Form PTO-1595 12-24-200			
	Patent and Trademark Office		
TO THE HONORABLE COMMIS Please record the attached orig 10263176	RKS: Attorney Docket No.: 678-1313 (P11236)		
Name of conveying party(ies):	2. Name and address of receiving party(ies):		
Takahiko KISHI \2.\\-63	Name: Samsung Electronics Co., Ltd.		
	Street Address: 416, Maetan-3 dong, 70, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1		
Additional name(s) of conveying party(ies) attached? [] yes [x] no	City: Gyeonggi-do		
3. Nature of Conveyance [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other	Country/State/Zip: Republic of Korea Additional names and addresses attached? [] yes [x] no		
Execution Date: December 11, 2003	,		
If this document is being filed together with a new appli	I		
A. Patent Application No.(s)	B. Patent No.(s):		
Additional numbers atta	l ached? [] Yes [X] No		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: [1]		
Name: Paul J. Farrell, Esq.	7. Total fee (37 C.F.R. 3.41) \$ 40.00 [x] Enclosed		
Internal Address: Dilworth & Barrese, LLP	[] Authorized to be charged to deposit account		
Street Address: 333 Earle Ovington Boulevard City: Uniondale State: NY ZIP: 11553	8. Deposit account number: 04-1121 (Attach duplicate copy of this page if paying by deposit account)		
DO NOT USE	THIS SPACE		
9. Statement and signature.			
To the best of my knowledge and belief, the foregoing in a true copy of the original document.	In all		
	gnature December 11, 2003 Date		
Reg. No. 33,494 Total number of pag	es including cover sheet, attachments and document [3]		
OMB No. 0651-0011 (exp. 4/84)			
Mail documents to be recorded with	h this portion required cover sheet information to:		
P.O. B	er for Patents ox 1450		
Public burden reporting for this sample cover sheet is estimated to a time for reviewing the document and gathering the data needed, and regarding this burden estimate to the U.S. Patent and Trademark Offi 20231, and to the Office of Management and Budget, Paperwork Redu	completing and reviewing the sample cover sheet. Send comments ce. Office of Information Systems, PK2-1000C, Washington, D.C.		

PATENT REEL: 014816 FRAME: 0963

ASSIGNMENT DOCKET NO. 678-1313 (P11236)

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 self, assign and forever grant and convey unto:

ASSIGNEE: Samsung Electronics Co., Ltd.

ADDRESS: 416, Maetan-3 dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of 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: NUMERICAL CONTROL OSCILLATOR, DIGITAL FREQUENCY CONVERTER AND RADIO FREQUENCY UNIT

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. 678-1313 (P11236), or is more particularly identified as:

×	executed on even date herewith, or			
	Serial No	filed in the U.S. Patent & Trademark Office o	n	
	or			
П	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 re-examined 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 <u>Peter G. Dilworth, Reg. No. 26,450 and Paul J. Farrell, Reg. No. 33,494</u>, 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.

1

PATENT REEL: 014816 FRAME: 0964

And I further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

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

(Seal) 1/ Dec /2003

2

PATENT REEL: 014816 FRAME: 0965