PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Dae Won LEE	01/10/2011
Hak Seong KIM	01/10/2011
Byoung Hoon KIM	01/10/2011
Ki Jun KIM	01/01/2011
Eun Sun KIM	01/06/2011

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:	13006879

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NAME OF SUBMITTER:	Esther H. Chong

Total Attachments: 2
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ATTORNEY DOCKET NO. 0465-2758PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 13/006,879 Filed January 14, 2011

Insert Name(s) of Inventor(s)

(Given Name FAMILY NAME (ALL CAPS))

WHEREAS, Dae Won LEE, Hak Seong KIM, Byoung Hoon KIM, Ki Jun KIM, Eun Sun KIM (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention

METHOD AND APPARATUS FOR TRANSMITTING DOWNLINK REFERENCE SIGNAL IN WIRELESS COMMUNICATION SYSTEM SUPPORTING MULTIPLE ANTENNAS

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 January 10, 2011, January 10, 2011, January 10, 2011, January 10, 2011 and January 6, 2011, respectively; and

Insert 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, for good and valuable consideration, the receipt of which is hereby acknowledged, 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 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 10/01/11, Name of Inventor
(signature) Dae Won LEE

Date 10/01/11, Name of Inventor
(signature) Hak Seong KIM

Date 10/01/11, Name of Inventor
(signature) Byoung Hoon KIM

Date 1./01/11, Name of Inventor
(signature) Ki Jun KIM

Date 06/01/11, Name of Inventor
(signature) Eun Sun KIM

Date __________, Name of Inventor __________
(signature)