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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MUHAMMAD ALI KAZMI and ANDERS FURUSKÄR

Appeal 2019-000437
Application 14/810,075
Technology Center 2600

Before JOHN A. JEFFERY, JOHN A. EVANS, and
NORMAN H. BEAMER, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Under 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–8. 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 Telefonaktiebolaget L M Ericsson (publ). Appeal Br. 2.

STATEMENT OF THE CASE

Appellant's invention pertains to network-controlled bandwidth for neighbor cell measurements. To this end, a radio base station sends measurement configuration information to user equipment (UE), where the information indicates a measurement bandwidth over which measurements are performed on the serving cell and neighbor cells. The UE then (1) performs measurements on each cell over the measurement bandwidth, and reports the measurements to the network. *See Abstract*. Claim 1 is illustrative:

1. A method in a user equipment for performing downlink measurements on a plurality of neighbor cells according to a received measurement configuration, the method comprising:
 - receiving measurement configuration information from a radio base station supporting a serving cell of a wireless communications network, the measurement configuration information including an indication of a single measurement bandwidth, over which measurements are to be performed on a plurality of neighbor cells;
 - performing measurements on the plurality of neighbor cells over the single measurement bandwidth, wherein two or more of the neighbor cells have different transmission bandwidths; and
 - reporting the measurements to the network.

THE REJECTION

The Examiner rejected claims 1–8 under 35 U.S.C. § 103 as unpatentable over Aoyama (WO 2007/077840 A1; published July 12, 2007), Palenius (US 2002/0019231 A1; published Feb. 14, 2002), Lee (US 2009/0010219 A1; published Jan. 8, 2009), and *E-UTRA Measurements*

Related to Mobility, R1-070044, 3GPP TSG RAN WG1 Meeting #47bis, Jan. 15–19, 2007 (“R1-070044”). Ans. 2–6.²

FINDINGS, CONCLUSIONS, AND CONTENTIONS

Regarding independent claim 1, the Examiner finds that Aoyama discloses, among other things, (1) receiving measurement configuration information from a radio base station, where the received information includes an indication of a measurement bandwidth; (2) performing measurements on neighbor cells over that bandwidth; and (3) reporting the measurements to a wireless communications network. Ans. 2–3. Although the Examiner acknowledges that Aoyama lacks a single measurement bandwidth, and that two or more neighbor cells have different transmission bandwidths, the Examiner cites Palenius, Lee, and R1-070044 as teaching these features in concluding that the claim would have been obvious. Ans. 3–4.

Appellant argues that not only is there is insufficient reasoning for the Examiner’s obvious-to-try rationale, it would have not been obvious to modify Aoyama to arrive at claim 1 in view of the art of record. Appeal Br. 4–7; Reply Br. 2–3. According to Appellant, R1-070044 not only teaches away from sending measurement confirmation information, Palenius and Lee do not suggest receiving a single measurement bandwidth or any measurement bandwidth. Appeal Br. 7–11; Reply Br. 4.

² Throughout this opinion, we refer to (1) the Appeal Brief filed May 18, 2018 (“Appeal Br.”); (2) the Examiner’s Answer mailed September 6, 2018 (“Ans.”); and (3) the Reply Brief filed October 30, 2018 (“Reply Br.”).

ISSUES

I. Under § 103, has the Examiner erred by finding that Aoyama, Palenius, Lee, and R1-070044 collectively would have taught or suggested (1) receiving measurement configuration information from a radio base station, where the received information includes an indication of a single measurement bandwidth over which measurements are to be performed on neighbor cells; and (2) performing measurements on the neighbor cells over the single measurement bandwidth, where two or more neighbor cells have different transmission bandwidths as recited in claim 1?

II. Is the Examiner's proposed combination of the cited references supported by articulated reasoning with some rational underpinning to justify the Examiner's obviousness conclusion?

ANALYSIS

We do not sustain the Examiner's obviousness rejection of claim 1. As noted above, the Examiner finds that Aoyama discloses nearly every element of claim 1 including (1) receiving measurement configuration information from a radio base station, where the received information includes an indication of a measurement bandwidth; and (2) performing measurements on neighbor cells over that bandwidth. *See* Ans. 2–3 (noting that the terminal in Aoyama's paragraph 52 is notified of how cells are measured, including "bands/bandwidth").

The Examiner acknowledges that Aoyama's received information does not indicate a *single* measurement bandwidth over which measurements are performed on neighbor cells with different transmission bandwidths. The Examiner's reliance on the other cited references, namely Palenius, Lee,

and R1-070044, to cure Aoyama's acknowledged deficiencies, however, is problematic on this record, as is the Examiner's articulated rationale to combine the references.

To be sure, R1-070044 explains in Section 4.1 that a Received Signal Strength Indicator (RSSI) measurement can be over a 1.1 MHz interval that corresponds to a center 72-subcarrier interval. This teaching at least suggests using a single measurement bandwidth, namely 1.1 MHz, for plural neighbor cells, particularly given R1-070044's teaching that this measurement applies to *any* target cell. R1-070044 § 4.1. That R1-070044 also contemplates basing Received Symbol RSSI (RS-RSSI) measurements on a constant bandwidth for all target cells or restricting the measurement bandwidth to that used for 72 subcarriers in Section 2.2 only further suggests using a single measurement bandwidth.

But we cannot say—nor has the Examiner shown—that the cells over which measurements are performed have different transmission bandwidths as claimed. Not only does R1-070044 set the RS-RSSI measurement bandwidth to be equal to that of the target cell in Section 2.2, Lee fares no better in this regard, despite describing measurement techniques for two adjoining cells *with different bandwidths*, for example, 20 MHz and 10 MHz, respectively. *See* Lee ¶ 71. In this scenario, when the UE camps on the current cell (C1) that receives the neighboring cell C2's entire bandwidth, the UE can perform the intra-frequency measurement for the neighboring cell. *Id.* Given this functionality, the measurement bandwidth is the same as that of one of the cells—not a different bandwidth as the claim requires. *Accord* Appeal Br. 11 (noting that the cell and transmission bandwidths in Lee are always the same).

The Examiner’s reliance on Palenius is also unavailing in this regard. Even assuming, without deciding, that Palenius uses a single measurement bandwidth as the Examiner finds (Ans. 3, 11), here again, the Examiner has not shown that such a bandwidth differs from those of the neighbor cells.

Nor has the Examiner shown that this difference would have been obvious, despite the Examiner’s determination that the recited difference would have ostensibly been obvious to try. As Appellant indicates (Appeal Br. 5–6; Reply Br. 2–3), the Examiner’s obvious-to-try rationale (Ans. 3, 10) is problematic because, among other things, the Examiner did not show the requisite design need or market pressure to solve the problem—a key factual requirement noted by the Court in *KSR*. See *KSR*, 550 U.S. at 421 (“*When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.*”) (emphasis added). In any event, to suggest that the recited bandwidth difference would have somehow been obvious as the Examiner proposes is not reasonably supported by the evidence in this record, but rather is the product of impermissible hindsight using Appellant’s own disclosure as a blueprint. See *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“It is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious . . .”).

Therefore, we are persuaded that the Examiner erred in rejecting (1) independent claim 1; (2) independent claim 4 that recites commensurate limitations; and (3) the dependent claims for similar reasons. Because this

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issue is dispositive regarding our reversing the Examiner's rejection of these claims, we need not address Appellant's other associated arguments.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-8	103	Aoyama, Palenius, Lee, R1-070044		1-8

REVERSED