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NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER
LOUIS-FILS, NICOLE M

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARIA CUEVAS RAMIREZ

Appeal 2019-003500
Application 15/567,472
Technology Center 2600

Before ROBERT E. NAPPI, JUSTIN BUSCH, and JOYCE CRAIG, *Administrative Patent Judges.*

CRAIG, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1–15. *See* Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[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 BRITISH TELECOMMUNICATIONS public limited company, a corporation of the United Kingdom. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The claims are directed to the maintenance of tracking and location area mappings needed by a network control system to support a dual attachment process in mobile cellular telephony. Spec. 1. Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A mobile telecommunications system comprising:
>
> a plurality of base stations forming part of a first network operating according to a first protocol, a plurality of base stations forming part of a second network operating according to a second protocol, and a mobile management entity (MME), in which the MME has a store of mappings between geographical areas managed by a set of respective first network control elements in the first network and geographical areas managed by a set of respective second network control elements in the second network, the mapping being suitable for supporting a dual attach system to allow a mobile terminal, having made an association with one of the set of first network control elements, to make an association with one of the set of second network control elements selected according to the mapping,
>
> wherein at least one of the base stations of the first network is arranged to request and receive neighbour data from a mobile terminal currently in communication with the base station, the neighbour data relating to base stations of the second network that can be detected by the mobile terminal, and to forward the neighbour data to the MME, and the MME is arranged to update the mapping between the base stations in accordance with the location updates it receives from the terminal.

REJECTION

Claims 1–15 stand rejected under 35 U.S.C. § 103 as unpatentable over the combination of Lee et al. (US 2013/0051362 Al, published Feb. 28, 2013) ("Lee") and Nylander et al. (US 2012/0195255 Al, published Aug. 2, 2012) ("Nylander"). Final Act. 4.

ANALYSIS

We have reviewed the rejection of claims 1–15 in light of Appellant's arguments that the Examiner erred. We have considered in this decision only those arguments Appellant actually raised in the Briefs. Any other arguments Appellant could have made, but chose not to make, in the Briefs are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Appellant's arguments are not persuasive of error. We agree with and adopt as our own the Examiner's findings of facts and conclusions as set forth in the Answer and in the Action from which this appeal was taken. We provide the following explanation for emphasis.

With respect to independent claim 1, Appellant contends the cited portions of Lee and Nylander do not teach or suggest the limitation:

> wherein at least one of the base stations of the first network is arranged to request and receive neighbour data from a mobile terminal currently in communication with the base station, the neighbour data relating to base stations of the second network that can be detected by the mobile terminal, and to forward the neighbour data to the MME, and the MME is arranged to update the mapping between the base stations in accordance with the location updates it receives from the terminal,

as recited in claim 1. Appeal Br. 9. Appellant argues that "Lee does not describe a mechanism to collate an accurate TA/LA mapping and store it in a mobile management entity (MME). Instead, Lee assumes that such mapping table exists and uses it to select the most appropriate cell to handover to." *Id.*

We agree with the Examiner that the plain language of claim 1 does not recite or otherwise require "a mechanism to collate an accurate TA/LA mapping and store it in a mobile management entity (MME)." *See* Ans. 5. Claim 1 merely recites that "the MME is arranged to update the mapping

between the base stations in accordance with the location updates it receives from the terminal." Appeal Br. 17 (Claims Appendix). The Examiner found that Lee teaches an MME storing a mapping and teaches how to obtain the mapping information by using a measurement report for the user equipment, which the Examiner explained is analogous to a mechanism to gather information for a TA/LA mapping list. Ans. 5. The Examiner also found that Nylander teaches that "the MME is arranged to update the mapping between the base stations in accordance with the location updates it receives from the terminal." Ans. 4 (citing Nylander Fig. 10); Final Act. 5–6 (citing Nylander ¶ 123).

Appellant argues that Nylander does not cure Lee's deficiencies because "Nylander's first base station node does not obtain data (data regarding tracking area, cell type) of the second base station node from a mobile terminal." Appeal Br. 10.

Appellant's argument is not persuasive. The Examiner found that "Nylander obtains the tracking area of the second base station by using an Automatic Neighbor Relation function," which "instructs a wireless terminal to perform measurements on neighbor cells and the wireless terminal sends a measurement reporting regarding the cell served by the second base station node." Ans. 4 (citing Nylander ¶ 99).

