To: Commissioner for Patents:	102717110	Date: April 1, 2004	
Please record the attached original documents or copy there	· · · · · · · · · · · · · · · · · · ·	Attorney Docket No. 5649-1255	
1. Name of conveying party(ies):	2. Name and address of receivi	ng party(ies):	
[1.] Sang-bo Lee	Samsung Electronics Co., Ltd 416 Maetan-dong, Yeongtong- Suwon-si, Gyeonggi-do	u.s. PTO	
Additional name(s) of conveying party(ies) attached? Yes X No	Republic of Korea)/81 1/81	
3. Nature of conveyance:		2236 10	
<u>X</u> Assignment			
Merger Security Agreement			
Change of Name			
Other Execution Date: [1.] April 1, 2004	Additional name(s) & address(es) atta	ched? Yes X No	
4. Application Serial NoPatent No	108/5574		
 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 7. Total fee (37 CFR 3.41) X_Enclosed Authorized to be char 8. Deposit account number: 50- 	\$40.00 rged to deposit account	
	USE THIS SPACE		
DO NOT			
9. Statement and signature To the best of my knowledge and belief, the foregoing info of the original document. Mitchell S. Bigel, #29,614 Name of Person Signing Signature	formation is true and correct and any o	<u>April 1, 2004</u> Date	
9. Statement and signature To the best of my knowledge and belief, the foregoing info of the original document. Mitchell S. Bigel, #29,614 Name of Person Signing Signature		<u>April 1, 2004</u> Date	
9. Statement and signature To the best of my knowledge and belief, the foregoing info of the original document. Mitchell S. Bigel, #29,614 Name of Person Signing Signature	formation is true and correct and any o	<u>April 1, 2004</u> Date	

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ASSIGNMENT

THIS ASSIGNMENT, made by me, Sang-bo Lee, citizen of the Republic of Korea, residing at 403-1604, Geumhwa Maeul Jugong Apt., Sanggal-ri, Giheung-cub, Yongin-city, Gyeonggi-do, Republic of Korea;

WITNESSETH: That,

WHEREAS, I am the sole inventor of certain new and useful improvements in **MULTI-STAGE OUTPUT MULTIPLEXING CIRCUITS AND METHODS FOR DOUBLE DATA RATE SYNCHRONOUS MEMORY DEVICES**, 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. I 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 uny 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, I 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 thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same 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 me if this assignment and sale had not been made.

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

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

I further covenant and agree to bind my heirs legal representatives and assigns, promptly to communicate to said assignee or its representatives any facts known to me 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.

IN WITNESS WHEREOF, I have become of my hand and seal on this 10 day of <u>Hpril</u>, 2004

Sang-Bo Lee (SEAL)

Witnessed by:

Date:

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RECORDED: 04/01/2004