PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Chi-Hyun PARK	09/03/2007
Young-Hoon KWON	09/03/2007
Sang-Boh YUN	09/03/2007

RECEIVING PARTY DATA

Name:	Samsung Electronics Co., Ltd.	
Street Address:	416, Maetan-dong, Yeongtong-gu,	
City:	Suwon-si, Gyeonggi-do	
State/Country:	KOREA, REPUBLIC OF	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11851448

CORRESPONDENCE DATA

Fax Number: (202)403-3587

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 202-293-2941

Email: mshin@myiplaw.net

Correspondent Name: Maeng-Ho Shin

Address Line 1: 1730 M Street, NW

Address Line 2: Suite 807

Address Line 4: Washington, DISTRICT OF COLUMBIA 20036

ATTORNEY DOCKET NUMBER:	0202-0028
NAME OF SUBMITTER:	/Maeng-Ho Shin/

Total Attachments: 3

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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) 1) Chi-Hyun PARK, 2) Young-Hoon KWON, and 3) Sang-Boh YUN	2. Name and address of receiving party(ies)			
1, our rigation was, 2, roung room two st, and o) dung bon rota	Name: Samsung Electronics Co., Ltd.			
	Internal Address:			
Additional name(s) of conveying party(ies) attached? Yes 🗸 No				
3. Nature of conveyance/Execution Date(s):	Street Address: 416, Maetan-dong, Yeongtong-gu			
Execution Date(s) September 3, 2007				
Assignment Merger				
Security Agreement Change of Name	City: Suwon-city			
Joint Research Agreement	State: Gyeonggi-do			
Government Interest Assignment	Country Bould's 11/2			
Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip:Zip:			
Other	Additional name(s) & address(es) attached? ☐ Yes ✓ No			
11/851,448 Additional numbers att	ached?			
5. Name and address to whom correspondence	6. Total number of applications and patents			
concerning document should be mailed:	involved: One			
Name: Maeng-Ho Shin	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			
Street Address: 1730 M Street, NW, Suite 807	Enclosed			
	None required (government interest not affecting title)			
City: Washington	8. Payment Information			
State: District of Columbia Zip: 20036	a. Credit Card Last 4 Numbers Expiration Date			
Phone Number: 202-293-0804				
Fax Number: 202-403-3587	b. Deposit Account Number			
Email Address: usdocketing@myiplaw.net	Authorized User Name			
9. Signature: /Maeng-Ho SHIN/ Reg. #53,859 September 07, 2007				
Signature	Date			
Maeng-Ho Shin Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:			

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

Attorney Docket No.: 0202-0028 Client Docket No.: SP7166-US

Assignment

WHEREAS, the following inventors, namely 1) Chi-Hyun PARK, 2) Young-Hoon KWON, and 3) Sang-Boh YUN, all citizens of the Republic of Korea and residing respectfully at 1) #515, Charmang officetel, Ingyo-dong 1119, Paldal-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 2) #502-1301, Chungsol maeul Joogong 5danji APT, Guemgok-dong, Bundang-gu, Scongnam-si, Gyeonggi-do, Republic of Korea, and 3) #701-501, Lecmaechon Scongji APT, Lecmae-dong, Bundang-gu, Scongnam-si, Gyeonggi-do, Republic of Korea (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

METHOD AND APPARATUS FOR REMOVING INTERFERENCE FROM UPLINK SIGNAL IN TIME DIVISION DUPLEX (TDD) SYSTEM,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on 9/01/2017, and assigned Scrial No. 1/851,446; and,

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of 19/7-7 the Republic of Korea, located and doing business at 416, Maetan-dong, Ycongtong-gu, Suwon-si, Gyconggi-do, Republic of Korea (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors do hereby soll, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignors if this sale, assignment and transfer had not been made.

Assignors covenant and agree, without further compensation to said Assignors but at Assignee's expense:

- to execute: a.
 - all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and

all papers in connection with any interference, litigation, mediation, arbitration or ii. other proceeding relating to this application or any divisional, continuing, substitute or reissuo application thereof, as may be necessary or expedient;

to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;

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Attorney Docket No.: 0202-0028 Client Docket No.: SP7166-US

- c. to communicate to the Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

Assignors hereby authorize and request the United States Patent and Trademark Office or any other issuing authority to issue any and all Letters Patent that may be granted upon this invention and/or this application or any divisional, continuing, substitute or reissue application thereof to the Assignoe, its legal representatives, successors and assigns.

Assignors each hereby represent, covenant and warrant that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

The provisions of this Assignment are binding upon each Assignor's heirs, legal representatives and/or administrators and assigns.

Assignors hereby grant to the law firm of Stimson, Shin & Associates LLP of Washington, DC and its attorneys and agents as associated with Customer No. 68103 the authority and power to insert on this instrument any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or a Patent Office of any foreign country.

Signature of First Inventor:

Chalyn /

September 3.200

Date

Signature of Second Inventor:

Young-Hoon KWON

September 3, 2001

Date

Signature of Third Inventor:

Sang-Boh YUN

September 3,200

Date