

Attorney Docket No. 020859-010810US

Form PTO-1595 (Rev. 11/08)
OMB No. 0651-0027 (exp. 12/31/2008)U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office**RECORDATION FORM COVER SHEET
PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)Anxiao Andrew Jiang
Robert Mateescu
Moshe Schwartz
Jehoshua BruckAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No**2. Name and address of receiving party(ies)**Name: California Institute of Technology

Internal Address: _____

Street Address: 1200 East California Blvd.City: PasadenaState: CACountry: US Zip: 91125Additional name(s) & address(es) attached? ☐ Yes ☒ No**3. Nature of conveyance/Execution Date(s):**Execution Date(s) December 9, 12, 15, 2008 and
January 20, 2009

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

4. Application or patent number(s):☐ This document is being filed together with a new application.

A. Patent Application No.(s)

U.S. Patent Application Serial No.
12/275,186 filed November 20, 2008

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No**5. Name and address to whom correspondence concerning document should be mailed:**Name: David A. Hall

Internal Address: _____

TOWNSEND AND TOWNSEND AND CREW LLPStreet Address: Two Embarcadero Center,
Eighth FloorCity: San FranciscoState: California Zip: 94111-3834Phone Number: (415) 576-0200Fax Number: (415) 576-0300Email Address: docket@townsend.com**6. Total number of applications and patents involved:** 1**7. Total fee (37 CFR 1.21(h) & 3.41) \$** 40.00

- ☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment InformationAccount Number 20-1430Authorized User Name Townsend andTownsend and Crew LLP**9. Signature:**David A. Hall
Signature

David A. Hall

Name of Person Signing

Atty. Reg. No. 32,233

Total number of pages including cover
sheet, attachments, and documents:

6

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450**PATENT**

700398370

REEL: 022206 FRAME: 0660

CH \$40.00 201430 12276186

Attorney Docket No.: 020859-010810US
Client Reference No.: CIT-5064

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, **Anxiao Jiang; Robert Mateescu; Moshe Schwartz; and Jehoshua Bruck**, all c/o California Institute of Technology, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: **RANK MODULATION FOR MEMORY DEVICES**

Date(s) of execution of Declaration:

Filing Date: **November 20, 2008**

Application No.: **12/275,186; and**

WHEREAS, **California Institute of Technology**, a corporation of the state of California, located at 1200 East California Blvd., Pasadena, CA 91125, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

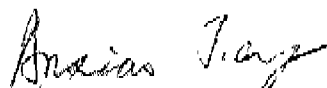
For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

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Attorney Docket No.: 020859-010810US
Page 2

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 12/15/2008



Anxiao Jiang

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

Dated: _____

Robert Mateescu

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

Dated: _____

Moshe Schwartz

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

Dated: _____

Jehoshua Bruck

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

61707286 v1

Page 2 of 2

Assignment
Attorney Docket No.: 020859-010810US
Page 2

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: _____

Anxiao Andrew Jiang

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

Dated: 01/20/09

Robert Mateescu

SIGNATURE WITNESSED BY:

Dated: 01/20/09

Signature of Witness

Printed Name

Dated: _____

Moshe Schwartz

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

Dated: _____

Jehoshua Bruck

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

61707286 v1

Page 2 of 2

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REEL: 022206 FRAME: 0663

Assignment
Attorney Docket No.: 020859-010810US
Page 2

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: _____

Anxiao Andrew Jiang

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

Dated: _____

Robert Mateescu

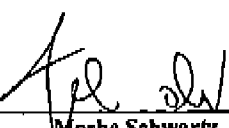
SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness


Printed Name

Dated: 12/9/2008


Moshe Schwartz

SIGNATURE WITNESSED BY:

Dated: 12/9/2008


Signature of Witness

SIVAN SABATO

Printed Name

Dated: _____

Jehoshua Bruck

SIGNATURE WITNESSED BY:

Dated: _____

Signature of Witness

Printed Name

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PATENT
REEL: 022206 FRAME: 0664

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Attorney Docket No.: 020859-010810US
Page 2

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: _____

SIGNATURE WITNESSED BY:

Dated: _____

Anxiao Andrew Jiang

Signature of Witness

Printed Name

Dated: _____

SIGNATURE WITNESSED BY:

Dated: _____

Robert Mateescu

Signature of Witness

Printed Name

Dated: _____

SIGNATURE WITNESSED BY:

Dated: _____

Moshe Schwartz

Signature of Witness

Printed Name

Dated: 12/12/08

SIGNATURE WITNESSED BY:

Dated: 12/12/08

[Signature]
Jehoshua Bruck

[Signature]
Signature of Witness

PATAMA TIWEESUP
Printed Name

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and
TOWNSEND
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FACSIMILE COVER SHEET

Date: February 4, 2009	Client & Matter Number: 020859-010810US	No. Pages (including this one): 8
To: Assignment Division U.S. Patent & Trademark Office	At Fax Number: 571-273-0140	Confirmation Phone Number:
From: David A. Hall		(4015)

Message:

Please record the attached Assignment document in connection with U S. Patent Application Serial No. **12/275,186** filed November 20, 2008 and fax to us the confirmation information. Please contact us with any questions.

Thank you

Original Will:	<input type="checkbox"/>	BE SENT BY MAIL	<input type="checkbox"/>	BE SENT BY COURIER	<input type="checkbox"/>	BE SENT BY MESSENGER	<input checked="" type="checkbox"/>	NOT BE SENT
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