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Form PTO-1595 (Rev. 03-09)	04/08/2010			U.S. DEPARTMENT OF COMMERCE	
OMB No. 0651-0027 (exp. 03/31/2009)	04-21-2010		United States Patent and Traden	nark Office	
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To the Director of the U.S. Patent and		. mille 11.min 18319. H		documents or the new address(es) be	elow
Name of conveying party(ies)	103595		e arru ed	dress of receiving party(ies)	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Electronics Co., Ltd.	
Sung-Hyun Lee Dong-Soo Kang			Internal Address:		
Social Sociality					
Additional name(s) of conveying party(ies) attached? Yes X No					
3. Nature of conveyance/Execution Date(s):		Street Address: 416, Maetan-dong, Yeongtong-gu			
Execution Date(s)March 16, 2010					
X Assignment	r	0.4			
Security Agreement Change	e of Name	City: Suwon-si, Gyeonggi-do			
Joint Research Agreement		State: _			
Government Interest Assignment		Counto	/* Penubli	c of Korea Zip:	
Executive Order 9424, Confirmatory License		Country	y. <u>Republi</u>	corkolea	
Other		Addition	al name(s) & address(es) attached?	s ⊠ No
4. Application or patent number(s):	X This	documer	nt is being	g filed together with a new appl	ication.
A. Patent Application No.(s)		B. P	atent No	.(s)	
12/798644					
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Additio	l onal numbers atta	l ached?	Yes 🔀	No	
5. Name and address to whom correspo		6. Total number of applications and patents			
concerning document should be mailed	l:	involve	d: <u>1</u>		
Name: Anthony P. Onello, Jr.		7. Total	l fee (37	CFR 1.21(h) & 3.41) \$40.00	
Internal Address: Mills & Onello, LLP					
		Authorized to be charged to deposit account			
Street Address: 11 Beacon Street, Suite 605		X Enclosed			
		None required (government interest not affecting title)			
City: Boston		8. Payı	ment Inf	ormation	
State: MA Zip: 02108					
Phone Number: 617-994-4900		_	- *4 A -	and Nicoshan	
Fax Number: 617-742-7774			posit Acc	count Number	
Email Address: mail@millsonello.com	_	Authorized User Name <u>Mills & Onello, LLP</u>			
9. Signature:				Da. 05 2010	
	ignature			<u> </u>	
Anthony P. Onello, JR. ; Reg N	No.: 38,572		T	otal number of pages including cover	3
Name of Person S	igning		S	heet, attachments, and documents:	

U.S. PTO

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

04/12/2818 **RELETEL 09888815 12798644**

or re-cost PATENT

Attorney Reference No.: SAM-1469

ASSIGNMENT

We, Sung-Hyun Lee, of 304-404, Sinyeongtong Hyundai 3-cha Apt., Banwol-dong, Hwaseong-si,
Gyeonggi-do, Republic of Korea; and Dong-Soo Kang, of 404-201, Sinyeongtong Hyundai 4-cha Apt.,
Banwol-dong, Hwaseong-si, Gyeonggi-do, Republic of Korea; having invented improvements in
SEMICONDUCTOR MEMORY DEVICE AND INTERNAL DATA TRANSMISSION METHOD
THEREOF identified as Attorney Docket No. SAM-1469, described in an application for Letters Patent of
the United States, which application was filed on, and assigned Serial No.
(in the event that the execution date, filing date and/or Serial No. are not entered above
at the time we execute this document, and if such information is deemed necessary, we hereby authorize and
request our attorneys at Mills & Onello, LLP, Eleven Beacon Street, Suite 605, Boston, Massachusetts
02108, USA, to insert above the execution date, filing date and/or Serial No. of said application, when
known), for good and valuable consideration, receipt of which is hereby acknowledged from Samsung
Electronics Co., Ltd., a Korean corporation having a place of business at 416, Maetan-dong, Yeongtong-gu,
Suwon-si, Gyeonggi-do, Republic of Korea (and hereinafter called the Assignee, which term shall include its
successors and assigns), do hereby sell, assign and transfer unto the Assignee our entire right, title, and
interest in and throughout the United States of America (including its territories and dependencies) and all
countries foreign thereto, in and to and under said application (which term shall include hereinafter where the
context so admits all divisional, continuing, reissue and other patent applications based thereon) and the
inventions (which term shall include each and every such invention, or part thereof) therein described, and
any and all patents and like rights of exclusion (including extensions thereof) of any country which may be
granted on or for said inventions or on said application;

And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or its own name or its designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns;

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee, any and all patents and like rights of exclusion which may be granted in any country upon said United States application on or for said inventions;

And We do hereby covenant for ourselves and our legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee, that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

Page 1 of 2

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Attorney Reference No.: SAM-1469

First or Sole Inventor:

Signature:

Sung-Hyun (ee

Date: 3/16/2010

Second Joint Inventor:

Signature:

Dong-Soo Kang

Date: 3/16/2010

ATTORNEY REFERENCE NO.: SAM-1469 J:SAM1469/1469_ASSIGNMENT-MULT-INV.DOC

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