



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/134,697	12/19/2013	Anders Larsson	P21844-US3	6165

27045 7590 09/23/2016
ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER

DEAN, RAYMOND S

ART UNIT	PAPER NUMBER
----------	--------------

2649

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/23/2016

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

kara.coffman@ericsson.com
kathryn.lopez@ericsson.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANDERS LARSSON, THOMAS WALLDEEN,
and MARTIN BÄCKSTRÖM

Appeal 2015-006941
Application 14/134,697
Technology Center 2600

Before JASON V. MORGAN, MELISSA A. HAAPALA, and
NABEEL U. KHAN, *Administrative Patent Judges*.

HAAPALA, *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 1–21. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

EXEMPLARY CLAIM

1. A method implemented by a restricted local access point for determining output power for communication with mobile stations in a cellular network, the method comprising:

scanning, by the restricted local access point, the cellular network for determining broadcasting channels used by surrounding wireless access points, wherein the restricted local access point comprises a radio circuit which scans the cellular network for determining broadcasting channels used by surrounding wireless access points, and wherein the radio circuit receives on frequencies corresponding to the broadcast channels used by the surrounding wireless access points;

selecting, by the restricted local access point, a broadcasting channel that receives a lowest disturbance from surrounding access points, wherein the radio circuit is ordered to broadcast on the selected broadcasting channel, and wherein the radio circuit is a chipset having a form of a chipset from a mobile station but is made to receive on frequencies corresponding to the broadcast channels used by the surrounding wireless access points and further made to broadcast on the selected broadcasting channel;

varying, by the restricted local access point, the output power of the selected broadcasting channel in order to provide a desired relation to the lowest disturbance;

determining, by the restricted local access point, whether a main disturbing access point is another restricted local access point or an unrestricted global access point, and in case the main disturbing access point is another restricted local access point then further performing by the first restricted local access point:

setting a threshold for one of a plurality of quantities of the desired relation, which the quantity in question is not allowed to pass;

varying the output power for providing the desired relation without said quantity passing said threshold; and,

selecting another channel if the desired relation cannot be obtained without the quantity passing the threshold; and

wherein the restricted local access point is one of following:

a Global System for Mobile Communications (GSM) restricted local access point; or

a Universal Mobile Telecommunications System (UMTS) restricted local access point.

REJECTIONS ON APPEAL

Claims 1–8, 10–12, and 14–21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Haartsen (US 5,794,157; Aug. 11, 1998), Batra (US 7,372,890 B2; May 13, 2008) (“Batra ’890”), Rainnie (US 7,672,695 B1; March 2, 2010), and Wong (US 2005/0255892 A1; Nov. 17, 2005). Ans. 2–21.¹

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Haartsen, Batra ’890, Rainnie, Wong, and Batra (US 2004/0218683 A1; Nov. 4, 2004) (“Batra ’683”). Ans. 22–23.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Haartsen, Batra ’890, Rainnie, Wong, and Paulraj (US 6,377,636 B1; Apr. 23, 2002). Ans. 22–23.

¹ By an Amendment after the Final Action, claims 22–26 were canceled and independent claims 1, 16, and 19 were amended to incorporate the canceled subject matter. Amendment 10 (Nov. 24, 2014). The Answer revises the rejections to account for the amendments. Clearly due to a typographical error, the Answer incorrectly omits claims 20 and 21 from the statement of the first rejection, but does include these claims in the body of the rejection. *See* Ans. 20–21.

ANALYSIS

Appellants contend the independent claims require a local access point that: both receives and broadcasts data on the same frequencies; and operates under a Global System for Mobile Communications (GSM) or Universal Mobile Telecommunications System (UMTS). App. Br. 9; Reply Br. 2. Appellants further contend that an ordinarily skilled artisan would not have, at the time of the present invention, viewed the Examiner's applied prior art as teaching or suggesting the above features because GSM and UMTS were understood as requiring access points to receive and broadcast data over different frequencies. App. Br. 9–11; Reply Br. 3. In Appellants' words:

[T]he claimed restricted local access point[,] per the GSM and UMTS standards[,] would normally have to receive on a different frequency band than it transmits on. . . .

