### 501944706 06/05/2012

### PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
Suck Chel YANG	11/11/2011
Min Gyu KIM	10/19/2011
Joon Kui AHN	11/11/2011
Dong Youn SEO	11/11/2011

### 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:	13513072

### CORRESPONDENCE DATA

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Mail.

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

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Address Line 4: FALLS CHURCH, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER:	0465-3243PUS1
NAME OF SUBMITTER:	esther h. chong

### Total Attachments: 4

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> PATENT REEL: 028321 FRAME: 0574

OP \$40.00 13513072

# BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

## **ASSIGNMENT**

Application No.	13/513,072	Filed	May 31, 2012
Insert Name(s) of Inventor(s)	***(Given Name )	AMILY NAME (ALL CAP	S))***
	WHEREAS, YANG, Suck Chel; KI designated as the undersigned) have		on Kui and SEO, Dong Youn (hereinafte useful improvements in:
Insert Title of Invention	APPARATUS AND METHOD OF	AVOIDING CONTROL	CHANNEL BLOCKING
or nevention	for which an application for Letters undersigned (except in the case of a page of the case of a page of the case o		ites of America has been executed by the
Insert Date of Signing of Application	on November 11	, 2011	; and
Insert Name of Assignee	WHEREAS, LG ELECTRONICS I	NC.	
Insert Address	of 20 Yeouido-dong, Yeongdeungpe	-gu, Seoul 150-721 Repu	ıblic of Korca
of Assignee		title and interest in and t	reinafter designated as the Assignee) is o said invention and in and to any Letters America and
F APPROPRIATE	paid, the receipt of which is hereby undersigned has (have) sold, assign transfer unto said Assignee the full America, its territories, dependencies any and all Letters Patent(s) which	e acknowledged, and othed and transferred, and and exclusive right to the and possessions and the may be granted theref	llars (\$10.00) to the undersigned in hand ner good and valuable consideration, the by these presents does sell, assign and ne said invention in the United States of e entire right, title and interest in and to for in the United States of America, its ove is designated, in any and all foreign
	and to any and all divisions, reissue term or terms for which the same may	· ·	sions and extensions thereof for the full

EHC/mrh

### Attorney Docket No. 0465-3243PUS1

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 Assignce and to vest all rights therein hereby conveyed to said Assignce 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	2011.11.11	Name of Inventor (signature) YANG, Suck Chel
Date		Name of Inventor (signature) KIM, Min Gyu
Date	20((.11,	Name of Inventor (signature) AHN, Joon Kui
Date	2011 . 11 . 11	Name of Inventor (signature) SEO, Dong Youn

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# BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

## **ASSIGNMENT**

Application No.	13/513,072	Filed	May 31, 2012
Insert Name(s) of Inventor(s)	***(Given Name FAN	TILY NAME (ALL CA	PS))***
· · ·	WHEREAS, YANG, Suck Chel; KIM, designated as the undersigned) have inv	Min Gyu; AHN, J ented certain new an	oon Kui and SEO, Dong Youn (hereinafte d useful improvements in:
Insert Title of Invention	APPARATUS AND METHOD OF A	OIDING CONTRO	OL CHANNEL BLOCKING
	for which an application for Letters Pa undersigned (except in the case of a pro-	tent of the United S visional application)	tates of America has been executed by the
Insert Date of Signing of Application	on October 19, 2011		; and
Insert Name of Assignee	WHEREAS, LG ELECTRONICS INC	7. <u>7.</u>	
or Assignee Insert Address of Assignee	of 20 Yeouido-dong, Yeongdeungpo-gu	ı, <u>Seoul 150-721 Re</u>	public of Korea
CHECK BOX F APPROPRIATE	its heirs, successors, legal representations of acquiring the entire right, title Patent(s) that may be granted therefor in in any foreign countries.	e and interest in and	ereinafter designated as the Assignee) is to said invention and in and to any Letters America and
	paid, the receipt of which is hereby ac undersigned has (have) sold, assigned transfer unto said Assignee the full and America, its territories, dependencies an any and all Letters Patent(s) which m	eknowledged, and co and transferred, and d exclusive right to and possessions and ay 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, of		ersions and extensions thereof for the full

EHC/mrh

### Attorney Docket No. 0465-3243PUS1

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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) YANG, Suck Chel	
Date	2011. 10.19	Name of Inventor (signature) KIM, Min Gyu	
Date		Name of Inventor (signature) AHN, Joon Kui	
Date		Name of Inventor (signature) SEO, Dong Youn	

Birch, Slewart, Kolasch & Birch, LLP

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jw chung/정지욱/10.178.226.24/2011-10-19 13:16