502582243 11/25/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2628301

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HANBYUL SEO	07/15/2013
MINGYU KIM	11/13/2013
HAKSEONG KIM	07/15/2013
SUCKCHEL YANG	07/15/2013

RECEIVING PARTY DATA

Name:	LG ELECTRONICS INC.	
Street Address:	20 YEOUIDO-DONG, YEONGDEUNGPO-GU	
City:	SEOUL	
State/Country:	KOREA, REPUBLIC OF	
Postal Code:	150-721	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14002934

CORRESPONDENCE DATA

Fax Number: (202)496-7756 Phone: 202.496.7500

Email: mlaip@mckennalong.com

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

Correspondent Name: MCKENNA LONG & ALDRIDGE LLP

Address Line 1: 1900 K STREET, NW

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20006

ATTORNEY DOCKET NUMBER:	8737.00742.US00
NAME OF SUBMITTER:	MICHAEL I. ANGERT
Signature:	/Michael I. Angert Reg#46522/
	PATENT

PATENT REEL: 031672 FRAME: 0754 502582243

Date:	11/25/2013
Total Attachments: 4 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif	

PATENT REEL: 031672 FRAME: 0755

Docket No.:

Assignment of Application

WHEREAS,	I (WE) SEO, Hanbyul; KIM, Mingyu; KIM, Hakseong and YANG, Suckchel				
······································		<u> </u>		, re	espectively,
have invented cert	ain new	and useful impro	vements in:		
METHOD AN		ATUS FOR TRAI VIRELESS COMM		K/NACK INFORMATI STEM	ION IN
for which an appli	cation fo	r Letters Patent	was executed on		· · · · · · · · · · · · · · · · · · ·
(Application No.	1	4/002,934	, Filed	September 3, 201	3), and
WHEREAS,	LG EL	ECTRONICS	NC.		
(hereinafter referre	ed to as "	'ASSIGNEE'') h	aving a place of	business at:	
20 Yeouido-dong,	Yeongde	ungpo-gu, Seou	l 150-721 Repul	olic of Korea	

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and

Page 1 of 2

DC:50576580.1

Docket No.:

enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of McKenna Long & Aldridge LLP, Attorneys at Law, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: 2013.1.15	and
	(Signature of Inventor) SEO, Hanbyul
Date:	(Signature of Inventor) KIM, Mingyu
Date: 2012 1. 15	(Signature of Inventor) KIM, Hakseong
Date: 2013.1.15	(Signature of Inventor) YANG, Suckchel

McKenna Long & Aldridge LLP

Attorneys At Law 1900 K Street, N.W. Washington, D.C. 20006

Page 2 of 2

Docket No.:

Assignment of Application

WHEREAS,	I (WE) SEO, Hanbyul; KIM, Mingyu; KIM, Hakseong and YANG, Suckchel				
				,	respectively,
have invented certa	ain new a	and useful impro	vements in:		
	V	VIRELESS COMN	IUNICATION SY		TION IN
for which an applic	cation for	r Letters Patent v	was executed on		
(Application No.	1	4/002,934	, Filed	September 3, 20	013), and
WHEREAS,	LG EL	ECTRONICS I	NC.		
(hereinafter referre					1400
20 Yeouido-dong,	Yeongde	ungpo-gu, Seou	l 150-721 Repul	olic of Korea	

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and

Page 1 of 2

DC:50576580.1

Docket No.:

enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of McKenna Long & Aldridge LLP, Attorneys at Law, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date:		(Signature of Inventor)
		SEO, Hanbyul
Date:	20/7,11,13	M
		(Signature of Inventor) KIM, Mingyu
Date:		
<i></i>		(Signature of Inventor) KIM, Hakseong
Date:		(Signature of Inventor)
		YANG, Suckchel

McKenna Long & Aldridge LLP

Attorneys At Law 1900 K Street, N.W. Washington, D.C. 20006

Page 2 of 2

DC:50576580.1

REEL: 031672 FRAME: 0759

RECORDED: 11/25/2013