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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PETER VINCENT BOESEN¹

Appeal 2018-002118
Application 14/927,388
Technology Center 2600

Before DAVID M. KOHUT, ERIC B. CHEN, and SCOTT E. BAIN,
Administrative Patent Judges.

BAIN, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1, 4–16, and 20, which constitute all claims pending in the application. Claims 2, 3, and 17–19 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellant identifies himself, Peter Vincent Boesen, as the real party in interest. App. Br. 3.

STATEMENT OF THE CASE

The Invention

Appellant's invention relates to a wireless earpiece for short-range communication with a personal electronic device, such as a cellphone. Spec. 1–2. The invention provides “multi-channel audio” using the earpiece. *Id.* at 2. The invention also provides various features for added comfort, audio quality, and other purposes. *Id.* at 2–5.

Claims 1 and 16, the sole independent claims, are illustrative of the invention and the subject matter at issue in the appeal, and are reproduced below.

1. A system for control of electronic devices, the system comprising:

an earpiece comprising an ear piece housing, a short range transceiver disposed within the ear piece housing, a speaker, an air conduction microphone, a bone conduction microphone, and an inertial sensor;

a network node comprising a short range transceiver, the short range transceiver of the network node in operative communication with the earpiece through the short range transceiver of the ear piece.

16. A system for control of electronic devices, the system comprising:

a set of earpieces comprising a left ear piece and a right ear piece, wherein each of left ear piece and the right ear piece comprise an ear piece housing and a short range transceiver disposed within the ear piece housing;

a network node comprising a short range transceiver, the short range transceiver of the network node in operative

communication with the set of earpieces through the short range transceiver of the left ear piece or the right ear piece;

wherein each of the left ear piece and the right ear piece comprises an inertial sensor within the ear piece housing;

wherein each of the left ear piece and the right ear piece comprises a bone conduction microphone and an air conduction sensor;

wherein the set of earpieces are stereophonic.

App. Br. 19–21 (Claims Appendix).

The Rejections on Appeal

Claims 1, 4–16, and 20 stand rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1–36 of U.S. Patent No. 8,526,646. Final Act. 4–5.²

Claims 1, 4–16, and 20 stand provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1–23 of co-pending App. No. 14/815,576. Final Act. 5.

Claims 1, 4–16, and 20 stand provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1–22 of co-pending App. No. 14/883,600. *Id.*

Claims 1, 4–16, and 20 stand provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1–20 of co-pending App. No. 14/883,593. *Id.*

² The statements of rejection cite claims 1–20, but claims 2, 3, and 17–19 are canceled. Final Act. 4–5.

Claims 1, 4–10, 13, 16, and 20 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Tillgren et al. (US 6,339,706 B1; Jan. 15, 2002) (“Tillgren”), Freeman et al. (US 2008/0189110 A1; Aug. 7, 2008) (“Freeman”), Wagner (US 7,101,287 B1; Sept. 5, 2006), and Ono (US 5,295,193; Mar. 15, 1994). Final Act. 6–10.

Claims 11, 12, 14, and 15 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Tillgren, Freeman, Wagner, Ono, and Cole et al. (US 2010/0063931 A1; Mar. 11, 2010) (“Cole”). Final Act. 10–11.³

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellant’s arguments presented in this appeal. Arguments which Appellant could have made but did not make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). On the record before us, we are not persuaded the Examiner erred. We adopt as our own the findings and reasons set forth in the rejections from which the appeal is taken and in the Examiner’s Answer, and provide the following discussion for highlighting and emphasis.

Double Patenting Rejections of Claims 1, 4–16, and 20

Appellant does not, in the Appeal Brief, contest any of the double patenting rejections or even indicate they are being appealed. App. Br. 9. Appellant does attempt to argue the double patenting rejections in the Reply

³ In the Final Action, the Examiner does not expressly cite Wagner and Ono as to claims 11, 12, 14, and 15 (all of which depend from claim 1), *see* Final Act. 10, but they are part of the rejection of base claim 1.

