

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Seiichi ARITOME	10/31/2011
Soo Jin WI	10/31/2011
Angelo VISCONTI	11/02/2011
Mattia ROBUSTELLI	11/02/2011

RECEIVING PARTY DATA

Name:	Hynix Semiconductor Inc.
Street Address:	San 136-1, Ami-ri, Bubal-eup, Icheon-si
City:	Gyeonggi-do
State/Country:	REPUBLIC OF KOREA

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13282029

CORRESPONDENCE DATA

Fax Number: (571)327-5452
 Phone: 571-327-5450
 Email: ipntlaw@ipntlaw.com
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.
 Correspondent Name: IP & T GROUP LLP
 Address Line 1: 7700 Little River Turnpike
 Address Line 2: Suite 207
 Address Line 4: Annandale, VIRGINIA 22003

ATTORNEY DOCKET NUMBER:	PO110120HD
NAME OF SUBMITTER:	Jung H. Kim

Total Attachments: 6

501749154

**PATENT
 REEL: 027351 FRAME: 0456**

OP \$40.00 13282029

source=Po110210HD-Assignment#page1.tif
source=Po110210HD-Assignment#page2.tif
source=Po110210HD-Assignment#page3.tif
source=Po110210HD-Assignment#page4.tif
source=Po110210HD-Assignment#page5.tif
source=Po110210HD-Assignment#page6.tif

ASSIGNMENT OF PATENT APPLICATION

WHEREAS I/We, the below named inventor(s) has made an invention entitled:

SEMICONDUCTOR MEMORY DEVICE AND METHOD OF OPERATING THE SAME

For which I/We executed an application for Letters Patent of the United States concurrently herewith; and/or For which I/We filed an application for Letters Patent of the United States on October 26, 2011 (Application No. 13/282,029).

BE IT KNOWN that, for good and valuable consideration, the receipt of which is hereby acknowledged, I/We, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto HYNIX SEMICONDUCTOR INC., a corporation of the Republic of Korea, whose post office address is San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do, REPUBLIC OF KOREA (hereinafter referred to as Assignee), its lawful successors and assigns my/our entire right, title, and interest in and to this application and the invention(s) and improvement(s) set forth therein; and any and all continuations, continuations-in-part, divisionals, and renewals of and substitutes for said application for said Letters Patent and any and all Letters Patent of the United States and of countries foreign thereto, which may be granted thereon or therefore; and any reissues, reexaminations, or extensions of all such Letters Patent.

I/WE HEREBY authorize the Assignee, its lawful successors and assigns to apply for Letters Patent in all countries foreign to the United States directly in its own name, and to claim priority of the filing date of any of the above-mentioned applications for Letters Patent of the United States and of countries foreign thereto under the provisions of any and all international conventions and treaties.

I/WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as foreshad, to issue all Letters Patent for this invention to the Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with said Assignee, its successors and assigns, any facts known to me/us respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid said Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and in countries foreign thereto, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys of record to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Signature of first assignor:

Name of first assignor:

Address:

Seichi Aritome Date October 31, 2011

Seichi Aritome

Yangji Maeul Hanyang Apt. 520-1302, Sunae -dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea



Attorney Docket No.

Signature of second assignor: _____ Date _____

Name of second assignor: Soo Jin WI

Address: Hyundai 5 Cha Apt. 501-1601, Daewol-myeon, Icheon-si, Gyeonggi-do,
Republic of Korea

Signature of third assignor: _____ Date _____

Name of third assignor: Angelo Visconti

Address: Via Colombo 27, 22070 Appiano Gentile (CO), Italy

Signature of fourth assignor: _____ Date _____

Name of fourth assignor: Mattia Robustelli

Address: Via Saccardo, 46-20134 Milano (MI), Italy

CONFIDENTIAL



ASSIGNMENT OF PATENT APPLICATION

WHEREAS I/We, the below named inventor(s) has made an invention entitled:

SEMICONDUCTOR MEMORY DEVICE AND METHOD OF OPERATING THE SAME

For which I/We executed an application for Letters Patent of the United States concurrently herewith; and/or
For which I/We filed an application for Letters Patent of the United States on October 26, 2011 (Application No. 13/282,029),

BE IT KNOWN that, for good and valuable consideration, the receipt of which is hereby acknowledged, I/We, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto HYNIX SEMICONDUCTOR INC., a corporation of the Republic of Korea, whose post office address is San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do, REPUBLIC OF KOREA (hereinafter referred to as Assignee), its lawful successors and assigns my/our entire right, title, and interest in and to this application and the invention(s) and improvement(s) set forth therein; and any and all continuations, continuations-in-part, divisionals, and renewals of and substitutes for said application for said Letters Patent and any and all Letters Patent of the United States and of countries foreign thereto, which may be granted thereon or therefore; and any reissues, reexaminations, or extensions of all such Letters Patent.

