

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Ji Won KANG</td> <td>07/08/2013</td> </tr> <tr> <td>Jin Young CHUN</td> <td>07/03/2013</td> </tr> <tr> <td>Ki Tae KIM</td> <td>07/03/2013</td> </tr> <tr> <td>Su Nam KIM</td> <td>07/03/2013</td> </tr> <tr> <td>Bin Chul IHM</td> <td>06/29/2013</td> </tr> <tr> <td>Sung Ho PARK</td> <td>07/03/2013</td> </tr> </tbody> </table>		Name	Execution Date	Ji Won KANG	07/08/2013	Jin Young CHUN	07/03/2013	Ki Tae KIM	07/03/2013	Su Nam KIM	07/03/2013	Bin Chul IHM	06/29/2013	Sung Ho PARK	07/03/2013
Name	Execution Date														
Ji Won KANG	07/08/2013														
Jin Young CHUN	07/03/2013														
Ki Tae KIM	07/03/2013														
Su Nam KIM	07/03/2013														
Bin Chul IHM	06/29/2013														
Sung Ho PARK	07/03/2013														
RECEIVING PARTY DATA															
<table border="1"> <tr> <td>Name:</td> <td>LG ELECTRONICS INC.</td> </tr> <tr> <td>Street Address:</td> <td>20 Yeouido-dong Yeongdeungpo-gu</td> </tr> <tr> <td>City:</td> <td>Seoul</td> </tr> <tr> <td>State/Country:</td> <td>KOREA, REPUBLIC OF</td> </tr> <tr> <td>Postal Code:</td> <td>150-721</td> </tr> </table>		Name:	LG ELECTRONICS INC.	Street Address:	20 Yeouido-dong Yeongdeungpo-gu	City:	Seoul	State/Country:	KOREA, REPUBLIC OF	Postal Code:	150-721				
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															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13980488</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13980488										
Property Type	Number														
Application Number:	13980488														
CORRESPONDENCE DATA															
Fax Number:	7032058050														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Phone:	703-205-8000														
Email:	mailroom@bskb.com, yolanda.askew-sampson@bskb.com														
Correspondent Name:	Birch, Stewart, Kolasch & Birch, LLP														
Address Line 1:	P.O. Box 747														
Address Line 4:	Falls Church, VIRGINIA 22040-0747														
ATTORNEY DOCKET NUMBER:	5438-0479PUS1														
NAME OF SUBMITTER:	Yolanda Askew-Sampson														

OP \$40.00 13980488

Signature:	/yolanda askew-sampson/
Date:	07/19/2013
Total Attachments: 4 source=20130718ASSIGNMENT_5438_0479PUS1#page1.tif source=20130718ASSIGNMENT_5438_0479PUS1#page2.tif source=20130718ASSIGNMENT_5438_0479PUS1#page3.tif source=20130718ASSIGNMENT_5438_0479PUS1#page4.tif	

**BIRCH, STEWART, KOLASCH & BIRCH, LLP**UNITED STATES PATENT RIGHTS, OR  
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS**ASSIGNMENT**Application No. 13/980,488 Filed July 18, 2013Insert Name(s)  
of Inventor(s) **\*\*\* (Given Name FAMILY NAME (ALL CAPS)) \*\*\***

WHEREAS, KANG, Ji Won; CHUN, Jin Young; KIM, Ki Tac; KIM, Su Nam; IHM, Bin Chul and PARK, Sung Ho (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title  
of Invention **METHOD AND APPARATUS FOR RECEIVING SIGNAL IN MULTI-NODE SYSTEM**

for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application)

Insert Date  
of Signing of  
Applicationon July 8, 2013, July 3, 2013, July 3, 2013, July 3, 2013 and July 3, 2013, respectively; andInsert Name  
of Assignee  
Insert Address  
of AssigneeWHEREAS, **LG ELECTRONICS INC.**

of 20 Yeouido-dong Yeongdeungpo-gu Seoul 150-721 Republic of Korea

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

CHECK BOX  
IF APPROPRIATE **in any foreign countries.**

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

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

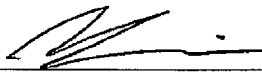
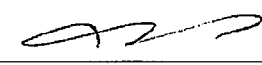
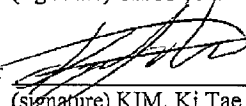

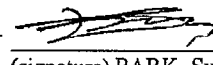
The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully 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	<u>8th July 2013</u>	Name of Inventor	<u></u> (signature) KANG, Ji Won
Date	<u>3rd July 2013</u>	Name of Inventor	<u></u> (signature) CHUN, Jin Young
Date	<u>3rd July 2013</u>	Name of Inventor	<u></u> (signature) KIM, Ki Tae
Date	<u>3rd July 2013</u>	Name of Inventor	<u></u> (signature) KIM, Su Nam
Date	_____	Name of Inventor	_____ (signature) IHM, Bin Chul
Date	<u>3rd July 2013</u>	Name of Inventor	<u></u> (signature) PARK, Sung Ho

**BIRCH, STEWART, KOLASCH & BIRCH, LLP**UNITED STATES PATENT RIGHTS, OR  
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS**ASSIGNMENT**Application No. 13/980,488 Filed July 18, 2013Insert Name(s) of Inventor(s) **\*\*\* (Given Name FAMILY NAME (ALL CAPS)) \*\*\***

WHEREAS, KANG, Ji Won; CHUN, Jin Young; KIM, Ki Tae; KIM, Su Nam; IHM, Bin Chul and PARK, Sung Ho (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD AND APPARATUS FOR RECEIVING SIGNAL IN MULTI-NODE SYSTEM**

for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application)

Insert Date of Signing of Application on June 29, 2013; andInsert Name of Assignee **WHEREAS, LG ELECTRONICS INC.**

Insert Address of Assignee of 20 Yeouido-dong Yeongdeungpo-gu Seoul 150-721 Republic of Korea

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

CHECK BOX IF APPROPRIATE  **in any foreign countries.**

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or 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 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) KANG, Ji Won

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) CHUN, Jin Young

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) KIM, Ki Tae

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) KIM, Su Nam

Date 29 June 2013, Name of Inventor \_\_\_\_\_  
(signature) IHM, Bin Chul

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) PARK, Sung Ho