Brief. Reply Br. 11–16; App. Br. 9. Any argument raised in the reply brief, however, “which was not raised in the appeal brief, or is not responsive to an argument raised in the examiner’s answer, . . . 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). Appellant’s argument in the Reply Brief is not responsive to the Answer (which, because Appellant did not raise the issue, also did not address the double patenting rejections). Nor does Appellant offer good cause, or any reason, for us to consider the belatedly raised arguments. Reply Br. 12–18. Appellant’s arguments, therefore, are waived as untimely and we do not consider them. Further, the record does not indicate any filing of a terminal disclaimer.

Accordingly, we sustain each of the double patenting rejections of claims 1, 4–16, and 20.

*Obviousness Rejection of Claims 1, 4–10, 13, 16, and 20
over Tillgren, Freeman, Wagner, and Ono*

Appellant argues the Examiner erred for each of the following reasons: Tillgren does not teach a method for inputting a command to an electronic device nor receiving audio information at a microphone of an earpiece (App. Br. 10–13); Tillgren does not teach a network node in operative communication with each earpiece of a set of earpieces (App. Br. 13–14); the Examiner’s reliance on Official Notice was improper (App. Br. 14–16); Tillgren does not disclose an earpiece (Reply Br. 23–24); and the Examiner’s combination of the references is improper (Reply Br. 24–29). We address these arguments in turn.

Appellant’s argument that “Tillgren does not teach a method for inputting a command to an electronic device nor receiving audio information at a microphone of an earpiece” is not commensurate with the scope of the claims. App. Br. 10–13 (emphasis omitted). Independent claims 1 and 16, which are directed to a system and not a method, do not recite “inputting a command to an electronic device,” or “receiving audio information at a microphone of an earpiece.” See App. Br. 19–21. Moreover, Appellant’s argument does not substantively address, and therefore reveals no reversible error in, the Examiner’s specific findings regarding the combination of Tillgren, Freeman, Wagner, and Ono. See *id.*; Final Act. 6–10.

Appellant’s next argument concerns independent claim 16, which recites in pertinent part, a “network node in operative communication with the set of earpieces.” App. Br. 13–14, 20–21. Appellant argues the Examiner erred in finding Tillgren teaches this limitation, because Tillgren does not teach “three electronic devices with the ability to communicate with one another.” App. Br. 13–14. The implication of Appellant’s argument is that the claimed earpieces are in communication with each other. *Id.* Again, however, Appellant’s argument is not commensurate with the scope of the claim. As the Examiner explains, “[t]here is no indication in the claim language that there is a separate communication between the two earpieces making a third communication line.” Ans. 3. We agree. Accordingly, we are not persuaded of Examiner error.

Appellant next contends, again with respect to claim 16, the Examiner improperly relied on Official Notice. App. Br. 14–16. In the Final Action, the Examiner took Official Notice that “wireless stereophonic hearing aids

and earphones [we]re well known and widely used in the art and it would have been obvious . . . to utilize a *stereophonic* set of earpieces for the device disclosed [in] Tillgren.” Final Act. 10 (emphasis added). The Examiner further cited Mellone (US 2004/0042629 A1; Mar. 4, 2004) in support of the Official Notice. Final Act. 2; Ans. 3–4; *see* App. Br. 14–16. On appeal, Appellant now contends Mellone does not show the elements of claim 16 were available for earbuds at the time of Appellant’s earliest priority date (May 10, 2004). App. Br. 15–16; *see also* Spec. 1, ll. 9–11 (priority applications). Appellant’s argument does not persuade us of error because Appellant fails to address the Official Notice finding, namely, that it was well known in the art that stereo wireless communication was available for headset earpieces such as those disclosed in Tillgren. Final Act. 10 (official notice quoted *supra*). Moreover, the record includes evidence supporting the Official Notice. For example, Mellone discloses that stereo wireless communication was well known in earbuds (which are earpieces) before Appellant’s earliest priority date.⁴ *See supra*.

