

ASSIGNMENT RECORDATION FORM COVER SHEET *Patents Only*

To: Commissioner for Patents:

Date: June 27, 2006

Attorney Docket No. 5649-1849

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

[1.] Seong-Jin Jang
[2.] Jeong-Don Lim

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Samsung Electronics Co., Ltd.
416 Maetan-dong, Ycongong-gu
Suwon-si, Gyeonggi-do
Republic of Korea

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment
☐ Merger
☐ Security Agreement
☐ Change of Name
☒ Other Please Correctly spell first inventor's name
Seong-Jin Jang

4. Application Serial No. _____ Patent No. _____

If this document is being filed together with a new application, the execution date of the application is:

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

David C. Hall
Myers Bigel Sibley & Sajovec
P. O. Box 37428
Raleigh NC 27627

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$40.00
☐ Enclosed
☒ Authorized to be charged to deposit account

8. Deposit account number: 50-0220

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9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David C. Hall Reg. No. 38,904

Name of Person Signing



Signature

June 27, 2006

Date

Total number of pages including cover sheet, attachments and document: 9

CERTIFICATION OF FACSIMILE TRANSMISSION UNDER 37 CFR § 1.8

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Jessica French

CH \$40.00 500220 11369341

03-15-2006

ASSIGNMENT RECORDATION FORM (



103198342

To: Commissioner for Patents;

Date: March 7, 2006

Attorney Docket No. 5649-1849

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1. Name of conveying party(ies):

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[2.] Jeong-Don Lim

Additional name(s) of conveying party(ies) attached? Yes ☒ No

2. Name and address of receiving party(ies):

Samsung Electronics Co., Ltd.
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Suwon-si, Gyeonggi-do
Republic of Korea

113277 U.S. PTO
11/369341

030706

3. Nature of conveyance:

☒ Assignment
☐ Merger
☐ Security Agreement
☐ Change of Name
☐ Other

Execution Date: [1.] February 15, 2006; [2.] February 15, 2006

Additional name(s) & address(es) attached? Yes ☒ No

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Additional numbers attached? Yes ☒ No

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David C. Hall Reg. No. 38,904

Name of Person Signing

Signature

March 7, 2006

Date

Total number of pages including cover sheet, attachments and document: 4

CERTIFICATE OF MAILING UNDER 37 CFR § 1.10

"Express Mail" label number: EV 769242045 US

Date of Deposit: March 7, 2006

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Traci A. Brown

03/09/2006 KBETEM01 00000010 11369341

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Attorney Docket 5649-1849

ASSIGNMENT

THIS ASSIGNMENT, made by us, **Seong-Jin Jang**, citizen of the Republic of Korea, residing at **Areum Maeul Hyosung Aptl., 706-1101, Inae-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-796, Republic of Korea**; and **Jeong-Don Lim**, citizen of the Republic of Korea, residing at **#104-1303, 224, Gusan-dong, Eunpyeong-gu, Seoul 122-060, Republic of Korea**;

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in **CIRCUITS AND METHODS FOR DATA BUS INVERSION IN A SEMICONDUCTOR MEMORY**, for which an application for United States Letters Patent has been filed, or is being filed concurrently, in the United States Patent and Trademark Office. We hereby authorize and request **Myers Bigel Sibley & Sajovec, P.A.**, to insert here in parentheses (Application No. _____, filed _____) the filing date and application number of said application when known or to file this Assignment concurrently with the application, and

WHEREAS, **Samsung Electronics Co., Ltd.**, a Korean corporation having a principal place of business at **416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea**, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer and convey unto the said assignee, its successors and assigns, the entire right, title and interest in and to the said invention and application, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

Attorney Docket 5649-1849


ASSIGNMENT - CONTINUED

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and application above-mentioned, and that we have the unencumbered right and authority to make this assignment.

We further covenant and agree to bind our heirs, legal representatives and assigns, promptly to communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns and other legal representatives.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 15th day of Feb, 2006.


Seong-Jin Jang

Witnessed by:

Date: _____

Attorney Docket 5649-1849

ASSIGNMENT - CONTINUED

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 15th day
of February, 2006.



Jeong-Don Lim

Witnessed by:

Date: _____

MYERS BIGEL SIBLEY & SAJOVEC, P.A.
Patent Attorneys
4140 Parklake Avenue, Suite 600, Raleigh, NC 27612
or
P.O. Box 37428
Raleigh, NC 27627
919-854-1400
Facsimile 919-854-1401

**TELECOPIER TRANSMISSION
COVER SHEET**

Date: June 21, 2006

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Telecopier No.: 571-308-7124

Telephone No.: 571-272-3350

To: Assignment Recordation Services
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U.S. Patent and Trademark Office

From: David C. Hall

Number of Pages: (including coversheet) 8

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If there is a problem with this transmission, please call (919) 854-1400. Our fax number is (919) 854-1401.

In re: 11/369,341
Filed: March 7, 2006

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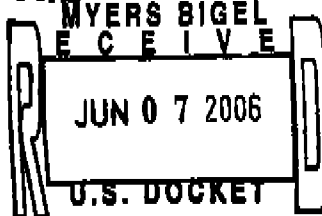
UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MAY 23, 2006

D. SCOTT MOORE
MYERS BIGEL SIBLEY & SAJOVEC
P.O. BOX 37428
RALEIGH NC 27627

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 03/07/2006

REEL/FRAME: 017659/0943
NUMBER OF PAGES: 4BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
DOCKET NUMBER: 5649-1849

ASSIGNOR:

JANG, SEOG-JIN

DOC DATE: 02/15/2006

ASSIGNOR:

LIM, JEONG-DON

DOC DATE: 02/15/2006

ASSIGNEE:

SAMSUNG ELECTRONICS CO., LTD.
416 MAETAN-DONG, YEONGTONG-GU
SUWON-SI, GYEONGGI-DO
REPUBLIC
OF KOREA

SERIAL NUMBER: 11369341

FILING DATE: 03/07/2006

PATENT NUMBER:

ISSUE DATE:

TITLE: CIRCUITS AND METHODS FOR DATA BUS INVERSION IN A SEMICONDUCTOR
MEMORY

PATENT

REEL: 017856 FRAME: 0092

017659/0943 PAGE 2

JEEVON JONES, EXAMINER
ASSIGNMENT SERVICES BRANCH
PUBLIC RECORDS DIVISION

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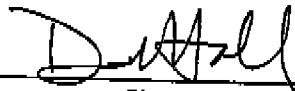
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Traci A. Brown

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