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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN F. HOLZRICHTER

Appeal 2018-004809
Application 13/948,937
Technology Center 2600

Before JOHN A. JEFFERY, DENISE M. POTHIER, and
JUSTIN BUSCH, *Administrative Patent Judges*.

BUSCH, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1 and 9, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b). Claims 2–8 and 10–17 were cancelled.

We affirm.

¹ Appellant identifies the real party in interest as “Lawrence Livermore National Security, LLC and the United States of America as represented by the United States Department of Energy (DOE).” App. Br. 2.

CLAIMED SUBJECT MATTER

Appellant's invention "relates to . . . obscuring acoustic speech."
Spec. ¶ 3. Appellant's Figure 1 is illustrative and is reproduced below:

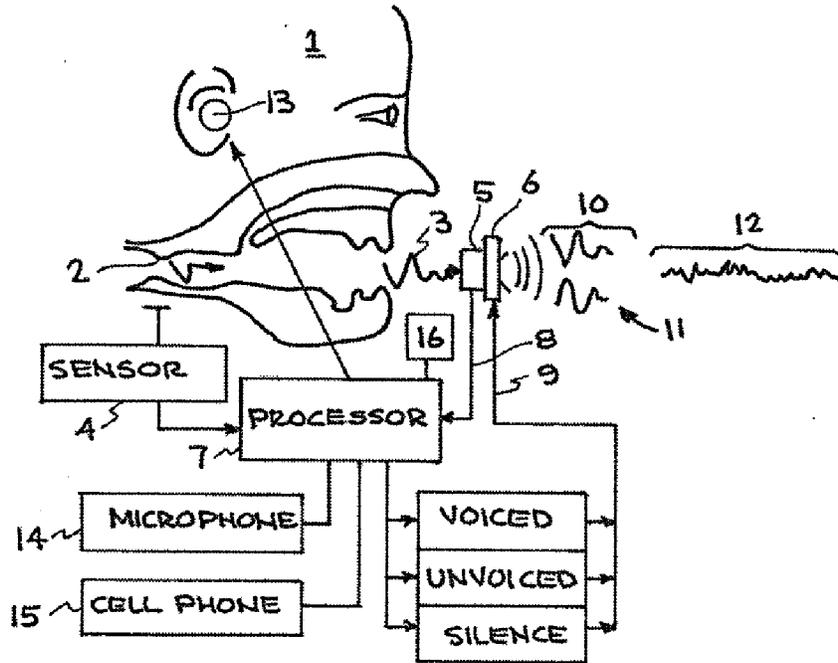


FIG. 1

Figure 1 illustrates "one embodiment of a voice obscuration, speech masking and canceling system." *Id.* ¶ 20.

According to the Specification, "[p]rocessor (7) records the present time spoken sounds from speaker (1)" into microphone (5). *Id.* ¶ 26. An "obscuring acoustic signal (11) is generated by the processor (7) and is conveyed to the loud speaker (6) [located on the far side of the microphone (5).]" *Id.* ¶ 27. "A resultant signal (12), comprised of [the speaker (1)'s] acoustic speech (10) and obscuring signal (11), is . . . heard by a listener Said listener is hence made unable to understand the [two] combined acoustic sounds." *Id.*

Claim 1 is representative and reproduced below:

1. A cellphone apparatus with voice sound cancelling or obscuring that is operated by a user wherein the user has a head, mouth and has neck or head skin tissue wherein said neck or head skin tissue experiences motions, wherein the user produces a speech signal that exits from the user's mouth, and wherein there is local noise from the environment of the user and wherein there are persons nearby the user, comprising:

a cell phone operably connected to the head of the user,

a first microphone, said first microphone located in front of the user's mouth and operably connected to said cell phone wherein said first microphone has a far side and said far side is located away from the user's mouth, wherein said first microphone receives the speech signal from the user's mouth and wherein said speech signal of the user includes vocal output intensity and voice sounds,

