PATENT ASSIGNMENT

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Toshiyuki HIROTA	09/20/2011
Takakazu KIYOMURA	09/20/2011
Yuichiro MOROZUMI	09/20/2011
Shingo HISHIYA	09/20/2011

RECEIVING PARTY DATA

Name:	Elpida Memory, Inc.
Street Address:	2-1, Yaesu 2-chome
City:	Chuo-ku, Tokyo
State/Country:	JAPAN
Postal Code:	104-0028

Name:	Tokyo Electron Limited
Street Address:	3-1, Akasaka 5-chome
City:	Minato-ku, Tokyo
State/Country:	JAPAN
Postal Code:	107-6325

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13245515

CORRESPONDENCE DATA

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via US Mail.

Correspondent Name: SUGHRUE MION, PLLC

PATENT

REEL: 026974 FRAME: 0169

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ATTORNEY DOCKET NUMBER: Q126865

NAME OF SUBMITTER: Kyle H. Compton, New Applic. Specialist

Total Attachments: 2

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PATENT REEL: 026974 FRAME: 0170

Assignment

Whereas, I/We, Toshiyuki HIROTA and Takakazu KIYOMURA, both of Tokyo, vichiro MOROZUMI and Shingo HISHIYAI, both of Yamanashi, all of Japan
hereinafter called assignor(s), have invented certain improvements in SEMICONDUCTOR DEVICE, METHOD OF MANUFACTURING THE SAME AND ADSORPTION SITE BLOCKING ATOMIC LAYER DEPOSITION METHOD
and executed an application for Letters Patent of the United States of America therefor on September 20, 2011; and
Whereas, Elpida Memory, Inc. 2-1. Yaesu 2-chome, Chuo-ku, Tokyo 104-0028 Japan, and
Tokvo Electron Limited 3-1. Akasaka 5-chome. Minato-ku. Tokvo 107-6325 Japa
(assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;
Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,
I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee.
I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/245,515 and Confirmation number
4418 september 26, 2011 the filing date
and application number of said application when known.
Dato: Sept. 20, 2011 Joshiyahi Mirotii S Toshiyaki HIROTA
S Toshiyuki HIROTA Date: Sept. 20, 2011 Tukakazu Kruomu M
Takakazu KIYOMURA Date:
s/ Yulchiro MOROZUMI Date:
ಕ/ Shingo HISHIYA
Legalization not required for recording but is prima facic evidence of execution under 35 U.S.C. §261)
Witness: Stry Zwi
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PATENT REEL: 026974 FRAME: 0171

Assignment

<u>Yui</u>	chiro MOROZUMI and Shingo HISHIYAI, both of Yamanashi, all of Japan
herein SEMI ADSO	after called assignor(s), have invented certain improvements in CONDUCTOR DEVICE, METHOD OF MANUFACTURING THE SAME AND RPTION SITE BLOCKING ATOMIC LAYER DEPOSITION METHOD
and ex	tecuted an application for Letters Patent of the United States of America therefor on tember 20, 2011; and
-	Whereas, Elpida Memory, Inc. 2-1, Yaesu 2-chome, Chuo-ku, Tokyo 104-0028 Japan, and Tokyo Electron Limited
	3-1, Akasaka 5-chome, Minato-ku, Tokyo 107-6325 Japar
invent	(assignce), desires to acquire the entire right, title, and interest in the application and ion, and to any United States patents to be obtained therefor;
	Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,
inventunder any La success necess	I/We, the above named assignor(s), hereby sell, assign and transfer to the above named ee, its successors and assigns, the entire right, title and interest in the application and the ion disclosed therein for the United States of America, including the right to claim priority 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue exters Patent granted upon the invention set forth in the application to the assignee, its ssors and assigns; and I/we will execute without further consideration all papers deemed sary by the assignee in connection with the United States application when called upon to by the assignee.
(Appli	I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 ylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses ication number13/245,515 and Confirmation number
and ap	8 , filed September 26, 2011) the filing date oplication number of said application when known.
Date:	
Date:	✓ Toshiyuki HIROTA
Date:	Sept. 20, 2011 Junquino moryo
Date:	Sept. 20, 2011 Phingo Wiskings
	Shingo HISHIYA V
(Legali:	zation not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)
	Witness: <u>Katsushige Harada</u>
	Mitano Migutami

RECORDED: 09/27/2011

PATENT REEL: 026974 FRAME: 0172