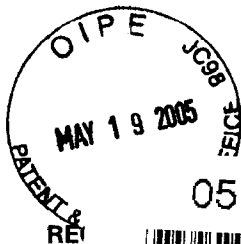


Substitute Form PTO-1595



05-25-2005

Attorney Docket No.: 0074/05101

5/19/05  
Commissioner of Patents and Trademarks: I



103009275

original document.

1. Name of conveying party(ies):

Kazuaki TAMURA  
Tomoaki IZUMI  
Tetsushi KASAHARA  
Masahiro NAKANISHI  
Kiminori MATSUNO  
Takuji MAEDA

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

Matsushita Electric Industrial Co., Ltd.  
1006, Oaza-kadoma  
Kadoma City, Osaka Pref.  
571-8501 Japan

Additional names/addresses attached? ☐ Yes ☒ No

Additional name(s) attached? ☐ Yes ☒ No

3. Nature of conveyance:

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

Execution Date: April 26, 2005

4. Application number(s) or patent number(s): 11/048,046

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

A. Patent Application No.(s): 11/048,046

B. Patent No.(s):

Additional numbers attached? ☐ Yes ☒ No

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

Randolph A. Smith  
SMITH PATENT OFFICE  
1901 Pennsylvania Ave., N.W.  
Suite 200  
Washington, D.C. 20006-3433

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41): \$40

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

8. Payment Information

- a) Credit Card Last 4 Numbers: 1006  
Expiration Date: July 2007  
b) Please apply any additional charges, or any credits, to our Deposit Account No. 19-2586

05/20/2005 JADD01 00000094 11048046

06 FC:8021

40.00 DP

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9. Statement and signature: *To the best of my knowledge and belief, the foregoing information is true and correct and the attached is a true copy of the original document.*

Randolph A. Smith  
Name of Person Signing

Signature *Reg. No. 32,548*

May 19, 2005  
Date

Total number of pages including cover sheet, attachments, and document: 3

PATENT  
REEL: 016584 FRAME: 0830

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned.

(1) <u>Kazuaki TAMURA</u>	(6) <u>Takuji MAEDA</u>
(2) <u>Tomoaki IZUMI</u>	(7) _____
(3) <u>Tetsushi KASAHARA</u>	(8) _____
(4) <u>Masahiro NAKANISHI</u>	(9) _____
(5) <u>Kiminori MATSUNO</u>	(10) _____

who has/have made a certain new and useful invention, hereby sell, assign and transfer unto

Matsushita Electric Industrial Co., Ltd.

1006, Oaza-kadoma, Kadoma City, Osaka Pref., 571-8501 Japan

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

SEMICONDUCTOR MEMORY DEVICE, MEMORY CONTROLLER AND MEMORY ACCESS DEVICE

(a) for which an application for United States Letters Patent was filed on February 2, 2005, and identified by United States Serial No. 11/048,046 ; or

(b) for which an application for United States Letters Patent was executed on \_\_\_\_\_,

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any all extensions, divisions, reissues, substitutes, renewals, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE:

AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

S I G N E D on the date(s) indicated aside my/our signature(s):

## I N V E N T O R ( S )

## D A T E S I G N E D

(1) Kazuaki Tamura  
Name: Kazuaki TAMURA

April, 26, 2005

(2) Tomoaki Izumi  
Name: Tomoaki IZUMI

April, 26, 2005

(3) Tetsushi Kasahara  
Name: Tetsushi KASAHARA

April, 26, 2005

(4) Masahiro Nakanishi  
Name: Masahiro NAKANISHI

April 26, 2005

(5) Kiminori Matsuno  
Name: Kiminori MATSUNO

April, 26 2005

(6) Takuii Maeda  
Name: Takuji MAEDA

April 26, 2005