Form PTO-1595 1-31-92

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U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

103297367 To the Honorable Commissioner of Patents and Trademarks: Please record the attached on copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Hyuk-Jun SUNG and Ki-Bum NAM Additional name(s) of conveying party(ies) Name: Samsung Electronics Co., Ltd attached? Yes No 416, Maetan-dong, Yeongtong-gu, 3. Nature of conveyance: Suwon-si, Gyeonggi-do, Assignment Republic of Korea ☐ Security Agreement ☐ Change of Name Additional name(s) & address(es) attached: ☐ Other ☐ Yes No. Execution Date: July 12, 2006 (both) Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: July 12, 2006 Patent Application No.(s) в. Patent No.(s) 08/24/2006 HLE333 00000003 11507771 40.00 DP 06 FO:8021 Additional numbers attached? | Yes No. 5. Name and address of party to whom Total number of applications and correspondence concerning document patents involved: should be mailed: Total fee (37 C.F.R. §3.41): \$40.00 □ Enclosed -Credit Card Payment Form Name: Frank Chau, Esq. PTO-2038 Authorized to be charged to deposit Street Address: F. CHAU & ASSOCIATES, LLC account 130 Woodbury Road Deposit account number: City: Woodbury State: NY_ Zip: 11797 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Jay H. Maioli, Reg. No. 27,213 August 21, 2006 Name of Person Signing Date Total number of pages including cover sheet, attachments and documents: Do not detach this portion Mail documents to be recorded with required cover sheet information to: Mail Stop Assignment Recordation Services Director of the US Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

ASSIGNMENT

DOCKET NO.: 8137-42 (SOV-00026-US)

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that: IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named Assignee is hereby acknowledged. I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE: Samsung Electronics Co., Ltd.

ADDRESS: 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, KOREA

Who is my Assignee, and to the successes and assigns of my Assignee, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention entitled:

TITLE: FREQUENCY DETECTING CIRCUIT AND METHOD, AND SEMICONDUCTOR **APPARATUS INCLUDING FREQUENCY DETECTING CIRCUIT**

invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment or indicates an attorney docket no. 8137-42 (SOV-000026-US), or is more particularly identified as:

. ⊠	executed on even date herewith, or 12 July 2006									
	Serial No.	filed	in	the	U.S.	Patent	&	Trademark	Office	on
	or ,									
	executed on									

and in and to all United States patents which may be granted thereon and therefore, and in and to all certificates of corrections, divisions, continuations, continuations-in-part, reissued and reexamined patents, and to any extensions thereof, said interest being the entire ownership of the patent when granted, to be held and enjoyed by said SAMSUNG ELECTRONICS CO., LTD., my Assignee, its successors, assigns or other legal representatives, to the full end of the term, terms, or any extension or renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made;

AND I hereby covenant and agree to sign and execute any further documents or instruments which may from time-to-time be either necessary, lawful, proper or requested by the Assignee, in the prosecution of the above-named application or in the preparation and prosecution of any certificate of correction, division, continuation, continuation-in-part, reissue, re-examination, in any amendment, extension, or interference proceeding, whether administrative or judicial, or otherwise, to secure the title hereto in said Assignee;

AND I do hereby authorize and request the Commissioner of Patents and Trademarks to issue said Patent or Patents to the Assignee, and I hereby appoint as my, or our attorney, and authorize and request Frank Chau, Reg. No. 34,136, to insert on this Assignment any further identification or to complete such identification which may be either necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

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IN WITNESS WHEREOF, I and we have set our hands and seals on the dates written beside my and our respective names:

INVENTOR(S)

Date Signed

l) _______Hvuk-Jun Sung

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PATENT

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