PATENT ASSIGNMENT

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

	Name	Execution Date
Jung-Hwa	Lee	09/29/2009

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	416, Maetan-dong, Yeongtong-gu,
City:	Suwon-si, Gyeonggi-do,
State/Country:	REPUBLIC OF KOREA
Postal Code:	442-742

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12577816

CORRESPONDENCE DATA

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NAME OF SUBMITTER: ADAM C. VOLENTINE

Total Attachments: 2

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> PATENT REEL: 023360 FRAME: 0811

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ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned Insert 7. 1. Jung-Hwa LEE Name(s) of Inventor(s) 2. ______ 8. _____ 3. _____ 9. _____ 4. ______ 10. _____ 5. _____ 11. _____ 6. _______ 12. _____ the undersigned hereby sell(s) and assign(s) to Insert Name(s) of SAMSUNG ELECTRONICS CO., LTD. Assignee(s) & 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea Address(es) (hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as Title of SEMICONDUCTOR MEMORY DEVICE Invention for which an application for patent in the United States of America has been executed by Date of Signing of Application the undersigned on September 29, 2009 The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient. The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuing. division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference. The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements. The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby grant(s) the practitioners associated with the <u>CUSTOMER NUMBER 20987</u> the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned

	-	y the undersigned on the	
Date Sep. 2	9,2009	Signature of Inventor	Jung-HWEDLEE
Date		Signature of Inventor	
Date		Signature of Inventor	
Date		_ Signature of Inventor	
Date		Signature of Inventor	
			d that the execution by the Inventor(s) be e. However, the current practice of the U.S. gnment even it has not been witnessed.)
	Witness-		

olicant Reference I	No. SPX20	00807-0090US	

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