dated February 5, 2009, in which the PTO rejected the draft claims of the '141 Patent as anticipated by U.S. Patent No. 6,220,866 issued to Amend et al. ("Amend"). (*Id.*) Plaintiff contends that since Amend discloses only a simulation stethoscope that cannot be used for auscultation, the PTO Examiner must—in order to have found that Amend anticipates—have understood "auscultation device" to encompass non-functional devices. (*Id.*) This argument is not entirely without merit, however the Court is not persuaded that it overcomes the evidence already discussed that supports Defendant's proposed construction.

[6] A patent's provisional application "can contribute to understanding the claims." *MPHJ Tech. Invs., LLC v. Ricoh Ams. Corp.*, 847 F.3d 1363, 1369 (Fed. Cir. 2017).

Generally speaking, Amend discloses an auscultation training system that utilizes a grid of position sensors located beneath the shell of a mannequin.[7] (R. 68-1 at 19, Amend col. 3 ll. 59-62.) A user "outfitted with stethoscope **220**" positions the stethoscope's headpiece at various locations on the mannequin. (*Id.* col. 4 ll. 9-11.) The position sensors are connected to a computer, which detects the position of the stethoscope headpiece on the mannequin and wirelessly transmits an appropriate sound corresponding to that position, *i.e.*, "the sound[] the user would hear if the user applied a conventional stethoscope bell in a similar anatomical location on an actual live patient." (*Id.* col. 4 ll. 9-29.) To receive the wirelessly transmitted sound, "a radio frequency receiver **212** [is] disposed within [the] stethoscope," and a pair of speakers that are each "disposed within one of the sound conducting tubes **220***a* of [the] stethoscope" play the sound for the user to hear. (*Id.* col. 3 l. 65 – col. 4 l. 6.) Although Amend repeatedly uses the word "stethoscope" to characterize the various embodiments of its invention, it also implicitly contrasts this "stethoscope" with a "conventional stethoscope," *i.e.*, one that is used to diagnose "actual live patient[s]." (*See, e.g.*, *id.* col. 3 ll. 9-18; *id.* col. 4 ll. 23-29.) In the February 2009 Office Action, the Examiner concluded that Amend disclosed an "auscultation device" in the form of the "stethoscope" discussed in Amend's various embodiments. (R. 71, '141 Patent Pros. History at 115.) The Examiner also characterized the invention of Amend as "enabling a user to hear sounds with a *simulated stethoscope*." (*Id.* at 118 (emphasis added).) Given the Examiner's characterization of Amend and his conclusion that Amend anticipated the original claims of the '141 Patent, it is plausible that he interpreted "auscultation device" consistent with Plaintiff's proposed construction, *i.e.*, as encompassing simulation stethoscopes

[7] Amend discloses a slight variation on this embodiment as well, but the differences in that embodiment do not affect the Court's analysis.

and other non-functional devices that cannot actually be used for auscultation. However, the Court finds this intrinsic evidence[8] unpersuasive for several reasons.

First, the Examiner did not expressly take a position on how "auscultation device" should be interpreted. It is true that "[s]tatements about a claim term made by an examiner during prosecution of an application may be evidence of how one of skill in the art understood the term at the time the application was filed." *Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1347 (Fed. Cir. 2005). However, the Examiner did not actually make any statements about, or interpreting, the term "auscultation device" in the February 2009 Office Action. Instead, the interpretation Plaintiff attributes to the Examiner is an inference drawn from the Examiner's conclusion that Amend anticipated the original claims of the '141 Patent. As such, the Court is not inclined to assign it significant weight. *See Rambus, Inc. v. Infineon Techs. AG*, No. 300-CV-524, 2001 WL 34138091, at *13 (E.D. Va. Mar. 15, 2001) (explaining that "guessing as to what a Patent Examiner may have been thinking" when rejecting pending claims on the basis of prior art "is not generally helpful to construing . . . claim terms because it requires both the court and the public to po[re] over oftentimes complex and voluminous patent histories" and "speculate as to the motivation behind an office action"); *Antonious v. Spalding & Evenflo Cos.*, No. 98-1478, 1999 WL 777450, at *5 (Fed. Cir. Aug. 31, 1999) (rejecting argument that "examiner's rejection pursuant to 35 U.S.C. § 102 based on [prior art] shows that the examiner must have agreed with [plaintiff's] proffered interpretation of the disputed claim language") (unpublished).

