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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/015,301	09/22/2023	7058040	EMP0902-RE	4883

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EXAMINER
HENEGHAN, MATTHEW E

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
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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.

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EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/015,301* .

PATENT UNDER REEXAMINATION *7058040* .

ART UNIT *3992* .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination	**Control No.** 90/015,301	**Patent Under Reexamination** 7058040	
	Examiner MATTHEW E HENEGHAN	**Art Unit** 3992	**AIA (FITF) Status** No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

a. ☑ Responsive to the communication(s) filed on 20 November 2023.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

b. ☐ This action is made FINAL.

c. ☑ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).** If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☑ Notice of References Cited by Examiner, PTO-892.
2. ☐ Information Disclosure Statement, PTO/SB/08.
3. ☐ Interview Summary, PTO-474.
4. ☐ _____.

Part II SUMMARY OF ACTION

1a. ☑ Claims 1-6 and 16 are subject to reexamination.

1b. ☑ Claims 7-15 are not subject to reexamination.

2. ☐ Claims _____ have been canceled in the present reexamination proceeding.

3. ☐ Claims _____ are patentable and/or confirmed.

4. ☑ Claims 1-6 and 16 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ The drawings, filed on _____ are acceptable.

7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.

8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. 119(a)-(d) or (f).

   a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have

   1 ☐ been received.

   2 ☐ not been received.

   3 ☐ been filed in Application No. _____.

   4 ☐ been filed in reexamination Control No. _____.

   5 ☐ been received by the International Bureau in PCT application No. _____.

   * See the attached detailed Office action for a list of the certified copies not received.

9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.

10. ☐ Other: _____

cc: Requester (if third party requester)

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present reexamination is being examined under the pre-AIA first to invent provisions.

In the event the determination of the status of the proceeding as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis (i.e., changing from AIA to pre-AIA) for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Reexamination

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 7,058,040 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

As stated in the Order Granting *Ex Parte* Reexamination mailed by the Office on 20 November 2023, a substantial new question of patentability affecting claims 1-6 and 16 of United States Patent Number 7,058,040 (hereinafter the '040 patent) has been raised by the request for *ex parte* reexamination. Claims 1-6 and 16 have been examined.

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

The term of the '040 patent expired on or about 2 March 2024. Claim construction shall be pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (words of a claim "are generally given their ordinary and customary meaning" as understood by a person of ordinary skill in the art in question at the time of the invention, see *Ex parte Papst-Motoren*, 1 USPQ2d 1655 (Bd. Pat. App. & Inter. 1986)). No amendments, other than for the cancellation of claims, will be allowed. See MPEP 2258(G) and 37 CFR 1.530(j).

Claim Construction

Claim 6 is phrased in a manner that is difficult to construct. In determining the proper scope of that claim, a review of the prosecution history shows that it appears to have been accidentally modified as a result of a typographical error to claim 7 in the Amendment filed by the Applicant on 5 December 2005. Consequently, this claim is being interpreted in a manner consistent with the previous version of that claim, as recited in the Amendment filed on 5 August 2005 (edited for renumbering):

"The method of claim 5, further comprising instructing transceivers for the first and second media to communicate only in their newly allocated time slots."

References

The following references supplied for this proceeding by the Third Party Requester are being used in the grounds of rejection in this Office Action:

U.S. Patent No.5,729,534 to Jokinen et al. (hereinafter Jokinen)

U.S. Patent No. 7,039,031 to Joerssen et al. (hereinafter Joerssen)[1]

U.S. Patent No. 6,600,726 to Nevo et al. (hereinafter Nevo)

[1] U.S. Patent No. 7,039,031 to Joerssen et al. qualifies as prior art under 35 U.S.C. 102(e). Patent Owner is notified that should the Patent Owner attempt to overcome this reference by establishing an earlier date of invention, the WIPO version of this patent, Patent Application Publication No. WO99/29126, which qualifies as prior art under 35 U.S.C. 102(b), may be substituted for it without creating a new ground of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Jokinen.

Jokinen discloses a method for data transmission over first and second media that overlap in frequency (transmissions divided between circuit switched and packet data transmission, see Abstract), comprising:

computing one or more time division multiple access (TDMA) time-slot channels (Jokinen's disclosure is specifically directed to TDMA, see column 1, lines 6-12) to be shared between the first and second media for data transmission (the channels are shared between the circuit switched and data packet services, see Abstract and column 4, lines 9-20);

allocating one or more time-slot channels to the first medium for data transmission (allocation for packet service, see column 4, lines 9-20);

allocating one or more of the remaining time-slot channels to the second medium for data transmission (allocation of circuit switched service, see column 4, lines 9-20); and dynamically adjusting a number of time-slot channels assigned to one of the first and second media during the data transmission to remain within limits of a desired level of service (time slots may be dynamically readjusted in response to utilization thresholds being reached and a service level weakening, see column 5, line 60 to column 6, line 3; also see claims 1 and 7).

