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APPLE INC./BROWNSTEIN c/o Brownstein Hyatt Farber Schreck, LLP 410 Seventeenth Street Suite 2200 Denver, CO 80202			LE, TOAN M	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SORIN V. DUSAN

Appeal 2020-003898
Application 15/496,681
Technology Center 2800

Before TERRY J. OWENS, CATHERINE Q. TIMM, and
BRIAN D. RANGE, *Administrative Patent Judges*.

RANGE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–7, 9, 10, and 17–27. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Apple, Inc. Appeal Br. 3.

CLAIMED SUBJECT MATTER²

Appellant describes the invention as relating to wearable electronic devices and detecting an installation position on a user based upon a signal from one or more sensors. Spec. ¶ 2. Claims 1, 17, and 21 are the three independent claims on appeal. Claim 1 is illustrative, and we reproduce it below while adding emphasis to certain key recitations:

1. A computer-implemented method for determining an installation position of a wearable audio device, the method comprising:
 - acquiring, using an accelerometer disposed in a wearable audio device, acceleration data over a period of time;
 - transmitting the acceleration data to a processing unit;
 - computing, using the processing unit, an aggregate metric based on the acceleration data, the aggregate metric indicating a net-positive acceleration condition or a net-negative acceleration condition over the period of time; and
 - determining, based on the net-positive acceleration condition or the net-negative acceleration condition, whether an installation position of the wearable audio device is on a right ear or a left ear of a user.**

Appeal Br. i (Claims App.). Claim 17 recites a system comprising a portable electronic device configured to make a determination similar to the “determining” emphasized above. *Id.* at iii. Claim 21 recites an apparatus comprising, among other things, a processing unit configured to make a determination similar to the “determining” emphasized above. *Id.* at iv.

² In this Decision, we refer to the Final Office Action dated July 29, 2019 (“Final Act.”), the Appeal Brief filed February 13, 2020 (“Appeal Br.”), the Examiner’s Answer dated March 25, 2020 (“Ans.”), and the Reply Brief filed April 29, 2020 (“Reply Br.”).

REJECTION AND REFERENCES

On appeal, the Examiner maintains (Ans. 3) the rejection of claims 1–7, 9, 10, and 17–27 under 35 U.S.C. § 102(a)(1) as anticipated by Kohei Onizuka & Charles G. Sodini, *Head Ballistocardiogram based on Wireless Multi-location Sensors*, IEEE 1275–1278, 2015 (“Onizuka”). Final Act. 2.

OPINION

A reference anticipates a claim if it “disclose[s] each and every element of the claimed invention, whether it does so explicitly or inherently.” *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009) (citation omitted). The elements “must be arranged or combined in the same way as in the claim.” *Id.* (internal quotes and citation omitted).

Here, the Examiner finds that Onizuka discloses each element of independent claims 1, 17, and 21. With respect to claim 1, Appellant argues, among other things, that Onizuka does not disclose “determining, based on the net-positive acceleration condition or the net-negative acceleration condition, whether an installation position of the wearable audio device is on a right ear or a left ear of a user.” Appeal Br. 7–10. For the reasons explained below, Appellant’s argument persuades us of error.

Onizuka describes a ballistocardiogram (BCG) clinical method to measure recoil against the heart pumping blood. Onizuka 1275. The Onizuka method attaches sensors to a person’s left and right ear and analyzes acceleration at each location. *Id.* The accelerometer data is measured and used to assess the person’s vital signs. *Id.*; *see also* Appeal Br. 8–9.

To reach the key “determining” recitation that Appellant argue, the Examiner finds, for example, that Onizuka discloses that its signals coming

from left and right ears are distinct. Final Act. 3. In particular, the Examiner emphasizes that Onizuka states, “[i]nterestingly, amplitudes on the right ear are smaller than the left ears or head top. They are also out of phase.” *Id.* (quoting Onizuka 1276); *see also* Ans. 14. Similarly, the Examiner emphasizes Onizuka’s figures as disclosing different signals for the left and right ears. Ans. 14 (referring to Onizuka Figs. 2–5(b)).

Onizuka’s teachings indicate, at most, that right and left ears *could* be differentiated based upon Onizuka’s signals. Onizuka does not disclose using its signals to actually make such a determination. Nor has the Examiner demonstrated that a person of skill in the art would have had a reason to make a right versus left ear determination in the context of Onizuka. We, thus, do not sustain the Examiner’s rejection of claim 1 or the claims depending from claim 1.

Claims 17 and 21 each require apparatus configured to reach a determination. Appeal Br. iii–iv (Claims App.). Appellant’s argument and the Examiner’s position regarding whether Onizuka teaches apparatus for making the determinations these claims recite is substantially the same as with regard to claim 1. Appeal Br. 8, 10–11; Ans. 14–16. The Examiner has not established that Onizuka discloses apparatus configured to make a determination of the installation position of two audio devices (claim 17) or a right versus left side determination (claim 21). We, thus, also do not sustain the Examiner’s rejection of claims 17 and 21 and of claims depending from claims 17 and 21.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-7, 9, 10, 17-27	102	Onizuka		1-7, 9, 10, 17-27

REVERSED