Erin A. Campion

SSIGNMENT RECORDATION FC			
To: Commissioner for Patents:	10315732	Date: January 4, 2 Attorney Docket No. 5649-1	
Please record the attached original documents or co	opy thereof.		
1. Name of conveying party(ies):		2. Name and address of receiving party(ies):	
[1.] In-su Choi		Samsung Electronics Co., Ltd.	
[2.] Joon-hee Lee		416 Maetan-dong, Yeongtong-gu, O	
[3.] Hee-joo Choi		Suwon-si, Gyeonggi-do	o =
[4.] Il-guy Jung		REPUBLIC OF KOREA	
Additional name(s) of conveying party(ies) attached? Yes	X No	3243 U	
3. Nature of conveyance:		1	
X Assignment			
Merger		Additional name(s) & address(es) attached? Yes X_ No	
Security Agreement		Additional name(s) & address(cs) attached: res _x_ rvo	
Change of Name			
Other			
Execution Date: [1.] September 12, 2005 [2.] Dec	cember 21, 2005		
[3.] September 12, 2005 [4.] September 12, 2005	5		
If this document is being filed together with a new is: [1.] September 12, 2005 [2.] December 21, 2 Additional numbers attached? Yes _X_ New	2005 [3.] September 12,	2, 2005 [4.] September 12, 2005	
5. Name and address of party to whom correspond concerning document should be mailed:		tal number of applications and patents involved: 1 otal fee (37 CFR 3.41) \$40.00	
Needham James Boddie, II		Enclosed	
Myers Bigel Sibley & Sajovec	X	Authorized to be charged to deposit account	
P. O. Box 37428			
Raleigh NC 27627	8. Dep	posit account number: 50-0220	
DO NOT USE THIS SPACE			
 Statement and signature To the best of my knowledge and belief, the fore of the original document. Needham James Boddie, II, Reg. No. 40,519 		rue and correct and any attached copy is a true copy January 4, 2006	
Name of Person Signing	Signature	Date	
Total number of pages including cover sheet, attac	chments and document:		
1/12/2006 DBYRNE 00000349 500220 11325083			
TEC: 8021 Express Mail Label No. EV 769239593 US Date of Deposit: January 4, 2006 I hereby certify that this correspondence is being deposit	TIFICATE OF EXPRES	es Postal Service "Express Mail Post Office to Addressee" s	servic
under 37 CFR § 1.10 on the date indicated above and is	s addressed to: Commissio	oner for Patents, P.O. Box 1450, Alexandria, VA 22313-14	150.

PATENT **REEL: 017446 FRAME: 0138**

ASSIGNMENT

THIS ASSIGNMENT, made by us, In-su Choi, citizen of the Republic of Korea, residing at 626-60 Eungam 3-dong, Eunpyeong-gu, Seoul, Republic of Korea; Joon-hee Lee, citizen of the Republic of Korea, residing at 521-103, Samsung 5-cha Apt., Pungdeokcheon 2-dong, Yongin-si, Gyeonggi-do, Republic of Korea; Hee-joo Choi, citizen of the Republic of Korea, residing at 423-701, Cheongmyeong Maeul 4-danji Gunyoung Apt., 1047-1, Yeongtong-dong, Yeongtong-gu, Suwon-si,, Gyeonggi-do, Republic of Korea; and Il-guy Jung, citizen of the Republic of Korea, residing at 1106-1504, Jugong Apt., Jinan-ri, Taean-eub, Hwaseong-si, Gyeonggi-do, Republic of Korea.

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in MEMORY MODULE AND MEMORY SYSTEM HAVING 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 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 us if this assignment and sale had not been made.

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ASSIGNMENT – CONTINUED

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 bind our heirs, legal representatives and assigns, promptly to 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.

IN WITNESS WHEREOF, V	we have hereunto set our hands and seals on this
day of $\frac{9}{12}$, 2005	In-su Choi
Witnessed by:	
Print Name	
Date:	

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ASSIGNMENT – CONTINUED

IN WITNESS WHEREOF,	we have hereunto set our hands and seals on this
day of $\underbrace{De(. >)}_{,2005}$	
	J.H Lee Joon-hee Lee
Witnessed by:	
Print Name	
Data	

ASSIGNMENT - CONTINUED

IN WITNESS WHEREOF, we h	ave hereunto set our hands and seals on this
day of $09/12$, 2005	
He	AJOChoi
Witnessed by:	
Print Name	
Data	

PATENT REEL: 017446 FRAME: 0142

ASSIGNMENT – CONTINUED

IN WITNESS WHEREC	OF, we have hereunto set our hands and seals on this
day of $\frac{12}{12}$, 2005	
•	neum
	Il-guy Jung
Witnessed by:	
Print Name	
Data	

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PATENT REEL: 017446 FRAME: 0143