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EXAMINER	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DESHAN MIAO, JIANHONG MOU, NAIZHENG ZHENG, and KARI PEKKA PAJUKOSKI

Appeal 2019-000690
Application 15/315,946
Technology Center 2600

Before ELENI MANTIS MERCADER, NORMAN H. BEAMER, and GARTH D. BAER, *Administrative Patent Judges*.

MANTIS MERCADER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 30–39 and 42–46, which are all the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

THE INVENTION

Appellant's claimed invention is directed to "antenna calibration" (Spec. 1:7) in "wireless systems [that] include public land mobile networks (PLMN) such as cellular networks, satellite based communication systems and different wireless local networks, for example wireless local area networks (WLAN)" (Spec. 1:22–24).

Independent claim 30, reproduced below, is representative of the subject matter on appeal:

30. A method comprising:

> sending information from a first node to a second node according to a collision avoidance mechanism, said first node comprised in a first layer of a layered network and said second node comprised in a second layer of the layered network, wherein the collision avoidance mechanism configures a fixed pattern for the second node;
>
> receiving at said first node channel information from said second node; and
>
> calibrating one or more antennae at said first node using said channel information.

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies Nokia Solutions and Networks Oy as the real party in interest (Appeal Br. 3).

Appeal Br. 19 (Claims Appendix).

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is the following:

Merlin	US 2012/0300864 A1	Nov. 29, 2012
Ghosh	US 2013/0070605 A1	Mar. 21, 2013
Zoldi	US 2013/0204755 A1	Aug. 8, 2013

REJECTIONS

The Examiner made the following rejections:

Claims 30–33, 35–39, 42, and 44–46 stand rejected under 35 U.S.C. § 103 as being unpatentable over Merlin and Ghosh (Final Act. 2).

Claims 34 and 43 stand rejected under 35 U.S.C. § 103 as being unpatentable over Merlin, Ghosh, and Zoldi (Final Act. 5).

ISSUES

The issues are whether the Examiner erred in finding:

1. the combination of Merlin and Ghosh teaches or suggests "wherein the collision avoidance mechanism configures a fixed pattern for the second node," as recited in independent claim 30, and similarly recited in independent claims 33 and 42;

2. the combination of Merlin, Ghosh, and Zoldi teaches or suggests the limitation of:

> wherein said second node is in a layer adjacent to said first node in said layered network, and wherein one or more nodes are

> allocated among one or more layers in said layered network according to one or more of a network OAM configuration,

as recited in dependent claim 34, and similarly recited in dependent claim 43.

ANALYSIS

We adopt the Examiner's findings in the Answer and Final Office Action and we add the following primarily for emphasis. We note that if Appellant failed to present arguments on a particular rejection, we will not unilaterally review those uncontested aspects of the rejection. *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential); *Hyatt v. Dudas*, 551 F.3d 1307, 1313–14 (Fed. Cir. 2008) (the Board may treat arguments Appellant failed to make for a given ground of rejection as waived).

Claim 30

Appellant argues that in Ghosh, "the quiet-period carrier sense multiple access-collision avoidance (QP-CSMA-CA) causes the AP [access point] to broadcast, when a fixed patter[n] of repetitive sensing in the QP-CSMA-CA has been met," because

> [t]he QP duration and sensing intervals, based on spectrum usage, are computed and adjusted by the AP. The AP communicates these parameters occasionally, using the periodic beacon signals or broadcasting a <u>dedicated request for OP-CSMA-CA</u>

(Reply Br. 5, citing Ghosh ¶ 103, some emphasis omitted, alteration in original). Appellant contends that "Ghosh's QP-CSMA-CA is disposed within the wireless client devices STAs and not in the AP" and that

> [s]tated differently, Ghosh's AP only requests a QP-CSMA-CA and schedules CSPs on a repetitive basis. Because the QP-

> CSMA-CA is disposed within Ghosh's STAs, the AP is unable to configure a fixed pattern for the [station] STA2

(Reply Br. 5, citing Ghosh ¶¶ 97, 101, 124).

We are not persuaded by Appellant's arguments. The Examiner finds, and we agree, that

> the AP is considered as the first node and the receiving devices (i.e., STA1 and STA2) are both considered as the second node. For the purpose of the claim, the AP broadcasts a fixed pattern allowing for the AP to signal increased or decreased sensing durations for the stations (for example, STA2) therefore, it can be said that the AP broadcasting a fixed pattern to STA2 is for the purpose of configuring (i.e., shaping, putting together, setting up or arranging) a fixed pattern for the STA2 (i.e., the second node)

(Ans. 5, citing Ghosh Fig.1, ¶¶ 125–127).