Appellant next argues that the broadest reasonable interpretation of an “earpiece” (as claimed) does not encompass a headset earphone worn over

⁴ To the extent Appellant argues Mellone is “insufficient” because it is not “35 U.S.C. § 102(b)-type prior art” (App. Br. 16), we are not persuaded. As Appellant acknowledges, Mellone’s publication date preceded Appellant’s priority date. *Id.*; *see also Lockheed Aircraft Corp. v. United States*, 553 F.2d 69, 83 (Ct. Cl. 1977) (“[P]rior art is prior art, and is presumptively known to the hypothetical man skilled in the art, even [if] its teachings are not generally known in the industry to which it relates.”). Moreover, as discussed above, Appellant’s arguments do not address the Examiner’s findings related to the Official Notice.

the ear. Reply Br. 23–24. This argument was not raised in Appellant’s Opening Brief and is not responsive to findings in the Answer, nor does Appellant attempt to explain any good cause for belatedly raising the argument. This argument, therefore, is waived as untimely. *See supra* 5–6; 37 C.F.R. § 41.41(b)(2). Even if our reviewing court were to find the argument was timely raised, we would not be persuaded of error. The Examiner finds “earpiece” encompasses all forms of a speaker fit to an ear. Final Act. 2 (emphasis omitted) (“Earpiece is defined as: a part of an instrument (as a telephone or stethoscope) that is placed against or inserted into the outer opening of the ear; especially: EARPHONE”).⁵ Appellant does not address the Examiner’s finding, and presents no evidence that the meaning of “earpiece” excludes a headset earpiece (e.g., earphone) worn over the ear.

Finally, Appellant argues one of ordinary skill would not have combined the references. Reply Br. 24–28. Appellant, however, does not substantively contest the Examiner’s articulated rationale for combining the references, which we find supported on this record. Final Act. 7–8. Specifically, as the Examiner finds, because Tillgren’s and Freeman’s devices permit voice commands, it would have been obvious to add

⁵ The cited definition is: “1 : the part of an instrument (such as a telephone, stethoscope, or hearing aid) that is placed against or inserted into the outer opening of the ear[;] *especially* : EARPHONE.” Merriam Webster Dictionary, <https://www.merriam-webster.com/dictionary/earpiece> (last visited Dec. 20, 2018). The included “*especially* : EARPHONE” is defined as “a device that converts electrical energy into sound waves and is worn over or inserted into the ear.” *Id.*, <https://www.merriam-webster.com/dictionary/earphone> (last visited Dec. 20, 2018).

Freeman's voice purchasing to Tillgren's device. Final Act. 7; *see also KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) (obvious to apply "a known technique to a piece of prior art ready for the improvement"). Further, as the Examiner finds, because Wagner's and Ono's devices are earpieces, it would have been obvious to modify Tillgren's headset by adding Wagner's inertial sensor for its disclosed function of inputting commands and Ono's bone conduction microphone for its disclosed function of capturing voice inputs. Final Act. 8; *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1365 (Fed. Cir. 2006) (rationale to combine references also may be found within the references themselves). Appellant does not meaningfully contest these rationales, or show the features are added for reasons other than their established functions. *KSR*, 550 U.S. at 417 (generally obvious to "simply arrange[] old elements with each performing the same function").

*Obviousness Rejection of Claims 11, 12, 14, and 15
over Tillgren, Freeman, Wagner, Ono, and Cole*

Appellant argues the Examiner erred in rejecting dependent claims 11, 12, 14, and 15 for the same reasons as claim 1. Reply Br. 29. Because we are not persuaded of error regarding claim 1, Appellant's arguments for claims 11, 12, 14, and 15 are also not persuasive. Accordingly, we sustain the obviousness rejection of claims 11, 12, 14, and 15.

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DECISION

We affirm the Examiner's decision rejecting claims 1, 4–16, and 20.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. § 41.50(f).

AFFIRMED