Second, it is not clear that the Examiner read Amend as *only* disclosing a "simulated stethoscope," as would be logically necessary to sustain this inference. If the Examiner instead

[8] Because Amend was cited by the Examiner during prosecution of the '141 Patent, it is considered intrinsic evidence. *See Phillips*, 415 F.3d at 1317; *Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003).

viewed Amend as disclosing the use of both simulated stethoscopes and real, functional stethoscopes as part of its auscultation training system, the Examiner could have rejected the draft claims of the '141 Patent as anticipated by Amend without adopting the broader interpretation that Plaintiff attributes to him. The February 2009 Office Action does not make clear which way the Examiner interpreted Amend, weakening the inference that Plaintiff draws from the Examiner's anticipation rejection.

Third, even if the Examiner implicitly interpreted "auscultation device" as including simulation or other non-functional devices, that would be of limited probative value because the PTO's standard for construing claim terms during prosecution is different from what district courts use in litigation. During prosecution, terms are given their "broadest reasonable interpretation" ("BRI") consistent with the specification.[9] *In re Montgomery*, 677 F.3d 1375, 1379 (Fed. Cir. 2012); MANUAL OF PATENT EXAMINING PROCEDURE § 2111 (9th ed. 2015). As the label implies, BRI is a broader interpretive standard than the "ordinary and customary" standard that governs claim construction during litigation. *Rambus, Inc.*, 2001 WL 34138091, at *14 ("Patent examiners construe claims under a broader standard than that used by a court in undertaking claim construction."); *see also Facebook, Inc. v. Pragmatus AV, LLC*, 582 F. App'x 864, 869 (Fed. Cir. 2014) ("The broadest reasonable interpretation of a claim term may be the same as or broader than the construction of a term under the *Phillips* standard.") (unpublished). Thus, were a district court to construe claim language more narrowly than the examiner did during prosecution, the difference "could well be explained by the differing claim construction standards that apply at the PTO." *TDM Am., LLC v. United States*, 100 Fed. Cl. 485, 492 (Fed. Cl. 2011); *see also Convolve, Inc. v. Compaq Comput. Corp.*, 812 F.3d 1313, 1325 (Fed. Cir.

[9] The Court may presume that the Examiner, as required, accorded claim terms their BRI. *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1347 (Fed. Cir. 2001).

2016) ("[T]he examiner's finding under the broadest reasonable interpretation that the claims are not limited to 'seek acoustic noise' cannot be dispositive. To the extent that the district court adopted this reasoning wholesale without accounting for the differences between the broadest reasonable interpretation standard and *Phillips*, the court erred."). In finding that Amend disclosed an "auscultation device," the Examiner may well have concluded that the broadest reasonable interpretation of this term includes simulation or dummy devices that are not functional. That conclusion would not necessarily conflict with a finding by this Court that the ordinary and customary meaning of that term is more narrow. *See Geospan Corp. v. Pictometry Int'l Corp.*, No. Civ. 08-816 ADM/JSM, 2012 WL 5942005, at *4-5 (D. Minn. Nov. 28, 2012) (rejecting argument that examiner's construction "irreconcilably conflicts" with court's construction, explaining that "the arguably different constructions can be explained by the broader claim construction standard" used by the PTO).

Plaintiff's principal remaining argument is that in the particular field of the '141 Patent—which Plaintiff defines as auscultation training and simulation—terms such as "auscultation device" and "stethoscope" are used loosely to encompass "simulations thereof that might not be able to actually sense sounds in real-time," and that one of ordinary skill in the art would understand that "auscultation device" is used in this manner in the '141 Patent. (R. 70, Resp. at 5; *see also id.* at 6, 14.) As evidence of this usage, Plaintiff cites U.S. Patent No. 3,947,974, entitled "Cardiological Manikin Auscultation and Blood Pressure Systems" and issued to Gordon et al. ("Gordon"). (*Id.* at 6; *see also* R. 71 at 270, Gordon, at [54].) Plaintiff also cites extrinsic evidence consisting of U.S. patents issued to other inventors and a sales catalog from a third

party seller of auscultation training systems.[10] (R. 70, Resp. at 13-14.) The Court does not find this argument or Plaintiff's supporting evidence persuasive or sufficient to overcome the intrinsic evidence discussed above that favors Defendant's construction.

