Form **PTO-1595** (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)

05-17-2006



U.S. DEPAI	RTMENT O	F COMMER	CE
United States	Patent and	Trademark	Offic

103239498			
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)		
Young-Jin Jeon	Name: Samsung Electronics Co., Ltd.		
	Internal Address:		
Additional name(s) of conveying party(ies) attached? Yes V No			
3. Nature of conveyance/Execution Date(s):	Street Address: 416, Maetan-dong,		
Execution Date(s) October 13, 2005	Yeongtong-gu		
Assignment Merger			
Security Agreement Change of Name	City: Suwon-si, Gyeonggi-do		
Joint Research Agreement	State:		
Government Interest Assignment	Country: Republic of Korea Zip:		
Executive Order 9424, Confirmatory License			
Other at 1192 / Frame 0128 Additional name(s) & address(es) attached? Yes No			
4. Application or patent number(s): This document is being filed together with a new application.			
A. Patent Application No.(s)	B. Patent No.(s)		
11/265,945, filed November 3, 2005	5 5		
	ā -		
Additional numbers att			
5. Name and address to whom correspondence	6. Total number of applications and patents		
concerning document should be mailed:	involved: 1 5 8		
Name: Anthony P. Onello, Jr.	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00		
Internal Address:	Authorized to be charged by credit card		
	Authorized to be charged to deposit account		
Street Address: Eleven Beacon Street	✓ Enclosed		
Suite 605	None required (government interest not affecting title)		
City: Boston	8. Payment Information 8 a. Credit Card Last 4 Numbers		
State: Massachusetts Zip:02108	a. Credit Card Last 4 Numbers 🛂 🗣		
Phone Number: (617) 994-4900	b. Deposit Account Number		
Fax Number: <u>(617) 742-7774</u>	Authorized User Name		
Email Address: mail@millsonello.com	Authorized User Name		
9. Signature:	Man 12, 2006		
Signature	Date		
Anthony P. Onello, Jr. Reg. No. 38,572	Total number of pages including covers sheet, attachments, and documents:		

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

REEL: 017887 FRAME: 0843

Form PTO-1595 (Rev. 09/04) OMB No. 0651-0027 (exp. 6/30/2005)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office			
1/35 R ()(10) MH MH MH MIN (1031.1	7323			
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1. Name of conveying party(ies)/Execution Date(s):	2. Name and address of receiving party(ies)			
Young-Jin Jeong - Jeon	Name: Samsung Electronics Co., Ltd			
	Internal Address:			
Execution Date(s) October 13, 2005 Additional name(s) of conveying party(ies) attached? Yes V No	Street Address: 416, Maetan-dong,			
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Government Interest Assignment Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip:			
Other	Additional name(s) & address(es) attached? ☐ Yes ✔ No			
4. Application or patent number(s): ✓ This A. Patent Application No.(s) Additional numbers att	document is being filed together with a new application. B. Patent No.(s) ached? Yes No			
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
Name: Anthony P. Onello, Jr.	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00			
Internal Address:	Authorized to be charged by credit card			
	Authorized to be charged to deposit account			
Street Address: Mills & Onello LLP	✓ Enclosed			
Eleven Beacon Street, 605	None required (government interest not affecting title)			
City: Boston	8. Payment Information			
State: Massachusetts Zip: 02108	a. Credit Card Last 4 Numbers Expiration Date			
Phone Number: (617) 994-4900	b. Deposit Account Number			
Fax Number: <u>(617) 742-7774</u>				
Ernail Address: mail@millsonello.com	Authorized User Name			

01 FC=8021

9. Signature:

Anthony P. Onello, Jr., Registration No. 38,572

1124 Mame of Person Signing Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:

Mail Stor Assignation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Signature

PATENT

Nousubu 3, 2005 Date

3

Total number of pages including cover

sheet, attachments, and documents:

REEL: 017887 FRAME: 0844

Reference No.: SAM-0785

ASSIGNMENT

I, Young-Jin Jeon, of 108-1101, Hanmaeul Apt., Songgang-dong, Yuseong-gu, Deajeon, Republic of Korea, having invented improvements in DELAY LOCKED LOOP AND SEMICONDUCTOR MEMORY DEVICE HAVING THE SAME, described in an application for Letters Patent of the United States, executed by me on even date herewith, 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 my 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 I do also hereby sell, assign, and transfer unto the Assignee, all my 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 I do hereby authorize the Assignee to apply in my 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, I do hereby agree for myself and for my 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 I 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 I do hereby covenant for myself and my legal representatives and agree with the Assignee, that I 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 my right, title, and interest in and to said inventions has not been otherwise encumbered by me, and that I have not executed and will not execute any instruments in conflict herewith.

Page 1 of 2

PATENT REEL: 017887 FRAME: 0845

Reference No.: SAM-0785

First or Sole Inventor:

Signature:

Young-Jin Jeon

Date: 2005 10.13

REFERENCE NO.: SAM-0785 J:\SAM\0785\assignment-one-inv.wpd

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PATENT REEL: 017887 FRAME: 0846

RECORDED: 05/15/2006