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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/538,006	11/11/2014	Luay ZALZALAH	P44382 US1	2141
24112	7590	09/19/2019	EXAMINER	
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			ART UNIT	PAPER NUMBER
			2431	
			MAIL DATE	DELIVERY MODE
			09/19/2019	PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte LUAY ZALZALAH and NAJEH ABU-FARHA¹

Appeal 2018-008544
Application 14/538,006
Technology Center 2400

Before ERIC B. CHEN, GREGG I. ANDERSON, and
ADAM J. PYONIN, *Administrative Patent Judges*.

ANDERSON, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 27–39.² Claims 1–26 were previously withdrawn or cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ Appellant and the real party in interest is Telefonaktiebolaget LM Ericsson. App. Br. 2.

² In this Decision, we refer to the Final Office Action (“Final Act.,” mailed January 19, 2018), the Advisory Action (“Advisory Act.,” mailed February 26, 2018), the Appeal Brief (“App. Br.,” filed March 6, 2018), the Examiner’s Answer (“Ans.,” mailed June 28, 2018), the Reply Brief (“Reply Br.,” filed August 28, 2018), and the original Specification (“Spec.,” filed November 11, 2014).

I. STATEMENT OF THE CASE

A. *The Invention*

In the Background section, the Specification describes that a Wi-Fi network provides mobility fall back in the event of a cellular (e.g., 3GPP) service failure. Spec. 1:4–5, 3:6–7. When a Wireless Terminal (WT) experiences a cellular service interruption, a new data session may be established either with another cellular radio node or a Wi-Fi access point (Wi-Fi AP). *Id.* at 2:23–25.

The Specification explains that the invention addresses existing problems with fall back including that a WT may not be able to establish a new data session with the cellular network if the cellular network is severely interrupted and also may not be able to establish a new data session with the Wi-Fi network if there is no Wi-Fi AP providing open access in the serving area. Spec. 2:23–28. Although Wi-Fi access may be available from an authenticated or secured Wi-Fi AP, in order for the WT to make use of one, a user generally has to have previously manually entered appropriate Wi-Fi credentials for network authentication to that secure Wi-Fi AP for a new area or zone of the Wi-Fi network. *Id.* at 12:11–16, 13:1–4.

Figure 2 of the Specification is reproduced below.

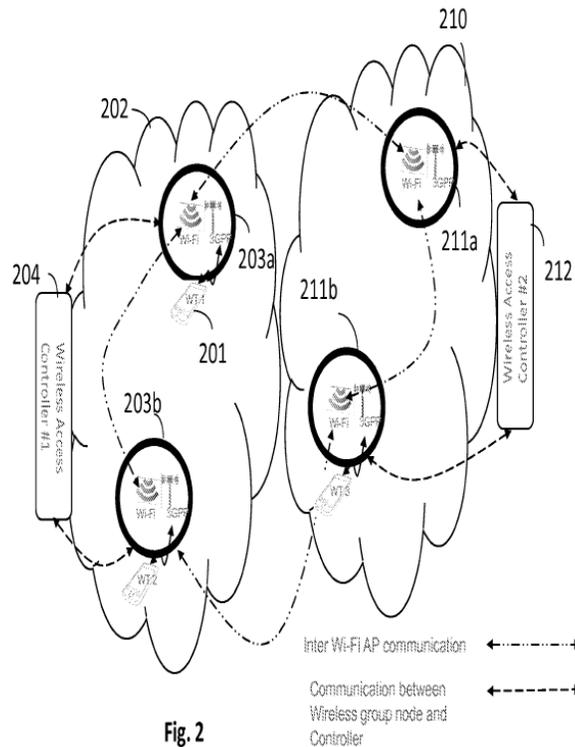


Figure 2 is a schematic of an integrated wireless system according to one embodiment of the present invention. Spec. 7:21–22. Figure 2 illustrates WT 201 operating in wireless zone 202 “on a 3GPP cellular network via a first integrated Wi-Fi and cellular network radio node 203a.” *Id.* at 12:7–8. “Other areas of the wireless zone 202 may be served by additional integrated wireless network nodes, such as node 203b.” *Id.* at 12:8–10. “If WT 201 moves into an adjacent wireless zone 210, its 3GPP cellular session will be transferred to a suitable node according to standard 3GPP hand-over protocols.” Spec. 12:22–23. “Zone 210 is similarly provided with one or more nodes 211a and 211b, providing integrated Wi-Fi and cellular network services and AC 212 to manage and monitor nodes 211a and 211b.” *Id.* at 12:23–26.