Turning first to intrinsic evidence,[11] Plaintiff argues that Gordon's repeated use of the term "stethoscope" to refer to a training device that cannot actually be used for auscultation demonstrates that, in this field, it is common to not distinguish between real and simulation auscultation devices. (*Id.* at 6.) Plaintiff's reliance on Gordon is unpersuasive. First, Gordon is so temporally remote from the '141 Patent that it has very limited bearing here. Claim language should be given the meaning it had "at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips*, 415 F.3d at 1313; *see also PC Connector Sols. LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1363 (Fed. Cir. 2005) (explaining that a claim term must be "interpreted as of its effective filing date"). Gordon issued in 1976, three decades before the filing of the non-provisional application that led to the '141 Patent.[12] (R. 71 at 270, Gordon, at [45].) Given the significant difference in time, the Court does not view Gordon as particularly useful in construing terms of the '141 Patent or illuminating usage of terminology at the relevant time. *See Phillips*, 415 F.3d 1313. Second, even if Gordon were to be given weight, Gordon's specification explains that it uses the term "stethoscope" consistent with the commonly-understood meaning of the word, to refer to a "stethoscope . . . of the standard clinical type used

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[10] In particular, Plaintiff cites U.S. Patent No. 3,665,087, entitled "Manikin Audio System" and issued to Poylo, (R. 70-5), U.S. Patent No. 5,397,237, entitled "Apparatus for Stimulating Respiratory Conditions Especially Pathological Respiratory Conditions" and issued to Dhont et al., (R. 70-6), and a 2000-2001 "Health Care Educational Materials" catalog distributed by the firm Nasco, (R. 70-7). (*See* R. 70, Resp. at 13-14.)

[11] Gordon was cited during prosecution of the '141 Patent and served as one basis for the Examiner's obviousness rejection in the February 2009 Office Action. (R. 71, '141 Patent Pros. History at 117, 120.) It is therefore deemed intrinsic evidence. *See Phillips*, 415 F.3d at 1317; *Kumar*, 351 F.3d at 1368.

[12] The '224 Application was filed in 2006. (R. 68-1 at 2, '141 Patent, at [22].)

by cardiologists." (R. 71 at 276, Gordon col. 4 ll. 53-59.) Gordon thus expressly defines its usage of "stethoscope," contrary to Plaintiff's contention that such terms are used loosely in this field to encompass simulation devices.

As for the extrinsic evidence cited by Plaintiff, there is no need to resort to this evidence because the Court does not find the claim language genuinely ambiguous in light of the intrinsic evidence. *Bell & Howell*, 132 F.3d at 706; *see also Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1367 (Fed. Cir. 2003) ("When an analysis of *intrinsic* evidence resolves any ambiguity in a disputed claim term, it is improper to rely on extrinsic evidence to contradict the meaning so ascertained."). Even evaluating the available extrinsic evidence, however, it is mixed on this issue. While Plaintiff submits extrinsic evidence purporting to show usage consistent with its own, broader construction, Plaintiff's own patents reflect a different usage. In the '089 Patent, which is also owned by Plaintiff and was applied for at approximately the same time as the '141 Patent,[13] Plaintiff explained that some embodiments of the claimed invention "include a mock auscultation device adapted to present selected sounds to a trainee. In other embodiments, a real auscultation device is fitted or retrofitted with a means for presenting selected sounds to a trainee." (R. 68-1 at 68, '089 Patent col. 2 ll. 47-50.) Contrary to Plaintiff's argument, it is evident that individuals in this field use appropriate adjectives—such as "mock"—when referring to simulation or non-functional auscultation devices. The Court notes as well that the '089 Patent expressly defines the term "auscultation device" to include both real and mock devices, (*id.* col. 2 ll. 50-53 ("Real and mock auscultation devices . . . are collectively referred to herein as 'auscultation devices.'")), suggesting that the term is not ordinarily understood in this

[13] The '131 Application—the non-provisional application leading to the '089 Patent—was filed in September 2008, two years after the '224 Application was filed. (R. 68-1 at 58, '089 Patent, at [21], [22].)

field to encompass simulation devices and that an express definition is needed when that is the intended usage. By contrast, the '141 Patent contains no similar express definition.