a second microphone which samples the local noise from the environment of the user, said second microphone operably connected to said cell phone and the head of the user,

a loudspeaker located on said far side of said first microphone, said loudspeaker that is located on said far side of said first microphone is located away from the user's mouth and is operably connected to said cell phone and the head of the user,

a system for measuring said speech signal of the user and broadcasting an obscuring acoustic signal diminishing said vocal acoustic output intensity or distorting said voice sounds or both diminishing said vocal acoustic output intensity and distorting said voice sounds making them unintelligible to persons nearby wherein said system is positioned proximate the neck or head skin tissue of the user, said system including

a non-acoustic sensor located proximate or contacting the neck or head skin tissue of the user for sensing the neck or head skin tissue motions that are related to said vocal acoustic output intensity and said voice sounds,

a processor connected to said first microphone, connected to said non-acoustic sensor, and connected to said second

microphone, said processor using said vocal acoustic output intensity and said voice sounds from said first microphone, the neck or head skin tissue motions from said non-acoustic sensor, and the local noise from the environment of the user from said second microphone for producing said obscuring acoustic signal, and

a device connected to said loudspeaker that uses said loudspeaker for broadcasting said obscuring acoustic signal diminishing said vocal acoustic output intensity or distorting said voice sounds or both diminishing said vocal acoustic output intensity and distorting said voice sounds making them unintelligible to persons nearby.

REJECTION

Claims 1 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Specht (US 2004/0125922 A1; July 1, 2004) and Burnett (US 2002/0184012 A1; Dec. 5, 2002). Final Act. 2–8.

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellant’s arguments that the Examiner erred. In reaching this decision, we have considered all evidence presented and all arguments Appellant made. Arguments Appellant could have made, but chose not to make in the Briefs, are deemed waived. *See* 37 C.F.R. § 41.37(c).

Independent claim 1 recites, in part, a “first microphone has a far side” and “a loudspeaker located on said far side of said first microphone.” Independent claim 9 recites similar language. Appellant argues these limitations should be construed to mean that the loudspeaker *is in contact with* the far side of the first microphone. App. Br. 8–9, 16; Reply Br. 3–5.

To resolve the question of patentability under § 103(a), we begin by construing claim 1. During examination, claims are given their broadest reasonable interpretation consistent with the Specification. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). “Construing claims broadly during prosecution is not unfair to the applicant . . . because the applicant has the opportunity to amend the claims to obtain more precise claim coverage.” *Id.* Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations that have no express basis in the claim. *In re Prater*, 415 F.2d 1393, 1404–05 (Fed. Cir. 1969); *In re Van Geuns*, 988 F.2d 1181 (Fed. Cir. 1993).

The meaning of a claim term may be determined by reviewing a variety of sources including the claims themselves, dictionaries and treatises, and the written description, the drawings, and the prosecution history. *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003). Paragraph 9 of the Specification discusses that “FIG. 1 illustrates one embodiment of a system constructed in accordance with the present invention.” Spec. ¶ 9; Fig. 1; *see also* Spec. ¶ 20 (“Referring now to the single figure of drawings[,], one embodiment of a voice obscuration, speech masking and canceling system is illustrated.”). We find the sole

instance of the phrase “located on” in the description of this one embodiment. *Id.* ¶ 27.

Yet, the Specification states the “[s]pecific embodiments are shown by way of example. It is to be understood that the invention is not limited to the particular forms disclosed. The invention covers all modifications, equivalents, and alternatives falling within the spirit and scope of the invention as defined by the claims.” *Id.* ¶ 8; *see id.* ¶¶ 5, 10. As such, one skilled in the art would not have interpreted the recited “loudspeaker located on said far side of said first microphone” to be limited to the example shown in Figure 1. Moreover, the Federal Circuit explained that the courts have “rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005).