We first note that independent claim 30 (and independent claims 33 and 42) places no restriction on the physical location of the claimed "collision avoidance mechanism." The mechanism could reside in whole or in part at any or all nodes, or at no nodes at all. In any case, Appellant admits that Ghosh teaches "[t]he QP duration and sensing intervals, based on spectrum usage, are computed and adjusted by the AP" and this can be performed "using the periodic beacon signals" (Ghosh ¶ 103).

Ghosh thus supports the Examiner's finding that "the AP broadcasts a fixed pattern allowing for the AP to signal increased or decreased sensing durations for the stations (for example, STA2)" and that "the AP [is] broadcasting a fixed pattern to STA2 [] for the purpose of configuring (i.e., shaping, putting together, setting up or arranging) a fixed pattern for the STA2 (i.e., the second node)," which meets the language of the claim.

Accordingly, we affirm the Examiner's rejection of independent claim 30, as well as independent claims 33 and 42 commensurate in scope, as well as dependent claims 31, 32, 35–39, and 44–46 not separately argued with particularity.[2]

Claim 34

Similar to Appellant's arguments regarding dependent claims 31, 32, 35–39, and 44–46 (*see* footnote 2), Appellant argues that the Examiner's citation to Zoldi fails to provide

> any reasoning of why a second node is in a layer adjacent to said first node in said layered network, and wherein one or more nodes are allocated among one or more layers in said layered network according to one or more of a network OAM configuration and self-monitoring would allegedly be obvious

(Appeal Br. 15–16, citing Zoldi ¶¶ 4, 10, 21).

We are not persuaded the Examiner erred. Appellant attacks Zoldi individually and fails to consider the combined teachings of the references. Nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

With respect to the claimed "second node is in a layer adjacent to said first node," the Examiner finds, and we agree, that in Merlin access point

[2] Appellant submits nearly identical arguments for dependent claims 31, 32, 35–39, and 44–46, each of which states that "an analysis supporting a rejection under 35 U.S.C 103 should be made explicit" and that the Examiner's analysis includes a citation "without providing any reasoning" (Appeal Br. 9–15; s*ee, for example,* Appeal Br. 9 regarding claim 31). However, in all cases, Appellant fails to identify an error in the Examiner's reasoning—for example, by identifying an error in the Examiner's analysis that contradicts the teaching of the reference.

102 is "in a first layer" because it receives "uplink signals from access terminals," whereas access terminal 104 is "in a second layer" because it receives "downlink signals from [the] access point" (Final Act. 2–3, 5). Thus, one skilled in the art would consider Merlin's access point and access terminal are in adjacent layers, as signals travel between the access terminal and the access point without traveling through additional (intermediate) layers.

Further, the cited portion of Zoldi expressly teaches that "[t]he *multi-layered self-calibrating model* leverages factor analysis to overcome input variable selection bias" (Zoldi ¶ 4, emphasis added), and "[t]he *multi-layered self-calibrating model* is effective on real world fraud data" (Zoldi ¶ 10, emphasis added). Appellant provides no argument why the combination of references fails to teach or suggest the claimed "layer adjacent" and "self-monitoring" limitations recited in dependent claim 34.

Accordingly, we affirm the Examiner's rejection of dependent claim 34, and dependent claim 43 not argued separately with particularity. *See* Appeal Br. 15–16.

CONCLUSION

The Examiner did not err in finding:

1. the combination of Merlin and Ghosh teaches or suggests "wherein the collision avoidance mechanism configures a fixed pattern for the second node," as recited in independent claim 30, and similarly recited in independent claims 33 and 42;

2. the combination of Merlin, Ghosh, and Zoldi teaches or suggests the limitation of:

> wherein said second node is in a layer adjacent to said first node in said layered network, and wherein one or more nodes are allocated among one or more layers in said layered network according to one or more of a network OAM configuration,

as recited in dependent claim 34, and similarly recited in dependent claim 43.

DECISION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
30–33, 35–39, 42, 44–46	103	Merlin, Ghosh	30–33, 35–39, 42, 44–46	
34, 43	103	Merlin, Ghosh, Zoldi	34, 43	
Overall Outcome			30–39, 42–46	

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)(1)(iv).

AFFIRMED