In sum, the Court finds the intrinsic evidence—the specification in particular—to strongly support Defendant's proposed construction of the term "auscultation device." The extrinsic evidence, while not necessary to consider given the state of the intrinsic evidence, offers at best mixed support for Plaintiff's construction. The Court therefore adopts Defendant's proposed construction.

II. "Stethoscope"

Defendant contends that the term "stethoscope" should be construed as "an 'auscultation device' as defined [by Defendant's construction], having a head piece, an ear piece assembly, and hollow tubing, providing for the transmission of sound from the head piece, via the hollow tubes, to the listener's ears." (R. 68, Br. at 18.) Plaintiff contends that this term should be construed as "a training or simulation device that imitates the appearance of a stethoscope." (R. 70, Resp. at 15.) Similar to the parties' dispute over "auscultation device," their dispute here is over whether a "stethoscope" must actually be capable of allowing a user to listen to sounds arising within a human body or whether, as Plaintiff contends, the term encompasses non-functional training or simulation devices as well, so long as they "imitate[] the appearance" of a real, functional stethoscope. (*See id.* at 15-16.)

Considering all of the intrinsic evidence, as well as the extrinsic evidence submitted by the parties, and giving each its due weight, the Court is persuaded that Defendant's proposed construction is largely correct. The Court reaches this conclusion for essentially the same reasons applicable to the proper construction of "auscultation device," as the parties rely on largely the same evidence and arguments for both terms. (*See* R. 68, Br. at 18-20; R. 70, Resp. at 15-16.) However, one additional aspect of the intrinsic evidence supports Defendant's construction.

In addition to claims reciting a "stethoscope," the '224 Application originally included an independent claim 12 directed to a "training stethoscope."[14] (*See* R. 71, '141 Patent Pros. History at 26-27.) In the February 2009 Office Action, the Examiner rejected original claim 12 and all its dependent claims on the basis of prior art. (*Id.* at 115-18.) In its responsive amendment, Plaintiff canceled those claims without explanation. (*Id.* at 134-36.) Plaintiff also amended claim 1 to overcome the Examiner's rejection, adding limitations with the now-disputed term "stethoscope." (*Id.* at 133.) In the absence of contrary evidence, the Court must presume that "training stethoscope" and "stethoscope" have different meanings. *See Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1369 (Fed. Cir. 2007) (explaining that "different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope" (citation omitted)). That presumption applies naturally here: "training stethoscope" might connote a device that is non-functional but possesses some attributes of a functional device, while the unadorned term "stethoscope" does not. It is illuminating that Plaintiff originally used both terms in the course of prosecuting different claims, subsequently abandoned the claims to a "training stethoscope," and simultaneously added the term "stethoscope" to claim 1 overcome the Examiner's rejection. "Claims as allowed must be read and interpreted with reference to rejected ones . . . and claims that have been narrowed in order to . . . distinguish[]

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[14] Claim 12 of the originally submitted application recited:

> A training stethoscope, comprising:
>
> > a head piece connected to an ear piece by tubing;
> >
> > a receiver for receiving an audio signal from a wireless transmitter;
> >
> > a speaker in circuit communication with the receiver for communicating the audio signal, the speaker positioned proximate the head assembly such that the audio signal from the speaker is transmitted from the head piece to the ear piece via the tubing assembly.

(R. 71, '141 Patent Pros. History at 27.)

the prior art cannot be sustained to cover that which was . . . eliminated from the patent." *Graham v. John Deere Co.*, 383 U.S. 1, 33 (1966). Plaintiff's proposed construction of "stethoscope" would essentially be coextensive with the meaning of "training stethoscope," a term that Plaintiff abandoned during prosecution. This severely undermines Plaintiff's proposed construction. *See id.*; *Schriber-Schroth Co. v. Cleveland Tr. Co.*, 311 U.S. 211, 218 (1940) ("Where the patentee . . . has, by amendment, cancelled or surrendered claims, those which are allowed are to be read in the light of those abandoned and an abandoned claim cannot be revived and restored to the patent by reading it by construction into the claims which are allowed.").

