

Form PTO-1595 (Rev. 03-09)
OMB No. 0651-0027 (exp. 03/31/2009)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

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)
Seok-Woo Choi

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
Name: Samsung Electronics Co., Ltd
Internal Address: _____
Street Address: 416, Maetan-dong, Yeongtong-gu
City: Suwon-si
State: Gyeonggi-do
Country: South Korea Zip: _____
Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance/Execution Date(s):
Execution Date(s) February 25, 2010

Assignment Merger
 Security Agreement Change of Name
 Joint Research Agreement
 Government Interest Assignment
 Executive Order 9424, Confirmatory License
 Other _____

4. Application or patent number(s): This document is being filed together with a new application.
A. Patent Application No. (s)
12/717,841
B. Patent No. (s)

Additional numbers attached? Yes No

5. Name and address to whom correspondence concerning document should be mailed:
Name: Patrick D. Muir
Internal Address: _____
Street Address: Muir Patent Consulting, PLLC
758 Walker Road, Suite C
City: Great Falls
State: VA Zip: 22066
Phone Number: 703-757-7880
Fax Number: 703-757-7447
Email Address: patrick@muirpatentconsulting.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$40

Authorized to be charged to deposit account
 Enclosed
 None required (government interest not affecting title)

8. Payment Information
Deposit Account Number 50-4574
Authorized User Name Patrick D. Muir

9. Signature: Bradley Edelman Signature March 4, 2010 Date

Bradley Edelman, Reg. No. 57,648
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 2

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

CH \$40.00 504574 12717641

SAM-284

ASSIGNMENT

I, Seok-Woo Choi ("Assignor"), have an interest in the invention entitled:

DELAY LOCKED LOOP CIRCUIT INCLUDING DELAY LINE WITH REDUCED SENSITIVITY TO VARIATION IN PVT,

which is the subject of a United States or International application for patent entitled above and naming the undersigned inventor

- in a Provisional Patent Application No. _____;
 in a Non-Provisional Application along with a Declaration signed today with this assignment;
 in a Non-Provisional Application where the Declaration was signed on _____;
 in a Non-Provisional Application filed on _____, and assigned Serial No. _____ or PCT International Application No. _____;
 in U.S. Patent No. _____, issued _____.

Samsung Electronics Co. LTD., 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742, Republic of Korea, ("Assignee"), is desirous of acquiring Assignor's interest in the invention.

Assignor acknowledges receipt and adequacy of good and valuable consideration in exchange for this Assignment, and assigns to Assignee and its successors in interest, the full and exclusive right, title and interest to any and all inventions, developments and improvements disclosed or described in the patent application listed above ("the invention"), in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, for the full term of the patent, including extensions of time, the same as if held by Assignor had this Assignment not been made. This Assignment includes the assignment of the right to recover for past infringements of, or liabilities for, any of the rights related to the invention.

Assignor covenants and agrees to cooperate with Assignee and execute all instruments or documents requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to the following: provisional, continuation, continuation-in-part, divisional, renewal or substitute, reissue, re-examination, or extension. Assignor covenants and agrees to cooperate with Assignee in any litigation regarding the invention, patents or applications regarding the invention, and render all necessary assistance deemed essential to Assignee's full protection and title in and to the invention hereby transferred without further or other compensation than that provided in this Assignment; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said Assignee.

Assignor covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment.

Assignor requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications, issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

Assignor hereby grants the firm of MUIR PATENT CONSULTING, PLLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of any issuing authority, including the United States Patent and Trademark Office, for recordation of this document.


 _____ (signature)
 Assignor: **Seok-Woo Choi**

On this 25 day of February, 2010.

