PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Eun Sun KIM	10/18/2010
Byeong Geol CHEON	10/19/2010
Ki Jun KIM	10/18/2010
Hak Seong KIM	10/18/2010

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:	12989273	

CORRESPONDENCE DATA

(703)205-8050 Fax Number:

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

703-205-8000 Phone:

Email: yolanda.askew-sampson@bskb.com

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

Address Line 1: P.O. BOX 747

Address Line 4: FALLS CHURCH, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER: 0465-2684PUS1

NAME OF SUBMITTER: Esther H. Chong

Total Attachments: 4

source=20101022ASSIGNMENT#page1.tif

REEL: 025186 FRAME: 0369

PATENT

source=20101022ASSIGNMENT#page2.tif source=20101022ASSIGNMENT#page3.tif source=20101022ASSIGNMENT#page4.tif

> PATENT REEL: 025186 FRAME: 0370

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application N	No. 12/989,273	Filed _	October 22, 2010
Insert Name(s) of Inventor(s)	***(Given Name FAMILY N	AME (ALL CA	.PS))***
or meeting (a)	WHEREAS, Eun Sun KIM, Byeong Geras the undersigned) has (have) invented		Ki Jun KIM, Hak Seong KlM (hereinafter designated and useful improvements in:
Insert Title METHOD FOR TRANSMITTING REFERE of Invention			IGNALS FOR RELAY NODE
	for which an application for Letters Pa undersigned (except in the case of a pro-		United States of America has been executed by the lication)
Insert Date of Signing of	On October 18, 2010		; and
Application Insert Name of Assignce	WHEREAS, LG ELECTRONICS INC	7	
Insert Address of Assignee	of 20, Yeouido-dong, Yeongdeungpo-gu	ı, 150-721 S	eoul, Republic of Korea
CHECK BOX		terest in and	ns (hereinafter designated as the Assignee) is desirous it to said invention and in and to any Letters Patent(s) America and
i AITROIMATE	paid, the receipt of which is hereby a undersigned has (have) sold, assigned an unto said Assignee the full and exclusive territories, dependencies and possession Letters Patent(s) which may be gran	acknowledg nd transferrove right to the ns and the ted therefo	of Ten Dollars (\$10.00) to the undersigned in hand ed, and other good and valuable consideration, the ed, and by these presents does sell, assign and transfer he said invention in the United States of America, its entire right, title and interest in and to any and all r in the United States of America, its territories, is designated, in any and all foreign countries; and to

Page 1 of 2

any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or

EHC/EHC/clb

terms for which the same may be granted.

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 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	Oct. 18th, 2010,	Name of Inventor	1 Address
			(signature) Eun Sun KIM
Date _		Name of Inventor	(signature) Byeong Geol CHEON
		•	
Date _	Oct, 18th, 20/0,	Name of Inventor	(signature) Ki Jun KIM
	·		
Date _	Oct. 18th, 2010.	Name of Inventor	7 L War
		Name of the contact	(signature) Hak Seong KIM
Date _	,	Name of Inventor	(signature)
		Name of Inventor	
Date _	•	ivanie of nivelior	(signature)

Page 2 of 2

EHC/EHC/clb

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application N	No. 12/989,273	Filed	October 22, 2010	
Insert Name(s) of Inventor(s)	***(Given Name FAMILY NAME (ALL CAPS))***			
	WHEREAS, Eun Sun KIM, Byeon as the undersigned) has (have) inve		i Jun KIM, Hak Seong KIM (hereinafter d nd useful improvements in:	esignated
Insert Title of Invention	METHOD FOR TRANSMITTING	REFERENCE SIG	JNALS FOR RELAY NODE	
	for which an application for Lette undersigned (except in the case of		nited States of America has been execute cation)	ed by the
insert Date of Signing of Application	On October 19	9, 2010		; and
insert Name of Assignee	WHEREAS, LG ELECTRONICS	INC.		
nsert Address of Assignce	of 20, Yeouido-dong, Yeongdeung	po-gu, 150-721 Sec	oul, Republic of Korea	
снеск вох		nd interest in and t	(hereinafter designated as the Assignee) is to said invention and in and to any Letters merica and	
NOW, THEREFORE, in consider paid, the receipt of which is he undersigned has (have) sold, assigned the full and exterritories, dependencies and post Letters Patent(s) which may be dependencies and possessions, and		eby acknowledged and transferred clusive right to the essions and the er granted therefor if the box above is antinuations, conve	f Ten Dollars (\$10.00) to the undersigned, and other good and valuable considera, and by these presents does sell, assign an said invention in the United States of Antire right, title and interest in and to an in the United States of America, its to designated, in any and all foreign countriersions and extensions thereof for the full	ation, the ad transfer merica, its ay and all erritories, es; and to

Page 1 of 2

EHC/EHC/clb

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 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) Eun Sun KIM
Date 10/18/20/0,	Name of Inventor	(signature) Eun Sun Kilvi (signature) Byeong Geol CHEON
Date,	Name of Inventor	(signature) Ki Jun KIM
Date,	Name of Inventor	(signature) Hak Seong KIM
Date,	Name of Inventor	(signature)
Date,	Name of Inventor	(signature)

Page 2 of 2

BIRCH, STEWART, KOLASCH & BIRCH, LLP

EHC/EHC/clb