4-19-01 ASSIGNME 01-26-2001	FER SHEET Patents Only	
To: Commissioner for Patents: 102729252	Date: April 19, 2004 Attorney Docket No. 5649-1291	
Please record the attached original documents or copy thereof.		
Name of conveying party(ies):	2. Name and address of receiving party(ies):	
[1.] Se-Ho Lee [2.] Young-Nam Hwang	Samsung Electronics Co., Ltd. 416 Maetan-dong, Yeongtong-gu Suwon-si, Gyeonggi-do Republic of Korea	
Additional name(s) of conveying party(ies) attached? Yes X No	-	
3. Nature of conveyance:		
X Assignment Merger Security Agreement Change of Name Other Execution Date: [1.] April 8, 2004; [2.] April 8, 2004	Additional name(s) & address(es) attached? Yes X_ No	
4. Application Serial NoPatent No		
 5. Name and address of party to whom correspondence concerning document should be mailed: Mitchell S. Bigel Myers Bigel Sibley & Sajovec P. O. Box 37428 Raleigh NC 27627 	6. Total number of applications and patents involved: 1	
	7. Total fee (37 CFR 3.41) \$40.00 1 Enclosed Authorized to be charged to deposit account	
	8. Deposit account number: 50-0220	

9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

DO NOT USE THIS SPACE

Mitchell S. Bigel, #29,614

Name of Person Signing

Signature

April 19, 2004

Date

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

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40.00 DP

PATENT REEL: 015241 FRAME: 0872

ASSIGNMENT

THIS ASSIGNMENT, made by us, Se-Ho Lee, citizen of the Republic of Korea, residing at 201-1804, Samsung Apt., Yulcheon-dong, Jangan-gu, Suwon-si, Gyeonggi-do, Republic of Korea; Young-Nam Hwang, citizen of the Republic of Korea, residing at 303-904, Shinyoungtong Hyundai Apt., Banwol-ri, Taean-eub, Hwaseong-gun, Gyeonggi-do, Republic of Korea;

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in PHASE CHANGE MEMORY DEVICES HAVING PHASE CHANGE AREA IN POROUS DIELECTRIC LAYER AND METHODS FOR MANUFACTURING THE SAME, for which an application for United States Letters Patent has been filed, or is being filed concurrently, in the United States Patent and Trademark Office. We hereby authorize and request Myers Bigel Sibley & Sajovec, P.A., to insert here in parentheses (Application No. _______, filed _______) the filing date and application number of said application when known or to file this Assignment concurrently with the application; and

WHEREAS, Samsung Electronics Co., Ltd., a Korean corporation having a principal place of business at 416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer, and convey unto the said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues or other forms of protection thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted along with any term extensions thereon or therefor, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same

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to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and application above-mentioned, and that we have the unencumbered right and authority to make this assignment.

We further covenant and agree to promptly communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives; and we hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without further compensation, but at the expense of said assignee or its representatives.

its representatives.		
IN WITNESS	WHEREOF, we have hereunto set our	hands and seals on this 8 th
day of April	, 20 <u>04</u> .	
	Se- Ho Lee	(SEAL)
	Se-Ho Lee	
	Young-Nam Hwang	(SEAL)
	Young-Nam Hwang	
Witnessed by:		
Date:		
Date:		