PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jae Hoon CHUNG	01/27/2012
Sung Ho MOON	01/20/2012
Seung Hee HAN	01/27/2012
So Yeon KIM	01/16/2012

RECEIVING PARTY DATA

Name:	LG ELECTRONICS INC.	
Street Address:	20 Yeouido-dong, Yeongdeungpo-gu	
City:	Seoul	
State/Country:	REPUBLIC OF KOREA	
Postal Code:	150-721	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13388921

CORRESPONDENCE DATA

Fax Number: (703)205-8050 7032058000 Phone:

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: BIRCH, STEWART, KOLASCH, & BIRCH, LLP.

Address Line 1: P.O. BOX 747

Address Line 4: Falls Church, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER: 0465-3119PUS1

NAME OF SUBMITTER: James T. Eller, Jr.

Total Attachments: 6

REEL: 027656 FRAME: 0794

PATENT

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> PATENT REEL: 027656 FRAME: 0795

BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

Application No.	13/388,921	Filed _	February 3, 2012			
Insert Name(s) of Inventor(s)	***(Given Name FAMILY NAME (ALL CAPS))***					
`,	WHEREAS, CHUNG, Jae Hoon, MOON, designated as the undersigned) has (have) i	-	Seung Hee and KIM, So Yeon hereinafter ew and useful improvements in:			
Insert Title of Invention	METHOD AND APPARATUS FOR ALL UPLINK CONTROL INFORMATION IN A		PLINK CARRIER FOR TRANSMITTING IMUNICATION SYSTEM			
	for which an application for Letters Paten undersigned (except in the case of a provis		tates of America has been executed by the			
Insert Date of Signing of	on January 16, 2012, January 20, 2	2012, and Janı	nary 27, 2012 ; and			
Application Insert Name of Assignee	WHEREAS, LG ELECTRONICS IN	<u>C.</u>				
nsert Address	of20 Yeouido-dong, Yeongdeungpo-gu	Seoul 150-721 R	epublic of Korea			
of Assignee CHECK BOX F APPROPRIATE		and interest in and	ereinafter designated as the Assignce) is to said invention and in and to any Letters America and			
	paid, the receipt of which is hereby ackrundersigned has (have) sold, assigned an transfer unto said Assignee the full and e America, its territories, dependencies and any and all Letters Patent(s) which may	nowledged, and of transferred, and exclusive right to possessions and to be granted there	collars (\$10.00) to the undersigned in hand ther good and valuable consideration, the d by these presents does sell, assign and the said invention in the United States of the entire right, title and interest in and to efor in the United States of America, its bove is designated, in any and all foreign			
	and to any and all divisions, reissues, conterm or terms for which the same may be go		ersions and extensions thereof for the full			

4964502

0465-3119PUS1 Attorney Docket No.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date			Name of Inventor	(signature) CHUNG, Jac Hoon
Date	Jau-20-20/2	¥	Name of Inventor	12 most
				(signature) MOON, Sung Ho
Date		ş	Name of Inventor	
				(signature) HAN, Seung Hee
Date	Accordance Control of	5	Name of Inventor	
				(signature) KIM, So Yeon

Page 2 of 2

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Insert Name(s) of Inventor(s)	***(Given Nam	e FAMILY NAME (ALL CA	PS))***
,	WHEREAS, CHUNG, Jae Hoon, designated as the undersigned) has		Seung Hee and KIM, So Yeon hereinafter ew and useful improvements in:
Insert Title of Invention	METHOD AND APPARATUS FO UPLINK CONTROL INFORMATION		PLINK CARRIER FOR TRANSMITTING IMUNICATION SYSTEM
	for which an application for Lette undersigned (except in the case of		tates of America has been executed by the
Insert Date of Signing of Application	on January 16, 2012, Januar	y 20, 2012, and Janu	ary 27, 2012 ; and
Insert Name	WHEREAS, LG ELECTRON	ICS INC.	
of Assignee Insert Address of Assignee	of 20 Yeouido-dong, Yeongdeur	ngpo-gu Seoul 150-721 Re	epublic of Korea
СНЕСК ВОХ	, , ,	nt, title and interest in and	ereinafter designated as the Assignee) is to said invention and in and to any Letters America and
IF APPROPRIATE	paid, the receipt of which is here undersigned has (have) sold, assi transfer unto said Assignee the fu America, its territories, dependence any and all Letters Patent(s) whi	by acknowledged, and ogned and transferred, and ll and exclusive right to lies and possessions and to may be granted there	ollars (\$10.00) to the undersigned in hand ther good and valuable consideration, the d by these presents does sell, assign and the said invention in the United States of the entire right, title and interest in and to effor in the United States of America, its pove is designated, in any and all foreign
	and to any and all divisions, reiss	ues, continuations, conve	ersions and extensions thereof for the full

term or terms for which the same may be granted.

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date			Name of Inventor	
				(signature) CHUNG, Jae Hoon
Date		,	Name of Inventor	
				(signature) MOON, Sung Ho
Date		\$	Name of Inventor	
	77 : Whomas Address and Addres	~~~		(signature) HAN, Seung Hee
Date	16th. JAN. 2012	3	Name of Inventor	Dogs
			····	(signature) KIM, So Yeon

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BIRCH, STEWART, KOLASCH & BIRCH, LLP

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Application No.	13/388,921	Filed	February 3, 2012				
Insert Name(s) of Inventor(s)	***(Given Name FAMILY NAME (ALL CAPS))***						
``	WHEREAS, CHUNG, Jae Hoon, MOON, Sung designated as the undersigned) has (have) invente	Ho, HAN, Se d certain new	oung Hee and KIM, So Yeon hereinafter and useful improvements in:				
Insert Title of Invention	METHOD AND APPARATUS FOR ALLOCATE UPLINK CONTROL INFORMATION IN A WIRE	NG AN UPL LESS COMM	LINK CARRIER FOR TRANSMITTING MUNICATION SYSTEM				
	for which an application for Letters Patent of the undersigned (except in the case of a provisional application)	for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application)					
Insert Date	on January 16, 2012, January 20, 2012	, and Janua	ary 27, 2012 ; and				
of Signing of Application Insert Name of Assignce	WHEREAS, <u>LG ELECTRONICS INC.</u>						
Insert Address of Assignee	of <u>20 Yeouido-dong, Yeongdeungpo-gu Seoul</u>	150-721 Repu	ublic of Korea				
CHECK BOX IF APPROPRIATE	its heirs, successors, legal representatives and desirous of acquiring the entire right, title and into Patent(s) that may be granted therefor in the Unite x in any foreign countries.	erest in and to	said invention and in and to any Letters				
II ALL KOLKIALE	NOW, THEREFORE, in consideration of the sun paid, the receipt of which is hereby acknowledge undersigned has (have) sold, assigned and transfer unto said Assignee the full and exclusive America, its territories, dependencies and possession and all Letters Patent(s) which may be graterritories, dependencies and possessions, and if countries;	ged, and other sferred, and leave right to the sions and the anted therefo	er good and valuable consideration, the by these presents does sell, assign and e said invention in the United States of e entire right, title and interest in and to or in the United States of America, its				
	and to any and all divisions, reissues, continuati term or terms for which the same may be granted.	ons, conversi	ions and extensions thereof for the full				

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	27 Jan, 2012	Name of Inventor	Jae (Sloon Chug (signature) CHUNG, Jae Hoon
Date	,	Name of Inventor	
			(signature) MOON, Sung Ho
Date	21. Jan. 2012	Name of Inventor	
			(signature) HAN, Seung Hee
Date	,	Name of Inventor	
			(signature) KIM, So Yeon

Page 2 of 2