OMB No. 0651-0027 (exp. 6/30/2008)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Off
	accuments or the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Joung-yeal Kim Seong-jin Jang	Name: Samsung Electronics Co., Ltd.
Seong-jin Jang	Internal Address:
Additional manages of accounting to the contract of the contra	
Additional name(s) of conveying party(ies) attached? Yes 3. Nature of conveyance/Execution Date(s):	Street Address: 416, Maetan-dong, Yeongtong-gu City: Suwon-si, Gyeonggi-do
Execution Date(s) August 8, 2006	
✓ Assignment Merger	Yeongtong-gu
Security Agreement Change of N	ame City: Suwon-si, Gyeonggi-do
Joint Research Agreement	State:
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): A. Patent Application No.(s)	This document is being filed together with a new application B. Patent No.(s)
Additional num	nbers attached?
5. Name and address to whom correspondence	6. Total number of applications and patents

concerning document should be mailed: involved: 1 Name: Steven M. Mills 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 ✓ Enclosed Street Address: Mills & Onello LLP None required (government interest not affecting title) Eleven Beacon Street, Suite 605 8. Payment Information City: Boston a. Credit Card Last 4 Numbers ___ State: Massachusetts **Zip**: 02108 Expiration Date Phone Number: (617) 994-4900 b. Deposit Account Number _____ Fax Number: (617) 742-7774 Authorized User Name ___ Email Address: mail@millsonello.com 9. Signature:

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

Signature

Steve 40400 ill, Registration No. 36,610

Name of Person Signing

08/21/2006 DBYRNE 00000172 11504897

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PATENT REEL: 018206 FRAME: 0065

Total number of pages including cover sheet, attachments, and documents:

Reference No.: SAM-0885

ASSIGNMENT

We, Joung-yeal Kim, of 101-1202, Yeonwon Maeul Byucksan Apt., Mabuk-ri, Guscong-eub, Yongin-si, Gyeonggi-do, Republic of Korea; and Seong-jin Jang, of 706-1101, Areum Maeul Hyosung Apt., Imae-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea, having invented improvements in WAVE PIPELINED OUTPUT CIRCUIT OF SYNCHRONOUS MEMORY DEVICE described in an application for Letters Patent of the United States, executed by us 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, Suwonsi, Gyeonggi-do, Republic of Korea (and hereinafter called the Assignes, 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.

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PATENT REEL: 018206 FRAME: 0066

Reference No.: SAM-0885

First or Sole Inventor:

Signature:

KIM Jang - Yeal Date: Of/of/2006

Second Joint Inventor:

eng In Jeng Date: Off Bry, work

REFERENCE NO.: SAM-HESS J-SAM-VRES-weignment wpd

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