504071946 10/28/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4118613

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SEJIN OH	05/02/2013
JEONGWOO KIM	05/15/2013
MINSUNG KWAK	08/05/2013

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:	15336560

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 202-496-7500

Email: mlaip@dentons.com

Correspondent Name: DENTONS US LLP

Address Line 1: 1900 K. STREET, N.W.

Address Line 4: WASHINGTON, D.C. 20006

ATTORNEY DOCKET NUMBER:	8736.00720.US23
NAME OF SUBMITTER:	YONG S. CHOI
SIGNATURE:	/YONG S. CHOI/
DATE SIGNED:	10/28/2016

Total Attachments: 6

source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif

> PATENT REEL: 040159 FRAME: 0005

504071946

source=Assignment#page5.tif
source=Assignment#page6.tif

PATENT REEL: 040159 FRAME: 0006

Docket No.: 8736,00720.US00

Assignment of Application

WHEREAS, I	(WE)	Sejin Oh, Jeo	ngwoo Kim and	l Minsung Kwak	
nagagariana a nasaria i i i i i anta i i i i a a ci i i da e a	,1			, res	spectively.
tave invented certai	n new an	d useful impro	overnents in:		
МЕТНОВ ОІ МОВІІ	F PROV	IDING AN BI ADCASTING	MERGENCY A AND APPARA	LERT SERVICE V TUS THEREFOR	IA A
or which an applica	ation for	Letters Patent	was executed on		2000 P. C. C.
Application No.	13/8	82,940	, Filed	May 1, 2013), and
WHEREAS,	LG ELE	CTRONICS	INC.		
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					

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

Page 1 of 2

DC 510167991

Docket No.: 8736.00720.US00

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.

mo! May 2, 2013	
/NV	(Signoture of Inventor) Sejin Oh
Date:	(Signatura of Inventor) Jeongwoo KIm
Onte;	(Signature of Inventor) Minsung Kwak

McKenna Long & Aldridge LLP Attorneys At Law 1900 K. Street, N.W. Washington, D.C. 20006

Page 2 of 2

DC:\$1016799.1

Docket No.: 8736,00720,US00

Assignment of Application

WHEREAS,	1 (WE) Sojin Oh, Jeongwoo Kim and Minsung Kwak				
	17	1		,	respectively.
have invented certa	in new a	and useful impro	ovements in:		жантала отогот от того в може у намент с с тобо от
				LERT SERVIC TUS THEREFO	
for which an applic	ation fo	Letters Patent	was executed on	(1 mm m m m m m m m m m m m m m m m m m	
(Application No.	13/	882,940	, Filed	Мау 1, 2013), and
WHEREAS,	LG KL	ECTRONICS	INC.		
(hereinafter referre	d to as "	ASSIGNEE") I	aving a place of	business at:	
20 Yeonido-dong,	Yeongd	eungpo-gu, Seo	ul 150-721, Kore	38	

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

Page 1 of 2

DC 510162991

Docket No.: 8736,00720,US00

The undersigned hereby grant(s) the firm of McKenna Long & Aldridge LLP. Attorneys at Law, 1969 K Street, N.W., Washington, D.C. 2006 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.

Company of Inventor)

Sejin Oh

Dane: May 15, 2013

Signature of Inventor)

Jeongwoo Kim

Onto:

(Signature of Inventor)

Minsung Kwak

McKunna Long & Aldridge LLP Attorneys At Law 1900 K Street, N.W. Washington, D.C. 20006

Page 2 of 2

DC:31016199.1

Docket No.: 8736.00720.US00

Assignment of Application

· · · · · · · · · · · · · · · · · · ·		,		
			, res	poctively.
have invented certain ne	w and useful impro	ovements in:	And the second s	
METHOD OF PA MOBILE B	ROVIDING AN EI BROADCASTING	VIERGENCY A AND APPARA	LERT SERVICE V TUS THEREFOR	IAA
for which an application	for Letters Palent	was executed on		
(Application No.	13/882,940	, Filed	May 1, 2013), and
WHEREAS, LG	ELECTRONICS	INC.	· · · · · · · · · · · · · · · · · · ·	
(hereinafter referred to	as "ASSIGNEE") h	aving a place of	business at:	

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 reacwais 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 ASSIONEE 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 ASSIONEE, make all rightful oaths, and, generally do everything possible to aid said ASSIONEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

Page 1 of 2

DC:51016789 F

Docket No.: 8736.00720.US00

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.

Dittoi	(Stepause of Seventor) Sojin Oh
Doret	(Signature of largester) Jeongwoo Kim
Date: 08.05. 2013	Rush (Signature of Inventor) Minsung Kwak

McKenna Long & Aldridge LLP Altorneys At Law 1900 K Street, N.W. Washington, D.C. 20006

Page 2 of 2

DC(\$1916799.1

minsung.kwek/平包包/10,177.62,64/2019-05-08 16:31

PATENT REEL: 040159 FRAME: 0012

RECORDED: 10/28/2016