Attorney Docket No. 020859-005210US

Form PTO-1595 (Rev. 06/04) OMB No. 0651-0027 (exp. 6/30/2005) U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

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| To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below. | |
| Name of conveying party(les)/Execution Date(s): James Buckwalter | 2. Name and address of receiving party(les) Name: California Institute of Technology Internal Address: |
| Execution Date(s)3/21/05 & 3/22/05 Additional name(s) of conveying party(ies) attached? | Street Address: 1200 E. California Blvd. City: Pasadena State: CA Country: US Zip: 91125 Additional name(s) & address(es) attached? Yes No document is being filed together with a new application. B. Patent No.(s) |
| l Additional numbers attached? ☐ Yes ☑No | |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: |
| Name: Raymond B. Hom Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor | 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) |
| City: San Francisco State: California Zip: 94111-3834 Phone Number: (415) 576-0200 | 8. Payment Information a. Credit Card Last 4 numbers Expiration Date b. Deposit Account Number 20-1430 |
| Fax Number: (415) 576-0300 Email Address: rbh @townsend.com | Authorized User Name Townsend and Townsend and Crew LLP |
| 9. Signature: Signature Raymond B. Hom Name of Person Signing Atty. Reg. No. 4 | Date Total number of pages including cover sheet, attachments, and documents: |

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 Additional name(s) of conveying party(ies): (Continued from Page 1)

Seyed Ali Hajimiri Behnam Analui

- Additional name(s) and address(es) of receiving party(ies): (Continued from Page 1)
- Additional application number(s) or patent number(s): (Continued from Page 1)
 - A. Patent Application No.(s)

B. Patent No.(s)

60453571 v1

Attorney Docket No.: 020859-005210US Client Reference No.: 4013

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, James Buckwalter of 202 S. Parkwood Ave., Pasadena, CA 91107; Seyed Ali Hajimiri of 425 San Palo Pl., Pasadena, CA 91107; Behnam Analui of 420 S. Oak Knoll Ave., Apt. 12, Pasadena, CA 91101 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: DETERMINISTIC JITTER EQUALIZER

Date(s) of execution of Declaration: March 21 & March 22, 2005

Filing Date: December 14, 2004

Application No.: 11/012,857 ; and

WHEREAS, California Institute of Technology in Pasadeua, California, located at 1200 E. 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 Assignce'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.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, Eighth Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

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

Dated: 0.3/4/05

James Buckwalter

Dated: /)

Formed Adi Hotismini

Dated: <u>03/21/05</u>

RECORDED: 03/29/2005

<u> AMERICA YA A</u>

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PATENT REEL: 015968 FRAME: 0159