Appellant replies that paragraph 99 of Nylander describes the measurement of properties of neighbour cells from the mobile terminal, not the initial identification of such cells. Reply Br. 4. According to Appellant, "[t]he network will already know the identities of the neighbours as they are part of the *same* network." *Id.*

Appellant has not persuaded us that claim 1 requires the initial identification of neighbour cells. The plain language of claim 1 requires that "at least one of the base stations of the first network is arranged to request and receive neighbour data from a mobile terminal currently in communication with the base station, the neighbour data relating to base stations of the second network that can be detected by the mobile terminal," and that "the MME is arranged to update the mapping between the base stations in accordance with the location updates it receives from the terminal." Appeal Br. 17. We are not persuaded of error in the Examiner's findings that Lee teaches an MME that has a store mapping and Nylander teaches requesting/receiving the neighboring information. *See* Ans. 4–5. We also agree with the Examiner's conclusion that it would have been obvious to one of ordinary skill in the art to have modified the teachings of Lee with the teaching of Nylander to provide a system for obtaining tracking area update information. *See id.*

Finally, Appellant argues that, although claim 1 requires two networks, with a base station of the first network operating according to a first protocol and a base station of the second network operating according to a second protocol, Nylander teaches that all base stations are part of the same network, and are thus on a common neighbour list which can be maintained by the MME. Appeal Br. 11.

Appellants' argument is not persuasive because Appellant attacks Nylander individually, even though the Examiner relied on the combination of Lee and Nylander in rejecting claim 1. *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)) ("The test for obviousness is what the combined teachings of the references would

have suggested to those having ordinary skill in the art."). The test for obviousness is not whether the claimed invention is expressly suggested in any one or all of the references, but whether the claimed subject matter would have been obvious to those of ordinary skill in the art in light of the combined teachings of those references. *See In re Keller*, 642 F.2d at 425.

Here, for example, the Examiner found that Lee teaches a mobile telecommunications system comprising a plurality of base stations forming part of a first network operating according to a first protocol and a plurality of base stations forming part of a second network operating according to a second protocol. Final Act. 4 (citing Lee, Figs. 1, 3, ¶¶ 4, 5). Thus, the Examiner relied on Lee, not Nylander, as teaching two networks, with a base station of the first network operating according to a first protocol and a base station of the second network operating according to a second protocol.

For these reasons, we are not persuaded that the Examiner erred in finding that the combination of Lee and Nylander teaches or suggests the disputed limitations of claim 1.

Accordingly, we sustain the Examiner's § 103 rejection of independent claim 1, as well as the Examiner's § 103 rejection of independent claims 5, 8, and 10, not argued separately with particularity. *See* Appeal Br. 9, 14. We also sustain the Examiner's § 103 rejection of dependent claims 2, 4, 5, 7–9, and 12–15, not argued separately.

Turning to dependent claim 3, Appellant argues that the cited teachings of Lee and Nylander fail to teach or suggest "the mapping is used by the MME to select a server in the second network with which an attach procedure is to be initiated when an attachment to the first network is initiated by a user terminal," as recited in claim 3 and similarly recited in

claims 6 and 11. Appeal Br. 14–15. In particular, Appellant argues that paragraphs 16 and 144 of Nylander, relied on by the Examiner, do not teach or suggest the disputed limitation. *Id.* at 15. Appellant argues that Nylander "fails to mention selection based on the mapping for supporting a dual attach system, let alone selection of a server in the second network with which an attach procedure is to be initiated when an attachment to the first network is *initiated by a user terminal*." *Id.*

Appellant's argument is unpersuasive because, again, Appellant argues Nylander separately, even though the Examiner relied on the combined teachings of Lee and Nylander. *See* Final Act. 11. The Examiner found that Lee teaches an MME storing a mapping table of relations between cells of two different protocols. *See* Ans. 5 (citing Lee Fig. 3, table 3010 with MME 230). Appellant did not persuasively rebut the Examiner's finding in the Appeal Brief and did not address it in the Reply Brief.

The test for obviousness is whether the claimed subject matter would have been obvious to those of ordinary skill in the art in light of the combined teachings of the references. *See In re Keller*, 642 F.2d at 425. Because Appellant did not address whether the combined teachings of Lee and Nylander would have taught, or at least suggested, the disputed limitation, we are not persuaded that the Examiner erred.

Accordingly, we sustain the Examiner's § 103 rejection of dependent claim 3, as well as grouped dependent claims 6 and 11.

DECISION

We affirm the decision of the Examiner rejecting claims 1–15.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–15	103	Lee, Nylander	1–15	

TIME PERIOD FOR RESPONSE

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. § 1.136(a)(1)(iv).

AFFIRMED