I/WE HEREBY authorize the Assignee, its lawful successors and assigns to apply for Letters Patent in all countries foreign to the United States directly in its own name, and to claim priority of the filing date of any of the above-mentioned applications for Letters Patent of the United States and of countries foreign thereto under the provisions of any and all international conventions and treaties.

I/WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as foresaid, to issue all Letters Patent for this invention to the Assignee, its successors and assigns, in accordance with the terms of this Assignment;

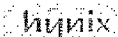
AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with said Assignee, its successors and assigns, any facts known to me/us respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid said Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and in countries foreign thereto, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys of record to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Signature of first assignor: _____ Date _____
Name of first assignor: Seiichi Aritome
Address: Yangji Maeul Hanyang Apt. 520-1302, Sunae -dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea



Attorney Docket No.

Signature of second assignor: W. Soo Jun Date October 31, 2011
Name of second assignor: Soo Jin WI
Address: Hyundai 5 Cha Apt. 501-1601, Daewol-myeon, Icheon-si, Gyeonggi-do,
Republic of Korea

Signature of third assignor: _____ Date _____
Name of third assignor: Angelo Visconti
Address: Via Colombo 27, 22070 Appiano Gentile (CO), Italy

Signature of fourth assignor: _____ Date _____
Name of fourth assignor: Mattia Robustelli
Address: Via Saccardo, 46-20134 Milano (MI), Italy



ASSIGNMENT OF PATENT APPLICATION

WHEREAS I/We, the below named inventor(s) has made an invention entitled:

SEMICONDUCTOR MEMORY DEVICE AND METHOD OF OPERATING THE SAME

For which I/We executed an application for Letters Patent of the United States concurrently herewith; and/or
For which I/We filed an application for Letters Patent of the United States on October 26, 2011 (Application
No. 13/282,029).

BE IT KNOWN that, for good and valuable consideration, the receipt of which is hereby acknowledged, I/We, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto **HYNIX SEMICONDUCTOR INC.**, a corporation of the Republic of Korea, whose post office address is **San 136-1, Ami-ri, Bubal-eup, Icheon-si, Gyeonggi-do, REPUBLIC OF KOREA** (hereinafter referred to as Assignee), its lawful successors and assigns my/our entire right, title, and interest in and to this application and the invention(s) and improvement(s) set forth therein; and any and all continuations, continuations-in-part, divisionals, and renewals of and substitutes for said application for said Letters Patent and any and all Letters Patent of the United States and of countries foreign thereto, which may be granted thereon or therefore; and any reissues, reexaminations, or extensions of all such Letters Patent.

I/WE HEREBY authorize the Assignee, its lawful successors and assigns to apply for Letters Patent in all countries foreign to the United States directly in its own name, and to claim priority of the filing date of any of the above-mentioned applications for Letters Patent of the United States and of countries foreign thereto under the provisions of any and all international conventions and treaties.

I/WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as foreshaid, to issue all Letters Patent for this invention to the Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with said Assignee, its successors and assigns, any facts known to me/us respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid said Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and in countries foreign thereto, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys of record to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Signature of first assignor: _____

Date _____

Name of first assignor: Seiichi Aritome

Address: Yangji Maoul Hanyang Apt. 520-1302, Sunae -dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Attorney Docket No.

Signature of second assignor: _____ Date _____
Name of second assignor: Soo Jin WI

Address: Hyundai 5 Cha Apt. 501-1601, Daewol-myeon, Icheon-si, Gyeonggi-do,
Republic of Korea

Signature of third assignor: Angelo Visconti Date 11-2-2011
Name of third assignor: Angelo Visconti

Address: Via Colombo 27, 22070 Appiano Gentile (CO), Italy

Signature of fourth assignor: Mattia Robustelli Date 11-2-2011
Name of fourth assignor: Mattia Robustelli

Address: Via Saccardo, 46-20134 Milano (MI), Italy