#### 501901605 04/26/2012

#### PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Dong Youn SEO	10/18/2011
Min Gyn KIM	10/19/2011
Suck Chel YANG	10/18/2011
Joon Kui AHN	10/18/2011

#### RECEIVING PARTY DATA

Name:	LG Electonics Inc.		
Street Address:	20, Yeouido-dong, Yougdeungpo-gu		
City:	Seoul		
State/Country:	KOREA, REPUBLIC OF		
Postal Code:	tal Code: 150-721		

### PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	13504075	

### 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

ATTORNEY DOCKET NUMBER:	5438-0319PUS1	
NAME OF SUBMITTER:	Charles Gorenstein	

#### Total Attachments: 4

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PATENT REEL: 028112 FRAME: 0351 TOP \$40.00 1350407

501901605

# BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

## **ASSIGNMENT**

Application No.	13/504,075	Filed _	April 25, 2012
Insert Name(s) of Inventor(s)	***(Given Nam	e FAMILY NAME (ALL CAI	PS))***
	WHEREAS, SEO, Dong Your (hereinafter designated as the under in:		s, Suck Chel and AHN, Joon Kui ed certain new and useful improvements
Insert Title of Invention	METHOD AND APPARATUS INFORMATION IN WIRELESS		RECEPTION ACKNOWLEDGEMENT YSTEM
	for which an application for Lette undersigned (except in the case of		ates of America has been executed by the
Insert Date of Signing of	on October 18, 20	)11	; and
Application Insert Name of Assignee	WHEREAS, LG Electronics Inc.		
Insert Address of Assignee	of 20, Yeouido-dong, Yeongdo	eungpo-gu, Seoul 150-	721 Republic of Korea
CHECK BOX IF APPROPRIATE		ht, title and interest in and	ereinafter designated as the Assignee) is to said invention and in and to any Letters America and
II ALTROLINATE	paid, the receipt of which is here undersigned has (have) sold, assi- transfer unto said Assignee the fi America, its territories, dependent any and all Letters Patent(s) wh	eby acknowledged, and or igned and transferred, and ill and exclusive right to cies and possessions and t ich 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 he entire right, title and interest in and to for in the United States of America, its pove is designated, in any and all foreign
	and to any and all divisions, reist term or terms for which the same r		ersions and extensions thereof for the full
		ie applications thereof and	connection with this application and any dalso to execute separate assignments in vor expedient.

Page 1 of 2

and producing evidence and proceeding with such interference.

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

## ATTORNEY DOCKET NO. 5438-0319PUS1

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 _	2011.10.18	_,	Name of Inventor (signature) SEO, Dong Youn
Date _		_,	Name of Inventor
Date _	2011.10.18	_,	(signature) KIM, Min Gyu  Name of Inventor
Date _	2011.10.18	_,	(signature) YANG, Suck Chel  Name of Inventor  (signature) AHN, Joon Kui

# BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

## ASSIGNMENT

Application No.	13/504,075	Filed	April 25, 2012		
Insert Name(s) of Inventor(s)	***(Giv	en Name FAMILY NAME (ALL CAF	°S))***		
,		g Youn; KIM, Min Gyu; YANG ne undersigned) has (have) invente	, Suck Chel and AHN, Joon Kui ed certain new and useful improvements		
Insert Title of Invention		ATUS FOR TRANSMITTING R ELESS COMMUNICATION SY	ECEPTION ACKNOWLEDGEMENT YSTEM		
		or Letters Patent of the United States of a provisional application)	ates of America has been executed by the		
Insert Date	on	October 19, 2011	; and		
of Signing of Application Insert Name of Assignee Insert Address of Assignee	WHEREAS, LG Electronics Inc. of 20, Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721 Republic of Korea				
CHECK BOX IF APPROPRIATE	desirous of acquiring the en	tire right, title and interest in and d therefor in the United States of A	reinafter designated as the Assignee) is to said invention and in and to any Letters America and		
2.2	paid, the receipt of which undersigned has (have) sol transfer unto said Assignee America, its territories, dep any and all Letters Patente	is hereby acknowledged, and of id, assigned and transferred, and the full and exclusive right to the endencies and possessions and the (s) which may be granted thereit	ollars (\$10.00) to the undersigned in hand her good and valuable consideration, the by these presents does sell, assign and he said invention in the United States of he 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 division term or terms for which the		rsions and extensions thereof for the full		
	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

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

connection with such applications as the Assignee may deem necessary or expedient.

and producing evidence and proceeding with such interference.

ATTORNEY DOCKET NO. 5438-0319PUS1

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.

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

Date	er e	Name of Inventor
Date	مه ۱۱ , ۱۵ . ۱۹ ,	(signature) SEO, Dong Youn  Name of Inventor (signature) KIM, Min Gyu
Date _	<b>,</b>	Name of Inventor (signature) YANG, Suck Chel
Date _		Name of Inventor (signature) AHN, Joon Kui