While the Court is persuaded that Defendant's construction is largely correct, it must be modified in part to account for the intrinsic evidence. The specification explains that in the principal embodiment—depicted in Figure 2—"[t]he stethoscope **40** is illustrated as an acoustic stethoscope but *may be any suitable stethoscope, including an electronic stethoscope*." (R. 68-1 at 2, '141 Patent col. 4 ll. 3-5 (emphasis added).) Defendant's proposed construction of "stethoscope" would be limited to devices that have "hollow tubing" and which "provid[e] for the transmission of sound from the head piece, via the hollow tubes, to the listener's ears." (R. 68, Br. at 18.) While acoustic stethoscopes may function in this manner, Defendant's proposed construction would improperly exclude electronic stethoscopes from the scope of the claims even though the specification expressly contemplates them as alternatives to acoustic stethoscopes. *See GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1311 (Fed. Cir. 2014) ("We normally do not construe claims in a manner that would exclude the preferred embodiment, especially where it is the only disclosed embodiment. In particular, where claims can reasonably be interpreted to include a specific embodiment, it is incorrect to construe the claims to exclude that embodiment, absent probative evidence on the contrary." (internal citations, alteration, and

quotation marks omitted)). Consequently, Defendant's proposed construction must be modified so that the term "stethoscope" is not limited to acoustic stethoscopes. The Court therefore construes "stethoscope" as "an 'auscultation device' as defined by Defendant's construction, having a head piece, an ear piece assembly, and tubing, providing for the transmission of sound to the listener's ears."

III. "Operator," "User," and "Patient"

Because the parties' disputes as to each of the terms "operator," "user," and "patient" are the same, the Court addresses these terms together. The crux of the dispute between the parties is relatively straightforward. Defendant contends that, as used in the claims, these terms refer to three distinct persons, while Plaintiff contends that they refer to roles—such that one person may satisfy more than one "role" in applying the claim language. While the evidence bearing on this question is thin, the Court is persuaded that Plaintiff's interpretation is correct; the terms "operator," "user," and "patient" denote roles and do not require three distinct individuals.

These terms principally appear in the independent claims[15]—claims 1 and 12—which read, in relevant part, as follows:

> 1. An arrangement for auscultation training, comprising:
>
> a signal generator capable of generating an audio signal representing at least one sound, the signal generator being controlled by a human *operator*, wherein the human *operator* plays one or more appropriate audio files according to a *user*'s placement of a stethoscope headpiece on a *patient*;
>
> . . .
>
> an auscultation device, comprising a stethoscope, remote from the transmitter, the auscultation device comprising:
>
> . . .

[15] Only the term "user" appears in any other claims—namely, dependent claim 16, which refers to a step of "communicating the at least one sound represented by the audio signal to a *user* of the auscultation device." (R. 68-1 at 2, '141 Patent col. 6 ll. 58-60 (emphasis added).)

a speaker adapted to audibly communicate the audio signal received by the receiver to the *user*.

12. A method for simulating auditory findings in an auscultation device, comprising:

an *operator* observing the placement of an auscultation device by a *user* relative to a *patient*;

the *operator* selecting an auscultation sound appropriate to the position of the auscultation device relative to the *patient*;

. . .

communicating at least one sound represented by the audio signal to the *user* of the auscultation device.

(R. 68-1 at 2, '141 Patent col. 5 l. 54 – col. 6 l. 7; *id.* col. 6 ll. 39-51 (emphases added).) The claims themselves do not illuminate whether these terms refer to distinct persons or simply denote roles that may be satisfied by fewer than three people. Turning to the specification, there is nothing in it that requires the operator, user, and patient to be distinct persons. To the contrary, the specification expressly contemplates that the operator and patient may be the same person. The specification explains that, as shown in Figure 4, "[t]he audio device **70** may be realized as a compact digital audio player adapted to be concealed in the palm of a hand," including "an integrated FM transmitter chip **72** and one or more buttons **74** for operating the device." (*Id.* col. 5 ll. 33-39.) In this embodiment, by virtue of being small and easily concealed, "the audio device **70** may be operated by the *patient being examined*." (*Id.* col. 5 ll. 39-40 (emphasis added); *see also id.* col. 5 ll. 40-43 ("This allows the patient to activate an appropriate audio file stored on the audio device **70** for transmission[.]").) In other words, the "operator" and "patient" can be the same person—the audio device would be "operated by the patient being examined" rather than a separate person—making clear that these terms are used to denote roles rather than distinct persons. A claim construction that excludes a preferred embodiment is "rarely, if ever correct," because it "would generally seem at odds with the intention of the patentee as expressed in the

