

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>Hyung Tae KIM</td> <td>01/27/2012</td> </tr> <tr> <td>Dae Won LEE</td> <td>01/26/2012</td> </tr> <tr> <td>Han Byul SEO</td> <td>01/27/2012</td> </tr> <tr> <td>Byoung Hoon KIM</td> <td>01/27/2012</td> </tr> <tr> <td>Ki Jun KIM</td> <td>01/27/2012</td> </tr> </tbody> </table>		Name	Execution Date	Hyung Tae KIM	01/27/2012	Dae Won LEE	01/26/2012	Han Byul SEO	01/27/2012	Byoung Hoon KIM	01/27/2012	Ki Jun KIM	01/27/2012
Name	Execution Date												
Hyung Tae KIM	01/27/2012												
Dae Won LEE	01/26/2012												
Han Byul SEO	01/27/2012												
Byoung Hoon KIM	01/27/2012												
Ki Jun KIM	01/27/2012												
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>REPUBLIC OF KOREA</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:	REPUBLIC OF KOREA	Postal Code:	150-721		
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													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13388662</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13388662								
Property Type	Number												
Application Number:	13388662												
CORRESPONDENCE DATA													
<p>Fax Number: (213)623-2211 Phone: 213-623-2221 Email: patent@lhlaw.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>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</p>													
ATTORNEY DOCKET NUMBER:	2101-5205												
NAME OF SUBMITTER:	Harry S. Lee												

OP \$40.00 13388662

Total Attachments: 4

source=2101-5205_Assign#page1.tif

source=2101-5205_Assign#page2.tif

source=2101-5205_Assign#page3.tif

source=2101-5205_Assign#page4.tif

PATENT

REEL: 027645 FRAME: 0617

ASSIGNMENT

(1-8) *Insert Name(s) of Inventor(s)* (1) KIM, Hyung Tae (5) KIM, Ki Jun
 (2) LEE, Dae Won
 (3) SEO, Han Byul
 (4) KIM, Byoung Hoon

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

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

(12) *Insert identification of Invention, such as Title, Case Number or Foreign Application Number* (12) **APPARATUS AND METHOD FOR GENERATING CODEBOOK IN WIRELESS COMMUNICATION SYSTEM**

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.

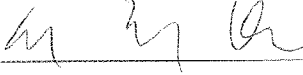
5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby 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.

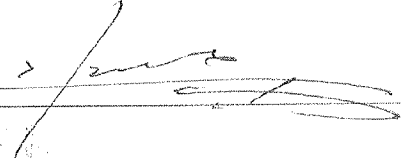
The undersigned hereby appoints the **Attorneys associated with Customer No. 035884** the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

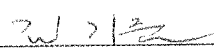
Date: 2012/01/29 Signature of Inventor 1 21 26 01

Signature of Assignee
 LG Electronics Inc.
 Seoul, Korea

Date: _____ Signature of Inventor 2 _____

Date: 2012/01/27 Signature of Inventor 3 

Date: 2012/01/27 Signature of Inventor 4 

Date: 2012/01/27 Signature of Inventor 5 

ASSIGNMENT

(1-8) *Insert Name(s) of Inventor(s)* (1) KIM, Hyung Tae (5) KIM, Ki Jun
 (2) LEE, Dae Won
 (3) SEO, Han Byul
 (4) KIM, Byoung Hoon

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

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

(12) *Insert identification of invention, such as Title, Case Number or Foreign Application Number* (12) **APPARATUS AND METHOD FOR GENERATING CODEBOOK IN WIRELESS COMMUNICATION SYSTEM**

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: _____ Signature of Inventor 1 _____

Date: Jan 26, 2012 Signature of Inventor 2 

Date: _____ Signature of Inventor 3 _____

Date: _____ Signature of Inventor 4 _____

Date: _____ Signature of Inventor 5 _____