. . . [T]he claimed GSM/UMTS restricted local access point has a specially configured chipset that has been made counter to the requirements of the GSM and UMTS standards to transmit and receive on the same frequency rather than to transmit and receive on different frequencies. Hence, the claimed restricted local access point is counter-intuitive (i.e., teaches away from the prior art) and therefore patentable

App. Br. 9–10; *see also* Reply Br. 3. Appellants also quote portions of the GSM and UMTS standards to support the assertion that both standards implement access points receiving and broadcasting data over different frequencies.² Appellants further argue that Wong teaches away from the claimed invention, contending:

² Appellants cite two websites as presenting the quoted portions of the GSM and UMTS standards. The websites are no longer available and thus have not been viewed by this panel. However, the quotations and citations have

Applicant notes that the Examiner has stated “Wong teaches, in Sections 0025, 0032, and 802.11 access point, which is the restricted local access point, that has GSM capability and thus having the capability to transmit and receive on different frequencies (see Final Office Action’s page 3, lines 1-8). Hence, Wong teaches away from claim 1.

App. Br. 11. Appellants’ arguments are not persuasive.

We agree with the Examiner that claim 1 does not specifically indicate that the restricted local access point transmits and receives on the same frequency. Adv. Act. 1. Rather, claim 1 requires the restricted access point *is made to receive on frequencies corresponding to the broadcast channels used by the surrounding wireless access points*, but does not require its own selected broadcast channel to be on the same frequencies used by the surrounding channels. The Examiner finds, and we agree, that Haartsen teaches the claimed restricted access point that receives on frequencies corresponding to broadcast channels used by the surrounding wireless access points. Final Act. 3–4; *see, e.g.*, Haartsen, col. 2, ll. 53–58, col. 6, ll. 16–20. We are not persuaded that either Wong or the cited portions of the GSM and UMTS standard teach away from combining the teachings of Haartsen with Wong’s teaching of a restricted access point with GSM capability. To teach away, a reference must actually “criticize, discredit, or otherwise discourage” investigation into the claimed solution. *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). Appellants have not shown that either the GSM and UMTS standards or Wong “criticize,

been presented twice before this appeal and twice for this appeal. Amendment 12 (Nov. 24, 2014); Amendment 15 (July 16, 2014); App. Br. 10; Reply Br. 3. Thus, for the sake of compact prosecution, we assume *arguendo* the quotations are accurate reproductions of the standards.

discredit, or otherwise discourage” investigation into restricted access points with GSM capability that are made to receive data on frequencies corresponding to the broadcast channels used by surrounding wireless access points. In particular, the cited sections of the GSM standard do not criticize or discourage investigation into a restricted access point with GSM capability receiving on additional frequencies (i.e., the broadcast frequencies used by surrounding access points) than that specified by the standard.³ Moreover, we observe that Haartsen explicitly indicates that its radio communication system—which receives on frequencies corresponding to the broadcast channels used by surrounding wireless access points—is compatible with existing cellular standards *like the Global System for Mobile Communication* (GSM). *See* Haartsen, col. 1, ll. 9–16.

For the reasons stated above, Appellants fail to persuade us of error in the rejection of independent claims 1, 16, and 19. Accordingly, we sustain the 35 U.S.C. § 103(a) rejections of claims 1, 16, and 19 and their dependent claims 2–15, 17, 18, 20, and 21, for which Appellants do not present separate arguments for patentability (*see* App. Br. 12).

³ We further observe that the limited excerpt of the GSM standard states only that the “Standard or primary GSM 900 Band” operates at the specified frequencies. *See* App. Br. 10. We are unable to ascertain from the limited excerpt of the GSM standard whether or not the entire GSM standard is so limited and/or whether other standards are used for restricted access points.

DECISION

We affirm the Examiner's decision to reject claims 1–21.

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. § 41.50(f).

AFFIRMED