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Patent and Trademark Office

To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copies thereof.

## 1. Name of conveying party(ies):

Kazuhiro TERAMOTO  
Yoji IDEI

11-9-07

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

U.S. PTO  
11/979954  
11/09/2007Elpida Memory, Inc.  
2-1, Yaesu 2-chome, Chuo-ku  
Tokyo, Japan

Additional conveying party(ies)

NO

## 3. Nature of conveyance:

ASSIGNMENT

Execution Date:

November 8, 2007

Additional name(s) &amp; address(es) attached?

NO

## 4. Application number(s) or patent number(s):

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

11/13/2007 CHGUYEN2 00000003 11979954  
04 FC:0021 November 8, 2007 48.00 OP

A. Patent Application Number(s):

B. Patent Number(s):

Additional numbers attached? NO

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

George C. Beck  
FOLEY & LARDNER LLP  
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3000 K Street NW, Suite 500  
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## 6. Total number of applications/patents involved:

1

## 7. Total fee (37 C.F.R. § 3.41):

\$40.00

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George C. Beck

November 9, 2007

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Date

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PATENT  
REEL: 020149 FRAME: 0473

## ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged each undersigned inventor (hereinafter referred to as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

Elpida Memory, Inc., 2-1, Yaesu 2-chome, Chuo-ku, Tokyo, Japan

(hereinafter ASSIGNEE) its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions in and to this invention relating to

SEMICONDUCTOR MEMORY DEVICE INCLUDING A SENSE AMPLIFIER HAVING A REDUCED OPERATING CURRENT

as set forth in this United States Patent Application

Check one ☐ executed concurrently herewith  
☐ executed on \_\_\_\_\_  
☐ Serial No. \_\_\_\_\_ Filed \_\_\_\_\_  
and

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all division continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the International Convention and any other international agreement to which the United States adheres; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letter Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

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ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of Foley & Lardner LLP the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of Foley & Lardner LLP do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

**NAME AND SIGNATURE OF INVENTOR(S)**

NAME: Kazuhiro TERAMOTO SIGNATURE: Kazuhiro Teramoto  DATE: November 8, 2007

NAME: Yoji IDEI SIGNATURE: Yoji Idei  DATE: November 8, 2007

NAME: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

NAME: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

NAME: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**NAME AND SIGNATURE OF WITNESSES**

NAME: Takeo FUJII SIGNATURE: Takeo Fujii  DATE: November 8, 2007

NAME: Akira MUTO SIGNATURE: Akira Muto  DATE: November 8, 2007

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