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ocpat_uspto@qualcomm.com
uspto@paradiceli.com
william@paradiceli.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SAI VENKATRAMAN and QINFANG SUN

Appeal 2015-002642
Application 12/985,645
Technology Center 2400

Before ELENI MANTIS MERCADER, CARL W. WHITEHEAD JR., and
ADAM J. PYONIN, *Administrative Patent Judges*.

PYONIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from a final rejection of claims 3, 6, 8–17, and 19–23. Claims 1, 2, 4, 5, 7, and 18 are canceled. *See* App. Br. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

STATEMENT OF THE CASE

Introduction

Appellants' disclosure relates to "WLAN systems used for tracking the position of devices on the network and more particularly to the synchronization of WLAN access points to facilitate the position

determinations.” Spec. ¶ 1. Claims 8, 13, and 14 are independent. Claim 8 is reproduced below for reference (with formatting and emphasis added):

8. A time-synchronized wireless network comprising a plurality of access points and a mobile station,
wherein *each access point is configured to obtain a signal transmitted by a navigation satellite, extract timing information from the signal based, at least in part, on a known position of the access point and compensate clocks of each access point based, at least in part, on the timing information*
so that a position of the mobile station can be determined by performing pseudo-range calculations on signals transmitted between at least one of the access points and the mobile station.

The Examiner’s Rejections

Claims 3, 6, and 8–11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Moshfeghi (US 2009/0121927 A1; May 14, 2009), Shiota (US 7,289,820 B2; Oct. 30, 2007) and van Diggelen (US 6,417,801 B1; July 9, 2002). Final Act. 2.

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Moshfeghi, Shiota, van Diggelen, and Lin (Fischer) (US 2010/0013701 A1; Jan. 21, 2010). Final Act. 9.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Moshfeghi, Shiota, van Diggelen, and Tenny (US 2007/0002813 A1; Jan. 4, 2007). Final Act. 10.

Claims 14, 16, 19, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Moshfeghi, Shiota, and Tenny. Final Act. 14.

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Moshfeghi, Shiota, Tenny, and Lin. Final Act. 21.

Claims 17, 22, and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Moshfeghi, Shiota, van Diggelen, and Tenny. Final Act. 21–22.

Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Moshfeghi, Shiota, Tenny, and Lin. Final Act. 27.

ANALYSIS

We have reviewed Appellants’ arguments that the Examiner has erred. We adopt the conclusions and findings of fact made by the Examiner in the Final Office Action and Examiner’s Answer as our own, and we highlight the following points for emphasis.

Appellants argue the Examiner erred, because the cited references do not suggest that:

each access point is configured to obtain a signal transmitted by a navigation satellite, extract timing information from the signal based, at least in part, on a known position of the access point and compensate clocks of each access point based, at least in part, on the timing information,

as recited in independent claim 8. App. Br. 5. Particularly, Appellants first contend Moshfeghi’s calculation of a range error “is related to positional, not temporal, characteristics because range is fundamentally a measure of distance” and thus “Moshfeghi contains no suggestion to ‘extract timing information from the signal based, at least in part, on a known position of the access point.’” App. Br. 5.

The Examiner finds, and we agree, that in Moshfeghi, the GPS receiver of an access point “may then compare its computed position with its known coordinates in order to calculate range errors (caused by atmospheric effects, satellite clock errors, etc.)” Ans. 4, citing Moshfeghi ¶ 76; *see also*

Final Act. 3. The Examiner additionally finds Moshfeghi's wireless access points receive "reference time" from the satellites, which is used to calculate measured range errors of the satellites. Final Act. 3–4, citing Moshfeghi ¶ 100–101 and Fig. 6. Appellants' arguments regarding the range errors of Moshfeghi being positional rather than temporal do not address the Examiner's findings regarding Moshfeghi's use of reference time in the range error calculations. Thus, we are not persuaded the Examiner erred.

Appellants next contend claim 8 "requires extracting the timing information from 'a signal transmitted by a navigation satellite'" which provides for "[t]he sufficiency of one satellite signal," whereas Moshfeghi "provides no teaching regarding the use of a single satellite." App. Br. 6; *see also* Reply Br. 2–3. Appellants' arguments are not commensurate with the scope of the claim. Each of independent claims 8, 13, and 14 use the open-ended transitional phrase "comprising," which does not exclude additional and unrecited limitations. *See, e.g., Mars, Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376 (Fed. Cir. 2004). Thus, we do not find the Examiner erred in finding Moshfeghi teaches or suggests the disputed limitations, as the claim language does not preclude the use of multiple satellites. *See* Final Act. 2; Ans. 5.

The Examiner additionally finds, and we agree, that the combination of Moshfeghi and Shiota teaches the disputed limitation. *See* Final Act. 2–4. Appellants contend "that Shiota similarly fails to suggest" the disputed limitation (App. Br. 6–7; *see also* Reply Br. 4); Appellants' arguments, however, do not address the Examiner's specific findings regarding Shiota. *See* Final Act. 4–5 (citing Shiota Fig. 1). Further, Appellants' arguments are unpersuasive of error because they attack the references individually and

thus fail to address the Examiner's findings. "[T]he test [for obviousness] is what the combined teachings of the references would have suggested to those of ordinary skill in the art," and "one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references." *In re Keller*, 642 F.2d 413, 425, 426 (CCPA 1981). Appellants provide similar arguments for independent claims 13 and 14, which we find similarly unpersuasive. *See* App. Br. 8–9.

CONCLUSION

We sustain the Examiner's rejection of independent claims 8, 13, and 14. Appellants advance no further argument on dependent claims 3, 6, 8–12, 15–17, and 19–23. *See* App. Br. 7–11. Accordingly, we sustain the Examiner's rejections of these claims for the same reasons discussed above.

DECISION

We affirm the Examiner's rejection of claims 3, 6, 8–17, and 19–23.

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)(iv).

AFFIRMED