PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Yoo-Sool YOON	11/18/2011
Jeong-Hyun LIM	12/02/2011
Koon-Seok LEE	12/02/2011

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:	13376759	

CORRESPONDENCE DATA

Fax Number: (703)205-8050 Phone: 7032058000

Email: mailroom@bskb.com, nleta@bskb.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: Birch, Stewart, Kolasch & Birch, LLP
Address Line 1: 8110 Gatehouse Road, Suite 100E
Address Line 4: Falls Church, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	3449-1796PUS1	
NAME OF SUBMITTER:	James T. Eller	

Total Attachments: 4

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PATENT REEL: 027349 FRAME: 0377 CH \$40.00 133/6/

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ATTORNEY DOCKET NO. 3449-1796PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No.	13/376,759	Filed	December 7, 2011	
Insert Name(s) of Investor(s)	***(Given Name FAMILY NAME (ALL CAPS))***			
	WHEREAS, YOON, Yoo-Sool, LIM, Jeon as the undersigned) has (have) invented certain no	g-Hyun, w and use	LEE, Koon-Sook (hereinafter designated ful improvements in:	
Insert Title of Invention	3			
	for which an application for Letters Patent of the undersigned (except in the case of a provisional a	e United S pplication)	tates of America has been executed by the	
Insert Date of Signing of	December 2, 2011		; and	
Application Insert Name of Assignee	WHEREAS, LG ELECTRONICS INC.			
Insert Address of Assignee	of 20 Yeouido-dong Yeongdeungpo-gu Scoul 150-721 Republic of Korea			
CHECK BOX IF APPROPRIATE	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and x in any foreign countries.			
	NOW, THEREFORE, in consideration of the sur paid, the receipt of which is hereby acknowled undersigned has (have) sold, assigned and tran transfer unto said Assignee the full and exclusin America, its territories, dependencies and posses any and all Letters Patent(s) which may be go territories, dependencies and possessions, and if countries;	ged, and o sferred, an we right to sions and anted ther	other 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	

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

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term or terms for which the same may be granted.

Attorney Docket No. 3449-1796PUS1

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 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) YOON, Yoo-Sool	
Date	Name of Inventor	
	(signature) LIM, Jeong-Hyun	
Date 2011 , 12 , 2	Name of Inventor 4000 - 400 k	
	(signature) LEE, Koon-Seok	

ATTORNEY DOCKET NO. 3449-1796PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No.	13/376,759	Etteri	December 7, 2011
Insert Name(s) of Inventoris)	***(Givan)	Name PAMILY NAMÉ (ALI, CAI	Moss
	WHEREAS, YOON, Yoo-S as the undersigned) has (have)		EE, Koon-Sook (hereinafter designated al improvements in:
Insert Title of Investion	COOKE	R AND CONTROL ME	THOD THEREOF
N. W. M.	for which an application for I undersigned (except in the case		ates of America has been executed by the
Insert Date	64	November 18, 2011	and
of Signing of Application Insert Name of Assignre Insert Address	WHEREAS, LG ELECTRON		blic of Koosa
of Assigned	its beirs, successors, legal re	presentatives and assigns (he right, title and interest in and herefor in the United States of	creinafter designated as the Assignee) is to said invention and in and to any Letters
F APPROPRIATE	paid, the receipt of which is undersigned has (have) sold, transfer unto said Assignee th America, its territories, depen- any and all Letters Patent(s)	hereby acknowledged, and or assigned and transferred, and he full and exclusive right to dencies and possessions and to which may be granted then	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 hove is designated, in any and all fureign
	and to any and all divisions,		traions and extensions thereof for the full

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Attorney Docket No. 3449-1796PUS1

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The undersigned agree (s) to execute all papers necessary in commercion with any interference which may be declared concerning this application or continuation, division, conversion or reinsue thereof or Letter Patent(s) or release patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

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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.

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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 - 18	Name of Inventor	(signature) YOON, Yoo-Sool
Date,	Name of Inventor	(signature) LIM, Jeong-Hyun
Date	Name of Inventor	(segnature) LEE, Koon-Scok

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