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(1) Yu-Pin KUO (2) Yu-Pin CHOU	Name: Realtek Semiconductor Corp.			
(3) Shu-Rong TONG Additional name(s) of conveying party(ies) attached? □Yes ☑No	Street Address: No. 2, Industry E. Rd. IX Science-Based Industrial Park Hsinchu 300, Taiwan, R.O.C.			
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Execution Date: December 4, 2003	8/C			
4. Application number(s) or patent number(s):	0473			
If this document is being filed together with a new applic	• •			
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Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications/patents involved: [1]			
David D. Ma Olyma	7. Total fee (37 CFR 3.41) \$ 40.00			
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PATENT REEL: 015200 FRAME: 0872

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

Page 1 of 2

WHEREAS TU-P	In Nuo , Tu-Fill Chou and Shu-Nong Tong
hereinafter referred to	collectively as the assignor, has invented a certain improvement
relating to PHASE FI	REQUENCY DETECTOR USED IN DIGITAL PLL SYSTEM
[imes] the inventor's d	eclaration for said application being executed concurrently with the execution of this
instrument; said appli	ication to be filed in the United States Patent and Trademark Office;
[] said application	having been filed in the United States Patent and Trademark Office on ,
authorization being h	ereby given to my attorney, THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P. of 100
GALLERIA PARKWA	Y, N.W. SUITE 1500 ATLANTA, GEORGIA 30339-5948, to insert here in parentheses
(Application Serial No) the application serial number of said application when known;
[] said application	having been filed under the Patent Cooperation Treaty on,
Serial No.	, the United States of America being designated.

AND WHEREAS REALTEK SEMICONDUCTOR CORP. of No.2, Industry E. Rd. IX, Science-Based Industrial Park, Hsinchu 300, Taiwan, R.O.C., hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

瑞昱編號 92A-05US || 三達編號 US1404PA

PATENT REEL: 015200 FRAME: 0873

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT Page 2 of 2

ASSIGNOR:		ASSIGNOR:	
Signature:	Ju-Pin Kuo	Signature:	Yu-Pin Chou
Printed Name:	Yu-Pin Kuo	Printed Name:	Yu-Pin Chou
Date:	December 4, 2003	Date:	December 4, 2003
ASSIGNOR:		WITNESS:	
Signature:	Shu-Rong Tong	Signature:	
	Shu-Rong Tong	Printed Name:	

Date:

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

December 4, 2003

Date:

瑞昱編號 92A-05US || 三達編號 US1404PA

RECORDED: 04/07/2004

PATENT REEL: 015200 FRAME: 0874