The Specification describes how to enable service continuity for WTs in the event of a cellular service failure by opening access to the Wi-Fi AP

of the network responsive to the cellular failure. Spec. 13:5–7. In response to a cellular radio failure, the Wi-Fi AP is able to convert from a mode that requires authentication or credentials to a mode that provides free, public Wi-Fi service to permit the WT to connect to the Wi-Fi AP and continue its data session. *Id.* at 13:5–14.

Independent claim 27, reproduced below, is illustrative:

27. A method, implemented in a Wi-Fi access point (AP), of providing Wi-Fi access to a wireless terminal (WT) experiencing a cellular service failure, the method comprising:

switching from a secured Wi-Fi access mode to an open Wi-Fi access mode, responsive to the cellular service failure, to provide open Wi-Fi access to the WT experiencing the cellular service failure;

sending a MAC address of the WT to other Wi-Fi APs to instruct each of the other Wi-Fi APs to allow the WT to access Wi-Fi.

App. Br. 17 (emphasis added).

B. The Rejections

1. Independent claims 27, 33, and 39 are rejected under 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. Final Act. 2.³

2. Claims 27–30, 33–36, and 39 are rejected under 35 U.S.C. § 103 as being unpatentable over Yang et al. (US 2014/0334306 A1; Nov. 13, 2014; hereinafter “Yang”), Chang (US 2014/0310024 A1; Oct. 16, 2014;

³ Section 112 rejections of claims 31, 32, 37, and 38 were withdrawn in the Advisory Action dated February 26, 2018. Section 112 rejections to claims 36–38 were also withdrawn. *See* Ans. 2.

hereinafter “Chang”), and Baker et al. (US 5,570,366; Oct. 29, 1996; hereinafter “Baker”). *Id.* at 5–7.

3. Claims 31 and 37 are rejected under 35 U.S.C. § 103 as being unpatentable over Yang, Chang, Baker, and Kandasamy (US 8,572,698 B1; Oct. 29, 2013; hereinafter “Kandasamy”). *Id.* at 8–7.

C. Issues

Appellant’s arguments present the following issues:

1. Does the Specification include sufficient written description of: (a) a “secured [Wi-Fi] access mode;” or (b) “switching” to an open mode from a secure mode? App. Br. 5–8.

2. Do Yang or Chang teach “switching from a secured Wi-Fi access mode to an open Wi-Fi access mode . . . to provide open Wi-Fi access to the WT experiencing the cellular service failure,” as recited in independent claim 27 and similarly in independent claims 33 and 39? *Id.* at 9–13.

II. ANALYSIS

We analyze claim 27 as illustrative on Issues 1 and 2.

Issue No. 1

The pertinent limitation of claim 27 is “switching from a secured Wi-Fi access mode to an open Wi-Fi access mode” (“switching term”), which is emphasized in Section I.A above. The Examiner finds that claims 27, 33, and 39 lack written description support in the Specification for the switching term, separately identifying “secured [Wi-Fi] access mode” and “switching from the open [Wi-Fi] access . . . to the secured [Wi-Fi] access mode.” Final Act. 2. The Examiner also finds that the words “secure” and “secured” of the switching term do not appear in the Specification. *Id.* at 3.

Appellant points to several portions of the Specification as supporting the switching term. App. Br. 5–6. Among other parts of the Specification, Appellant cites the following:

WT 201 in zone 202 will by default establish a data session via the 3GPP cellular network radio of node 203a since, as indicated above, WT 201 doesn't have open access to a Wi-Fi AP. Such access is normally only available if the user manually connects to the Wi-Fi service and enters the required Wi-Fi credentials for network authentication. If the AC 204 detects a 3GPP radio failure at node 203a, AC 204 will open access to the Wi-Fi AP of node 203a to convert it to a free public Wi-Fi service and thus to permit WT 201 to connect to the Wi-Fi AP of node 203a and continue its data session. . . . Therefore, even though the 3GPP radio of node 203a is unavailable, WT 201 is able to continue its data session via the Wi-Fi AP and the Wi-Fi AP takes over as a fall back for data services of WT 201.

Id. at 6 (quoting Spec. 13:1–12).

