

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Hyunsoo KO	11/03/2011
Sunam KIM	12/02/2011
Dongguk LIM	11/17/2011
Moonil LEE	11/07/2011
Jaehoon CHUNG	11/03/2011
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:	13244146
CORRESPONDENCE DATA	
Fax Number:	(213)623-2211
Phone:	213-623-2221
Email:	patent@hlaw.com
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
Correspondent Name:	LEE, HONG, DEGERMAN, KANG & WAIMEY
Address Line 1:	660 S. FIGUEROA STREET
Address Line 2:	Suite 2300
Address Line 4:	LOS ANGELES, CALIFORNIA 90017
ATTORNEY DOCKET NUMBER:	2101-5087
NAME OF SUBMITTER:	Harry S. Lee

OP \$40.00 13244146

501746216

PATENT
REEL: 027342 FRAME: 0360

Total Attachments: 4

source=7_2101-5087_Assign#page1.tif

source=7_2101-5087_Assign#page2.tif

source=7_2101-5087_Assign#page3.tif

source=7_2101-5087_Assign#page4.tif

ASSIGNMENT

- | | | |
|--|-----------------|-------------------|
| <i>(1-8) Insert Name(s) of Inventor(s)</i> | (1) HYUNSOO KO | (5) JAEHOON CHUNG |
| | (2) SUNAM KIM | (6) |
| | (3) DONGGUK LIM | (7) |
| | (4) MOONIL LEE | (8) |

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

- | | |
|---|--|
| <i>(9) Insert name of Assignee</i> | (9) LG ELECTRONICS INC. |
| <i>(10) Insert state of Incorporation of Assignee</i> | (10) Korea |
| <i>(11) Insert address of Assignee</i> | (11) 20 Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-721, Korea |

(hereinafter designated as the Assignee) the entire worldwide right, title and interest in the invention known as

- | | |
|--|---|
| <i>(12) Insert identification of Invention, such as Title, Case Number or Foreign Application Number</i> | (12) METHOD AND APPARATUS FOR EFFICIENT FEEDBACK IN A WIRELESS COMMUNICATION SYSTEM SUPPORTING MULTIPLE ANTENNA
(Application no. 13/244,146) |
|--|---|

for which the undersigned has (have) executed an application for patent in the United States of America and all patent applications in foreign countries corresponding thereto or based thereon.

1) The undersigned agree(s) to execute all papers necessary in connection with any original, reissue, divisional and continuing United States and foreign applications for the above-identified invention and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

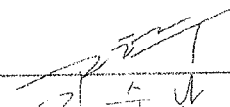
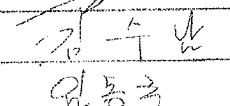
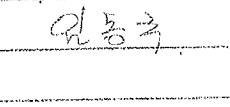
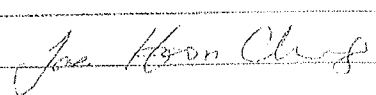
2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed any agreement in conflict herewith.

The undersigned hereby appoints the Attorneys associated with Customer No. 035884 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 United States Patent and Trademark Office for recordation of this document.

Date: <u>2nd Nov, 2011</u>	Signature of Inventor 1	
Date: <u>2011. 12. 2</u>	Signature of Inventor 2	
Date: <u>Nov. 11, 2011</u>	Signature of Inventor 3	
Date: _____	Signature of Inventor 4	_____
Date: <u>Nov 3rd, 2011</u>	Signature of Inventor 5	

ASSIGNMENT

- | | | |
|--|-----------------|-------------------|
| (1-8) <i>Insert Name(s) of Inventor(s)</i> | (1) HYUNSOO KO | (5) JAEHOON CHUNG |
| | (2) SUNAM KIM | (6) |
| | (3) DONGGUK LIM | (7) |
| | (4) MOONIL LEE | (8) |

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

- | | |
|---|--|
| (9) <i>Insert name of Assignee</i> | (9) LG ELECTRONICS INC. |
| (10) <i>Insert state of Incorporation of Assignee</i> | (10) Korea |
| (11) <i>Insert address of Assignee</i> | (11) 20 Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-721, Korea |

(hereinafter designated as the Assignee) the entire worldwide right, title and interest in the invention known as

- | | |
|--|---|
| (12) <i>Insert identification of Invention, such as Title, Case Number or Foreign Application Number</i> | (12) METHOD AND APPARATUS FOR EFFICIENT FEEDBACK IN A WIRELESS COMMUNICATION SYSTEM SUPPORTING MULTIPLE ANTENNA
(Application no. 13/244,146) |
|--|---|

for which the undersigned has (have) executed an application for patent in the United States of America and all patent applications in foreign countries corresponding thereto or based thereon.

1) The undersigned agree(s) to execute all papers necessary in connection with any original, reissue, divisional and continuing United States and foreign applications for the above-identified invention and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or continuations thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed any agreement in conflict herewith.

Attorney Docket No. 2101-5087

The undersigned hereby appoints the Attorneys associated with Customer No. 035884 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 United States Patent and Trademark Office for recordation of this document.

Date: _____ Signature of Inventor 1 _____

Date: _____ Signature of Inventor 2 _____

Date: _____ Signature of Inventor 3 _____

Date: Nov. 7th, 2011 Signature of Inventor 4 

Date: _____ Signature of Inventor 5 _____