Appellant then points to a dictionary definition of the word “on.” App. Br. 8, 17; Reply Br. 4. According to Appellant, a loudspeaker *located on* a microphone’s far side is a loudspeaker *in contact with* the microphone’s far side because the Merriam-Webster Dictionary defines the word “on” as being a function word to indicate a position *in contact with* and supported by a surface. Reply Br. 4; *accord* MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 811 (*prep. def. 1a*) (10th ed. 1993) (defining the word “on” as being “used as a function word to indicate position in contact with and supported by the top surface of <the book is lying ~ the table>.”). But contrary to Appellant’s contention, the Merriam-Webster Dictionary also defines the word “on” as being “used as a function word to indicate position

in close proximity with <a village ~ the sea>.” *Id.* (*prep. def.* 1c) (emphasis added); *see* App. Br. 8, 17 (citing the Merriam-Webster Dictionary definition defining the word “on” as being a function word to indicate position *in close proximity with*); Ans. 11 (noting the Merriam-Webster Dictionary definition that defines the word “on” as being a function word to indicate position *in close proximity with*).

Appellant’s arguments do not address, let alone persuasively rebut, the Examiner’s construction of “on the far side of.” Ans. 11–12. *See In re Angstadt*, 537 F.2d 498, 501 (CCPA 1976) (noting “we *must* give effect to *all* claim limitations.”) (emphasis in original); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970) (noting “[a]ll words in a claim must be considered in judging the patentability of the claim against the prior art.”). According to the Examiner, the phrase

“on the far side” does not necessarily and expressly require th[e] loudspeaker to be integrally formed on the opposite surface of the first microphone. . . . Having a “side” is not necessarily the same thing as having a [“surface,”] but can more generally simply indicate a relative location in position between two or three things.

Ans. 12. Appellant has not persuasively shown this Examiner’s reasoning regarding the interpretation of the phrase “on the far side of” to be in error.

Thus, in light of the disclosures in the Specification, the dictionary definitions of “on,” and the Examiner’s interpretation of the phrase “on the far side of” discussed above, we agree with the Examiner that the claims are not limited to a loudspeaker *in contact with* a first microphone.

Turning to the rejection, the Examiner finds Specht’s apparatus comprises a cell phone (102) operably connected to a user’s head and a first

microphone (106) having a far side located away from the user's mouth. Final Act. 2–3 (citing Specht ¶¶ 9, 24–26; Figs. 2A–2B, 3). The Examiner also finds Specht's loudspeaker (112) is located on the far side of a microphone (106). *Id.* at 3–4. Appellant argues Specht fails to disclose the features recited in claims 1 and 9 because Specht's loudspeaker (112) is suspended away from the microphone (106). App. Br. 10–11, 15; Reply Br. 3, 6–7. Appellant's argument, however, is not commensurate with the scope of claims 1 and 9 under our construction, because claims 1 and 9 do not recite a loudspeaker *in contact with* a microphone. Accordingly, Appellant's argument does not persuade us of error in the Examiner's rejection. *See In re Self*, 671 F.2d 1344, 1348 (CCPA 1982) (limitations not appearing in the claims cannot be relied upon for patentability). Appellant's argument that Burnett is silent regarding a loudspeaker located on the far side of a first microphone, App. Br. 11–12, is not germane to the Examiner's findings in this regard because the Examiner does not rely on Burnett to teach this limitation.

The Examiner acknowledges Specht does not teach a second microphone which samples local noise from the user's environment, the second microphone operably connected to the cell phone and user's head, as claim 1 recites. Final Act. 6. The Examiner cites Burnett for teaching a noise cancelling system that uses a second microphone for measuring background noise (in addition to a first microphone to measure a user's speech signal) in concluding that the claim would have been obvious in light of the combined teachings of Specht and Burnett. Final Act. 7–8 (citing Burnett ¶¶ 14, 79–80, 123–124; Figs. 9, 12). Thus, Appellant's argument

that Specht is silent regarding a second microphone that samples local noise from the user's environment, App. Br. 12–13, is not germane to the Examiner's findings in this regard because the Examiner does not rely on Specht to teach this limitation.

