



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.
90/019,702	10/14/2024	RE47720	UST720	8522

92045 7590 12/05/2024
The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER

HENEGHAN, MATTHEW E

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

3992

MAIL DATE	DELIVERY MODE
-----------	---------------

12/05/2024

PAPER

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.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

Unified Patents, LLC
4445 Willard Ave.
Suite 600
Chevy Chase, MD 20815

***EX PARTE* REEXAMINATION COMMUNICATION TRANSMITTAL FORM**

REEXAMINATION CONTROL NO. 90/019,702 .

PATENT UNDER REEXAMINATION RE47720 .

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)).

Order Granting Request For Ex Parte Reexamination	Control No. 90/019,702	Patent Under Reexamination RE47720	
	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--

The request for *ex parte* reexamination filed 10/14/2024 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a) ☐ PTO-892, b) ☒ PTO/SB/08, c) ☐ Other: _____

1. ☒ The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

		/MATTHEW E HENEGHAN/ Primary Examiner, Art Unit 3992
--	--	---

cc:Requester (if third party requester)

ORDER GRANTING EX PARTE REEXAMINATION

Ex Parte reexamination has been requested by a Third Party, Unified Patents, LLC, for claims 53-56, 64-66, 70, 76, 81-84, and 87-94 of U.S. Patent No. RE47,720 to Burchfiel, which is a reissue of U.S. Patent No. 7,483,711.

In view of the surrender of original Patent No. 7,483,711 (hereinafter the '711 patent) and the granting of Reissue Patent No. RE47,720 (hereinafter the '720 reissue) which issued on 5 November 2019, all subsequent proceedings in this reexamination will be based on the reissue patent claims.

A substantial new question of patentability affecting claims 53-56, 64-66, 70, 76, 81-84, and 87-94 of the '720 reissue is raised by the request for *ex parte* 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 the '711 patent and/or the '720 reissue 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.

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

Art Unit: 3992

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).

References

The following references have been supplied by the Third Party Requester for proposed grounds of rejection:

U.S. Patent No. 6,628,673 to McFarland et al. (hereinafter McFarland)

U.S. Patent No. 6,745,012 to Ton et al. (hereinafter Ton)

U.S. Patent Application Publication No. 2004/0095907 to Agee et al. (hereinafter Agee)

None of the references has been cited in a previous examination of this patent or in a final court judgement.

Proposed Ground of Rejection

The Third Party Requester has proposed that claims 53-56, 64-66, 70, 76, 81-84, and 87-94 should be rejected under 35 U.S.C. 103 over Agee in view of McFarland further in view of Ton.

Prosecution History

The '720 reissue is a reissue of the '711 patent.

The '711 patent was original filed as Application No. 10/689,763 on 22 October 2003 (hereinafter the '763 application), claiming priority to U.S. Provisional Patent Application No. 60/420,930, filed on 24 October 2002.

The '763 application was filed with claims 1-97. In response to a restriction requirement mailed by the Office on 10 October 2007, Applicant, in a response filed on 19 November 2007, elected to prosecute claims 1-25.

In a non-final rejection mailed by the Office on 26 February 2008, claims 17, 18, 24, and 25 were rejected under 35 U.S.C. 112, second paragraph and claims 1-16 and 19-23 were allowed.

In indicating the allowable subject matter, the Examiner stated:

“None of cited prior arts of record discloses a method for managing interference in a radio communication network, comprising the steps of: receiving at a first node in the radio communication network an instruction transmitted from a second node in the radio communication network to avoid using a plurality of frequencies to transmit to the second node, wherein the instruction is generated as specified in claim 1; filtering a transmission signal to remove power from the transmission signal at each frequency in the plurality of frequencies; and transmitting the transmission signal to the second node as specified in claim 21.”

Applicant filed an amendment on 29 May 2008, cancelling claims 17, 18, 24, and 25.

The Office mailed a Notice of Allowance on 22 September 2008. The claims were allowed and renumbered 1-21.

The Patent Owner filed for a reissue of the '711 patent on 16 February 2018, adding claims 22-42 in a preliminary amendment.

In a non-final rejection mailed by the Office on 26 December 2018, claims 19-42 were rejected under 35 U.S.C. 112, second paragraph. The claims were further rejected over under 35 U.S.C. 251 over an improper declaration. Claim 19 was also rejected under 35 U.S.C. 102 over U.S. Patent No. 6,115,408 to Gendel et al. (hereinafter Gendel). Claims 1-18, 20, and 22 were further indicated as allowable.

In a response filed on 17 January 2019, claims 19, 20, 22-37, and 39-42 were amended; claims 38 was cancelled; and claims 43-98 were added.