Regarding claim 4, Jokinen states that a desired level of service is determined on the basis of a traffic measurement result over a specified time period (see claim 9).

Claim(s) 1, 3, 4, and 16 are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Joerssen.

As per claim 1, Joerssen discloses a method for data transmission over first and second media that overlap in frequency (operates in mobile and LPRF networks in a manner that could cause interference, i.e. same frequency, see column 6, lines 39-56; frequency is 2.4 GHz, see column 2, lines 61-62), comprising:

computing one or more time division multiple access (TDMA) (see column 5, lines 26) time-slot channels to be shared between the first and second media for data transmission (slot length is chosen so as to have a number of time slots fit into one time frame; the number of LPRF slots is specified, see column 5, lines 42-54; slots not assigned to LPRF are allocated to mobile networks, such as GSM, see column 6, line 57 to column 7, line 8 and figures 7-10);

allocating one or more time-slot channels to the first medium for data transmission (slot length is chosen so as to have a number of time slots fit into one time frame; the number of LPRF slots is specified, see column 5, lines 42-54);

allocating one or more of the remaining time-slot channels to the second medium for data transmission (slots not assigned to LPRF are allocated to mobile networks, such as GSM, see column 6, line 57 to column 7, line 8 and figures 7-10); and

dynamically adjusting a number of time-slot channels assigned to one of the first and second media during the data transmission to remain within limits of a desired level of service (slot length may be varied in the LPRF network, which requires dynamic adjustment of the time slots, see column 6, lines 23-27; communication rates in the LPRF network may vary, depending on the number of devices in the LPRF network, see column 7, lines 12-15; allocation patterns are variable being controlled by second transceiver means, see claim 10, which is essentially the same as claim 10 of WO99/29126).

As per claim 3, Joerssen specifically discloses Bluetooth as a type of LRPF for such an invention (see column 1, lines 28-33).

As per claim 4, the desired level of service is determined for the LRPF during the data transmission (see communication rates in the LPRF network may vary, depending on the number of devices in the LPRF network, see column 7, lines 12-15).

As per claim 16, the respective transceivers (first and second transceivers, see abstract) are only disclosed as communicating in their respective allocated channels.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, and 16 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Jokinen.

Regarding claim 5, Jokinen further discloses determining available time slots (monitoring for free channels for reallocation, see column 4, lines 12-17 and column 5, lines 8-16); detecting the medium that fails to meet said desired level of service (time slots may be dynamically readjusted in response to utilization thresholds being reached and a service level weakening, see column 5, line 60 to column 6, line 3; also see claims 1 and 7); allocating the medium to a configuration having additional time slots (see column 5, lines 60-67).

Although Jokinen discloses transmitting a channel assignment message including information on the allocated configuration with the additional time slots (see column 2, lines 10-16 and column 4, lines 17-20) and the base station keeps the mobile station informed of the division of radio capacity (see column 5, lines 29-33), Jokinen does not explicitly state that this is performed as part of a dynamic adjustment.

Official notice is given that it was well-known in the art for nodes in a network to inform other nodes of configuration changes, in order to maintain synchronization.

Therefore it would have been obvious to one of ordinary skill in the art to have implemented the invention of Jokinen in such a manner that channel assignment messages would be transmitted in the process of dynamic channel reallocation, as was well-known in the art, in order to maintain synchronization.

Regarding claims 6 and 16, the use of transceivers for radio communication is implicit through out the art. Although Jokinen does not explicitly state that the transceivers are instructed to communicate according to their newly allocated time-slots, and only in those time-slots, a failure to do so would result in the loss of synchronization with the network. These limitations are therefore implicit in the invention of claim 5.

Claims 2 and 3 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Joerssen in view of Nevo.

Although Joerssen discloses several types of wireless networks that could be used together with LPRF (see column 4, lines 62-64), Joerssen does not specifically specify an 802.11 network, or the combination of Bluetooth (an LPRF network) and 802.11. Nevo discloses a wireless device for using and controlling two networks. Nevo specifically points out that the two networks could be Bluetooth and 802.11 (see abstract). Nevo further gives an example wherein a notebook needs to simultaneously communicate with Bluetooth and 802.11 networks (see column 1, lines 40-50). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Joerssen to work with Bluetooth and 802.11 as the two wireless networks, so that devices, such as notebooks, could use both simultaneously.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW E HENEGHAN whose telephone number is (571)272-3834. The examiner can normally be reached M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Fuelling can be reached on (571)270-1367. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: https://patentcenter.uspto.gov. Visit https://www.uspto.gov/patents/apply/patent-center for more information about Patent Center and https://www.uspto.gov/patents/docx for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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