specification." *PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC*, 815 F.3d 747, 755 (Fed. Cir. 2016) (citation omitted). To adopt Defendant's construction would require improperly ignoring or reading out—from all the claims—the embodiment in which a patient also serves as the operator of the audio device. Defendant argues in response that the disclosure of a patient also serving as the operator relates to "different embodiments or arrangements which have not been claimed." (R. 68, Br. at 21.) Defendant does not elaborate on this unclaimed-embodiment argument, and the Court is not persuaded. There is no evidence that this embodiment was intended to be outside the scope of the claims.

Defendant also argues that the prosecution history supports its construction. Specifically, Defendant points out that the limitations reciting the terms "operator," "user," and "patient" were added to overcome prior art and argues that they must consequently be limited in scope to refer to three distinct persons. (R. 68, Br. at 21-23.) Defendant's argument is not persuasive because the amendment adding these limitations was for reasons unrelated to the parties' present dispute. As already noted, in the February 2009 Office Action the Examiner rejected independent claims 1 and 12[16] as anticipated by Amend. (R. 71, '141 Patent Pros. History at 115.) As Plaintiff recognized, Amend discloses automatically playing auscultation sounds according to the electronically determined position of a stethoscope headpiece on a mannequin. (*Id.* at 137 ("In fact, both [Amend and Gordon] disclose automatically playing a preselected sound according to the electronically determined position of a stethoscope headpiece over a mannequin.").) In other words, in the system of Amend, appropriate auscultatory sounds are selected and played automatically by a computer—without human involvement—in response to sensors detecting the position of a headpiece. (*See* R. 68-1 at 19, Amend col. 3 ll. 59-62; *id.* col. 4 ll. 9-29.) In

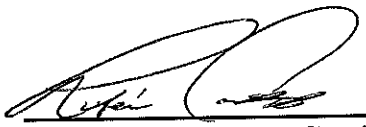
[16] This numbering refers to the claims as issued.

response to the Examiner's rejection, Plaintiff amended the claims to introduce human control over which auscultatory sounds are selected and played to a user, and distinguished Amend on this basis. (R. 71, '141 Patent Pros. History at 137 ("Neither Amend et al. nor Gordon et al. teach or suggest such control by a human operator.").) While the amendment makes clear that the recited "operator" must be a human, the Examiner's rejection and Plaintiff's responsive amendment shed no light on whether the recited "operator," "user," and "patient" must each be distinct individuals. Thus, the February 2009 Office Action and Plaintiff's responsive amendment are not probative of this issue.

While the Court agrees with Plaintiff that "operator," "user," and "patient" define roles rather than distinct persons, Plaintiff does not offer any express construction of these terms for the Court to adopt. However, having resolved the fundamental dispute between the parties, the Court finds it unnecessary to adopt any express construction for these otherwise accessible and non-specialized terms. *See GPNE Corp. v. Apple Inc.*, 830 F.3d 1365, 1372 (Fed. Cir. 2016) ("Where a district court has resolved the questions about claim scope that were raised by the parties, it is under no obligation to address other potential ambiguities that have no bearing on the operative scope of the claim."); *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015) (concluding that the "district court did not err in declining to construe" claim language because it nevertheless resolved "the heart of the parties' disagreement" and the phrase at issue was "comprised of commonly used terms; each [of which] is used in common parlance and has no special meaning in the art"). The Court holds that the terms "operator," "user," and "patient" in the claims of the '141 Patent denote roles and do not require three distinct individuals.

CONCLUSION

For the foregoing reasons, the Court construes the claim language disputed by the parties as discussed above. The parties shall appear for a status hearing on January 31, 2018, at 9:45 a.m. The parties are DIRECTED to reevaluate their settlement positions in light of this opinion and to exhaust all settlement possibilities.

ENTERED: 

Chief Judge Rubén Castillo
United States District Court

Dated: January 11, 2018