We see no error in the Examiner's reliance on Burnett for this limited purpose. Appellant contends Burnett's second microphone is not operably connected to a cell phone and a user's head. App. Br. 13; Reply Br. 8. However, the Examiner's findings in this regard are not based solely on Burnett, but rather on the combination of Specht and Burnett. Thus, Appellant's argument that Burnett's second microphone that samples local noise from a user's environment is not operably connected to a cell phone and a user's head is unavailing where, as here, the rejection is not based solely on the teachings of Burnett, but rather on the collective teachings of Specht and Burnett. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986); *In re Keller*, 642 F.2d 413, 426 (CCPA 1981).

Despite Appellant's arguments to the contrary, App. Br. 14–15, the Examiner has provided valid reasons for combining the references that are supported by articulated reasoning with some rational underpinning to justify the Examiner's obviousness conclusion (Final Act. 8; Ans. 18–21). We find no error in the Examiner's articulated reason to combine Specht and Burnett. *See* Final Act. 9; Ans. 18–21. As the Examiner explains, even though Specht may be sufficient to mask a user's speech using only a single microphone, Burnett teaches using additional information obtained from a second microphone that could be added to Specht to improve the calculation of the masking signal. Ans. 20. We agree with the Examiner that these

proposed enhancements to Specht predictably use prior art elements according to their established functions to yield a predictable result.

Ans. 19–21; *see KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

Lastly, Appellant contends, for the first time in the Reply Brief, that Burnett “does not contain the word ‘cellphone’ and does not relate to a cellphone.” Reply Br. 8. Appellant argues “[t]here is no valid reason for modifying the primary Specht reference relating to a cellphone with the secondary Burnett reference that does not relate to a cellphone.” *Id.*

This newly-raised argument is waived as untimely. *See* 37 C.F.R. § 41.41(b)(2). The Examiner had no opportunity to respond to the argument made only in the Reply Brief. *See Ex parte Borden*, 93 USPQ2d 1473, 1475 (BPAI 2010) (informative). Arguments not raised in an appeal brief and raised for the first time in a reply brief and “not responsive to an argument raised in the examiner’s answer, including any designated new ground of rejection, will not be considered by the Board for purposes of the present appeal, unless good cause is shown.” 37 C.F.R. § 41.41(b)(2).

Even if Appellant’s argument were raised in a timely fashion, which it was not, we would not find it persuasive. We note the Examiner does not rely on Burnett for teaching a microphone operably connected to a cellphone.

To the extent Appellant’s argument on page 8 of the Reply Brief is a contention that Specht and Burnett are considered as non-analogous art because one reference explicitly recites the word “cellphone” and the other reference does not, the analogous art test does not ask whether the prior art references are analogous to each other, but whether the references are

analogous to the claimed subject matter. *See In re Kahn*, 441 F.3d 977, 986–87 (Fed. Cir. 2006). To the extent Appellant’s argument is a new basis for asserting that there is no rationale for combining Specht and Burnett, this argument is also unpersuasive. As discussed above, the Examiner provided sufficient, and unrebutted, reasons with rational underpinnings for combining Burnett’s teaching of a second microphone to collect background noise with Specht’s system. *See* Ans. 18–21; *KSR*, 550 U.S. at 406.

We are not persuaded the Examiner erred in rejecting claim 1. *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). Accordingly, we sustain the rejection of independent claim 1. We also sustain the rejection of independent claim 9, which was rejected on substantially the same bases as claim 1. *See* Final Act. 10–11.

CONCLUSION

Under § 103(a), the Examiner did not err in rejecting claims 1 and 9.

DECISION

We affirm the Examiner’s decision to rejection claims 1 and 9.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED