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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/013,124	01/21/2014	6,438,180 B1	ABYZ-501	1041

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K&L GATES LLP-Pittsburgh
210 SIXTH AVENUE
PITTSBURGH, PA 15222-2613

EXAMINER

NGUYEN, LINH M

ART UNIT	PAPER NUMBER
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3992

MAIL DATE	DELIVERY MODE
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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.



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(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

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EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/013,124.

PATENT NO. 6,438,180 B1 E.

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. 90/013,124	Patent Under Reexamination 6,438,180 B1 E	
	Examiner Linh M. Nguyen	Art Unit 3992	AIA (First Inventor to File) 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 _____.
 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 _____ 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. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 3. <input type="checkbox"/> Interview Summary, PTO-474. |
| 2. <input type="checkbox"/> Information Disclosure Statement, PTO/SB/08. | 4. <input type="checkbox"/> _____. |

Part II SUMMARY OF ACTION

- 1a. Claims 1 and 2 are subject to reexamination.
- 1b. Claims 3-27 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 and 2 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)

NON-FINAL OFFICE ACTION

This is an *ex parte* reexamination of claims 1 and 2 of United States Patent Number 6,438,180 to Kavcic et al. (hereinafter "the '180 patent"), entitled "SOFT AND HARD SEQUENCE DETECTION IN ISI MEMORY CHANNELS". Since requester did not request reexamination of claims 3-27 and did not assert the existence of a substantial new question of patentability (SNQ) for such claims, such claims will not be reexamined. See MPEP 2243.

References Cited in the Request

The Request asserts that the following documents raise SNQs of the '180 patent:

Zeng, W., *Effective Detection Schemes for Magnetic Recording Channels with Severe Nonlinearities and Media Noise*, Thesis, University of Minnesota (October 1994) ("Zeng").

Lee, I., *Channel Equalization Techniques Applied to Digital Storage and Transmission Systems*, Thesis, Stanford University (June 1995) ("Lee").

U.S. Patent No. 6,104,766, filed on September 17, 1996 and issued on August 15, 2000, to Coker ("Coker").

Requester's Proposed Rejections/SNQs

1. A substantial new question of patentability as to claims 1 and 2 is raised by Zeng.
2. A substantial new question of patentability as to claims 1 and 2 is raised by Zeng in view of Lee.
3. A substantial new question of patentability as to claims 1 and 2 is raised by Zeng in view of Coker.

Claim Rejections - 35 USC §§ 102 & 103

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.

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 of this title, 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.

1. Claims 1 and 2 of the '180 patent are rejected under pre-AIA 35 U.S.C. § 102(b) as being anticipated by Zeng.

This rejection was proposed by the third party requester in the request for reexamination, and it is accepted for the reasons set forth in the request for reexamination as shown in the explanation at pp. 16-26 and the item-matching at pp. 27-33 of the Request, which is hereby incorporated by reference as the rejection.

2. Claims 1 and 2 of the '180 patent are rejected under pre-AIA 35 U.S.C. §103(a) as being obvious over Zeng in view of Lee.

This rejection was proposed by the third party requester in the request for reexamination, and it is accepted for the reasons set forth in the request for reexamination as shown in the explanation at pp. 33-38 and the item-matching at pp. 39-46 of the Request, which is hereby incorporated by reference as the rejection.

3. Claims 1 and 2 of the '180 patent are ***not*** rejected under pre-AIA 35 U.S.C. §103(a) as being obvious over Zeng in view of Coker.

The Request additionally proposed that claims 1-2 are obvious over Zeng in view of Coker. Requester stated that Coker's branch metric functions include a time-dependent parameter, Pi (*see* Equation (3), col.5 1.45). Coker expressly states that parameter Pi can be adapted in order to account for noise with statistical properties that vary from one time instance to another. *See* col.7 1.57, col.8 1.29. The examiner finds Coker teaches no more than Lee in regards to the claims, combining Coker to Zeng just like Lee to Zeng to add an explicitly time-

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dependent parameter; therefore, any rejection based on Zeng in view of Coker is merely cumulative to the rejection presented herein. Thus, this rejection is **not accepted**. The examiner reserves the right to use these references or present such rejections should patent owner amend the claims, argue dependent claims, etc.

Conclusion

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced.

Patent owner is reminded that any proposed amendment to the specification and/or claims in this proceeding must comply with 37 CFR 1.530(d)-(j).

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 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

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base patent throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286. The third party requester is similarly apprised of the ability to disclose such proceedings.

Correspondence

All correspondence relating to this *inter partes* reexamination proceeding should be directed:

By Mail to: Mail Stop *Inter Partes* Reexam

Attn: 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
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Registered users of EFS-Web may alternatively submit such correspondence via the electronic filing system EFS-Web, at <https://efs.uspto.gov/efile/myportal/efs-registered.html>. EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are “soft scanned” (i.e., electronically uploaded) directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submissions after

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the “soft scanning” process is complete.

Any inquiry concerning this communication or earlier communications from the examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

/Linh M. Nguyen/
Primary Examiner, Art Unit 3992

Conferees:

/James Menefee/
Primary Examiner AU 3992

/Andrew J. Fischer/
Supervisory Patent Examiner, Art Unit 3992