With respect to page 13 of the Specification quoted above, the Examiner focuses on a comparison of the words in the Specification with those used in the claim. *See, e.g.*, Ans. 5 (“There is no indication that the term ‘free public Wi-Fi’ refers to the claimed ‘open Wi-Fi access mode.’”). We disagree that the exact wording as used in the claim must be found in the Specification in order to satisfy the written description requirement. *See* Reply Br. 2 (citing *Eiselstein v. Frank*, 52 F.3d 1035, 1038 (Fed. Cir. 1995); *In re Wertheim*, 541 F.2d 257, 265 (CCPA 1976); MPEP § 1302.01 (stating that “exact terms need not be used in haec verba to satisfy the written description requirement”); MPEP § 2163.02 (stating “[t]he subject matter of the claim need not be described literally (i.e., using the same terms or in haec verba) in order for the disclosure to satisfy the description requirement”)). Appellant cites several sources as indicative that “numerous

uses of the terms open access and secure access in a manner consistent with the claims, Applicant's specification, and the record as a whole." Reply Br. 3 (citations omitted).

What is required by the written description requirement of § 112 first paragraph is the Specification must "clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (citing *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562–63 (Fed. Cir. 1991)). Further, the Specification must "reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.*

We agree with Appellant that

Applicant's discussion of an access point that converts from requiring authentication to instead being free and public (e.g., as described at Spec. page 13, lines 5-7) is understood by one of ordinary skill in the art as "switching from a secured Wi-Fi access mode to an open Wi-Fi access mode" as recited in claim 27 (and similarly for claims 33 and 39).

Reply Br. 4. We find that the Specification does establish that the inventors were in possession of the invention claimed, and the invention was described sufficiently for a person of ordinary skill to recognize the invention claimed. *See Ariad*, 598 F.3d at 1351.

Issue No. 2

The Examiner finds that Yang alone does not disclose "switch[ing] from a secured Wi-Fi access mode to an open Wi-Fi access mode." Final Act. 6. The Examiner cites to Chang as meeting the limitation, finding Chang discloses "one button . . . used for switching['] from a secured Wi-Fi

access mode ([0025] ‘a WiFi Protected setup (WPS) mode’) to an open Wi-Fi access mode ([0025] ‘a wireless access point mode’).” *Id.* (citing Chang ¶ 25) (emphasis omitted).

Appellant argues that

[a]ccording to the Wi-Fi Alliance, “Wi-Fi Protected Setup™ is an optional certification program based on technology designed to ease the setup of security-enabled Wi-Fi networks [and] supports methods (pushing a button . . .) that are familiar to most consumers to configure a network and **enable security**”.

App. Br. 11 (citing WI-FI ALLIANCE, *Wi-Fi Protected Setup*, <https://www.wi-fi.org/discover-wifi/wi-fi-protected-setup> (last visited Mar. 2, 2018)).⁴

Appellant contends Wi-Fi Protected Setup™ is “**precisely opposite** to the Office’s allegation that the push button provided for WPS is a mechanism for switching from secure **to open** access.” *Id.*

We are persuaded by Appellant. In sum, Chang teaches switching to a secure, or perhaps more secure, Wi-Fi Protected Setup™ mode. Claim 27’s switching term requires “switch[ing] from a secured Wi-Fi access mode *to an open Wi-Fi access mode*.” Emphasis added.⁵ For the reasons stated above, Chang does not teach the switching term limitation.

Independent claims 33 and 39 include the identically phrased switching term discussed above in connection with claim 27.

⁴ Although the cited URL of the Wi-Fi Alliance was not previously cited, the record on appeal may include materials to “understand the underlying technology.” MPEP § 1204.04 (2017). The citation is also a proper response to the argument made by the Examiner regarding Chang and understanding WPS.

⁵ We do not address Appellant’s remaining arguments because we find this argument dispositive.

Therefore, independent claims are not obvious over the cited art. The dependent claims rejected as being obvious, claims 28–31 and 34–37, are also not obvious over the cited art.

III. CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
27, 33, and 39	§ 112		X
27–31, 33–37, and 39	§ 103		X
Overall Outcome			X

The Examiner erred in rejecting claims 27–31, 33–37, and 39.

IV. DECISION

The Examiner’s decision rejecting claims 27–31, 33–37, and 39 is reversed.

REVERSED