504099239 11/16/2016

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| YOUNG BAE CHOI | 06/24/2004 |
| KWANG JIN NA | 06/24/2004 |

RECEIVING PARTY DATA

| Name: | HYNIX SEMICONDUCTOR INC. | |
|-------------------|------------------------------|--|
| Street Address: | SAN 136-1, AMI-RI, BUBAL-UEP | |
| Internal Address: | KYUNGKI-DO | |
| City: | ICHON-SHI | |
| State/Country: | KOREA, REPUBLIC OF | |

PROPERTY NUMBERS Total: 2

| Property Type | Number |
|----------------|---------|
| Patent Number: | 7190203 |
| Patent Number: | 7312647 |

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| ATTORNEY DOCKET NUMBER: | 29936/40284A - 40284B | |
|-------------------------|------------------------|--|
| NAME OF SUBMITTER: | VALERIA C. RODRIGUEZ | |
| SIGNATURE: | /VALERIA C. RODRIGUEZ/ | |
| DATE SIGNED: | 11/16/2016 | |

Total Attachments: 2

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PATENT 504099239 REEL: 040346 FRAME: 0842

NO. 475 P. 3 Attorney Docket: 29936/40284

ASSIGNMENT

Serial No:

10/878,769

Filed:

June 28, 2004

Title: DUTY RATIO CORRECTOR, AND MEMORY DEVICE HAVING THE SAME

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign(s) to Hynix Semiconductor Inc., of San 136-1, Ami-Ri, Bubal-Uep, Ichon-Shi, Kyungki-Do, Republic of Korea, (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, and in said application and any and all other U.S. applications which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignce. The undersigned also hereby authorizes the attorneys of Marshall, Gerstein & Borun to insert the filing date and serial number of this application in the blanks above when they become known.

The undersigned warrant(s) themselves (himself/herself) to be the owners (owner) of the interest herein assigned and to have the right to make this assignment and further warrant(s) that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned.

For said consideration the undersigned hereby agree(s), upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation, continuation-in-part and substitute applications for said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application that said assignee, its successors or assigns, may deem necessary or expedient, and for the aforesaid consideration the undersigned further agree(s) upon the request of said assignee, its successors or assigns, in the event of any application or Letters Patent assigned herein becoming involved in Interference, to cooperate to the best of the ability of the undersigned with said assignee, its successors or assigns, in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said Letters Patent in the United States and to vest all rights therein hereby conveyed in said assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by said assignee, its successors and assigns, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

> PATENT REEL: 040346 FRAME: 0843

4.AUG.2004 17:30

SEJONG

No.475 P.4 Attorney Docket: 29936/40284

SIGNED:

Date:

JUNE 24, 2004 Date:

JUNE 24, 2004

Choi Young Bae CHOI

Na Kwang Jin NA

PATENT REEL: 040346 FRAME: 0844