In a final rejection mailed by the Office on 20 May 2019, claims 19, 22-27, 39, 42, and 84-98 were rejected under 35 U.S.C. 112, second paragraph and claims 83 and 91 were rejected under 35 U.S.C. 112, fourth paragraph. All claims were indicated as otherwise containing allowable subject matter. Specifically, regarding claim 40, which corresponds to the only independent claim subject to this reexamination proceeding, the Examiner stated:

“the prior art of record does not anticipate or render obvious the limitation of ‘wherein the transmission signal is a first transmission signal that is transmitted using a first frequency and an

802.11-based orthogonal frequency-division multiplexing (OFDM) protocol via at least one directional antenna of a plurality of directional antennas, using a first power that is based on at least one of the one or more data structures; and further comprising: transmitting, using a second frequency and the 802.11-based OFDM protocol, a second transmission signal, simultaneously with the first transmission signal, to the third node, using a second power that is based on at least one of the one or more data structures' and 'the at least one of the one or more data structures' as recited in the claim."

The Applicant filed an after-final amendment on 12 June 2019, leading to a Notice of Allowance being mailed by the Office on 8 July 2019, in which the claims were renumbered. Most importantly, claim 40 was renumbered to claim 53, which is the independent claim for which reexamination has been requested.

Claims of the '720 Reissue

The following is the only independent claim of the '720 reissue for which reexamination has been requested:

Claim 53: A method for managing interference in a radio communications network,
comprising the steps of:

receiving at a first node in the radio communications network an instruction transmitted
from a second node in the radio communications network to avoid using a
plurality of frequencies to transmit to the second node;

filtering a transmission signal to remove power from the transmission signal at each frequency in the plurality of frequencies to be avoided;

transmitting the filtered transmission signal to the second node; receiving a compressed first feedback from the second node that characterizes receipt of a first signal sent from the first node to the second node;

receiving a compressed second feedback from a third node that characterizes receipt of a second signal sent from the first node to the third node;

decompressing the compressed first feedback resulting in a decompressed first feedback; and

decompressing the compressed second feedback resulting in a decompressed second feedback;

wherein the filtered transmission signal is a filtered first transmission signal that is transmitted to the second node using an 802.11-based orthogonal frequency-division multiplexing (OFDM) protocol via at least one antenna of a plurality of antennas, using a first power that is based on the decompressed first feedback; and further comprising:

transmitting, using the 802.11-based OFDM protocol, a filtered second transmission signal, simultaneously with the filtered first transmission signal, to the third node using a second power that is based on the decompressed second feedback.

Note the italicized portion of this claim above is what most closely corresponds to the limitations that were pointed to in the Examiner's Reasons for Allowance (see 15/898,404, Notice of Allowability, mailed 8 July 2019).

Substantial New Questions of Patentability (SNQ)

Agee in view of McFarland further in view of Ton

Agee discloses a method and apparatus for optimizing wireless networks, including the avoidance of interference. Agee discloses the filtering of a transmission signal to allow different power levels to different channels (see paragraphs 179 and 180, also fig. 25 and paragraph 274) based on feedback (see paragraph 172) by use of a band-pass filter (which masks out certain frequencies) using OFDM (see paragraphs 270-271) in a system having nodes with multiple antennae (see paragraph 173), while McFarland teaches the removing of power from a plurality of frequencies to be avoided (due to the changing or reallocating of channels, see column 5, lines 49-57), while suggesting the use of OFDM based on IEEE 802.11 (see column 7, lines 10-21). Ton discloses the use of data compression in networks (see column 3, lines 37-43). These aspects were not collectively taught by the prior art of record. They are in fields of endeavor that are sufficiently analogous that a reasonable examiner would find these, if they could be combined into a single teaching, to be important in determining the patentability of the claims. It is therefore AGREED that Agee in view of McFarland further in view of Ton establish a SNQ for claims 53-56, 64-66, 70, 76, 81-84, and 87-94.

35 U.S.C. 325(d)

A review of the post grant history for the '720 reissue indicates that there have been no other Office post grant challenges involving the patent (Reexamination Proceedings or *Inter Partes* Review, Post Grant Review, Covered Business Method trials). Accordingly, a determination of whether to exercise discretion to reject the request pursuant to 35 USC 325(d) is not applicable.

Conclusion

All correspondence relating to this *ex parte* reexamination proceeding should be directed:

Electronically: Registered users may submit via Patent Center at
<https://patentcenter.uspto.gov/>.

By Mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand: Customer Service Window
Knox Building
501 Dulany Street
Alexandria, VA 22314

For Patent Center transmissions, 37 CFR 1.8(a)(1)(i)(C) and (ii) states that correspondence (except for a request for reexamination and a corrected or replacement request for reexamination) will be considered timely filed if (a) it is transmitted via the USPTO patent electronic filing system in accordance with 37 CFR 1.6(a)(4), and (b) includes a certificate of transmission for each piece of correspondence stating the date of transmission, which is prior to the expiration of the set period of time in the Office action.

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.

/MATTHEW E HENEGHAN/
Primary Examiner, Art Unit 3992

Conferees:
/Ovidio Escalante/
Primary Examiner, Art Unit 3992

/MICHAEL FUELLING/
Supervisory Patent Examiner, Art Unit 3992