

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Seung Hee HAN	03/09/2009
Jin Young CHUN	04/10/2009
Wook Bong LEE	03/09/2009
Min Seok NOH	03/09/2009
Jin Sam KWAK	04/10/2009
Yeong Hyeon KWON	03/09/2009
Hyun Woo LEE	03/09/2009
Jin Soo CHOI	04/10/2009
Dong Cheol KIM	03/09/2009
Sung Ho MOON	04/10/2009
Bin Chul IHM	03/09/2009
Moon Il Lee	03/10/2009

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:	12343295

CORRESPONDENCE DATA

Fax Number: (703)205-8050
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
 Phone: 7032058000
 Email: predk@bskb.com

CH \$40.00 12343295

Correspondent Name: Birch, Stewart, Kolasch & Birch, LLP
Address Line 1: 8110 Gatehouse Road
Address Line 4: Falls Church, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER: 0465-2093PUS1

NAME OF SUBMITTER: Esther H. Chong

Total Attachments: 12

source=20090514Assignment#page1.tif
source=20090514Assignment#page2.tif
source=20090514Assignment#page3.tif
source=20090514Assignment#page4.tif
source=20090514Assignment#page5.tif
source=20090514Assignment#page6.tif
source=20090514Assignment#page7.tif
source=20090514Assignment#page8.tif
source=20090514Assignment#page9.tif
source=20090514Assignment#page10.tif
source=20090514Assignment#page11.tif
source=20090514Assignment#page12.tif

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 12/343,295 Filed December 23, 2008

Insert Name(s) of Inventor(s) ***** (Given Name FAMILY NAME (ALL CAPS)) *****

WHEREAS, Seung Hee HAN; Jin Young CHUN; Wook Bong LEE; Min Seok NOH; Jin Sam KWAK; Yeong Hyeon KWON; Hyun Woo LEE; Jin Soo CHOI; Dong Cheol KIM; Sung Ho MOON; Bin Chul IHM; and Moon Il LEE (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD FOR TRANSMITTING AND RECEIVING SIGNALS USING MULTI-BAND RADIO FREQUENCIES**

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 April 10, 2009; and

Insert Name of Assignee **WHEREAS, LG Electronics Inc.**
Insert Address of Assignee **of 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, REPUBLIC OF KOREA 150-721**

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 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) Seung Hee HAN

Date Apr. 10, 2009, Name of Inventor _____
(signature) Jin Young CHUN

Date _____, Name of Inventor _____
(signature) Wook Bong LEE

Date _____, Name of Inventor _____
(signature) Min Seok NOH

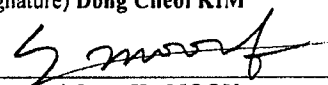
Date 04/10/09, Name of Inventor _____
(signature) Jin Sam KWAK

Date _____, Name of Inventor _____
(signature) Yeong Hyeon KWON

Date _____, Name of Inventor _____
(signature) Hyun Woo LEE

Date _____, Name of Inventor _____
(signature) Jin Soo CHOI

Date _____, Name of Inventor _____
(signature) Dong Cheol KIM

Date 4-10-2009, Name of Inventor 
(signature) Sung Ho MOON

Date _____, Name of Inventor _____
(signature) Bin Chul IHM

Date _____, Name of Inventor _____
(signature) Moon Il LEE

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 12/343,295 Filed December 23, 2008

Insert Name(s) of Inventor(s) *****(Given Name FAMILY NAME (ALL CAPS))*****

WHEREAS, Seung Hee HAN; Jin Young CHUN; Wook Bong LEE; Min Seok NOH; Jin Sam KWAK; Yeong Hyeon KWON; Hyun Woo LEE; Jin Soo CHOI; Dong Cheol KIM; Sung Ho MOON; Bin Chul IHM; and Moon Il LEE (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD FOR TRANSMITTING AND RECEIVING SIGNALS USING MULTI-BAND RADIO FREQUENCIES**

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 March 9, 2009; and

Insert Name of Assignee **WHEREAS, LG Electronics Inc.**
Insert Address of Assignee **of 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, REPUBLIC OF KOREA 150-721**

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 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 03/09/2009, Name of Inventor [Signature]
(signature) Seung Hee HAN

Date _____, Name of Inventor _____
(signature) Jin Young CHUN

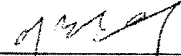
Date 03/09/2009, Name of Inventor [Signature]
(signature) Wook Bong LEE

Date 03/09/2009, Name of Inventor [Signature]
(signature) Min Seok NOH

Date _____, Name of Inventor _____
(signature) Jin Sam KWAK

Date 03/09/2009, Name of Inventor [Signature]
(signature) Yeong Hyeon KWON

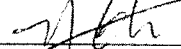
Date 04/08/2009,

Name of Inventor 
(signature) Hyun Woo LEE

Date _____,

Name of Inventor _____
(signature) Jin Soo CHOI

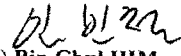
Date 04/09/2009,

Name of Inventor 
(signature) Dong Cheol KIM

Date _____,

Name of Inventor _____
(signature) Sung Ho MOON

Date 03/08/2009,

Name of Inventor 
(signature) Bin Chul IHM

Date _____,

Name of Inventor _____
(signature) Moon Il LEE

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 12/343,295 Filed December 23, 2008

Insert Name(s) of Inventor(s) *****(Given Name FAMILY NAME (ALL CAPS))*****

WHEREAS, Seung Hee HAN; Jin Young CHUN; Wook Bong LEE; Min Seok NOH; Jin Sam KWAK; Yeong Hyeon KWON; Hyun Woo LEE; Jin Soo CHOI; Dong Cheol KIM; Sung Ho MOON; Bin Chul IHM; and Moon Il LEE (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD FOR TRANSMITTING AND RECEIVING SIGNALS USING MULTI-BAND RADIO FREQUENCIES**

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 April 10, 2009; and

Insert Name of Assignee **WHEREAS, LG Electronics Inc.**

Insert Address of Assignee **of 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, REPUBLIC OF KOREA 150-721**

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 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.

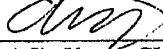
The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the 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) Seung Hee HAN

Date Apr. 10. 2009, Name of Inventor 
(signature) Jin Young CHUN

Date _____, Name of Inventor _____
(signature) Wook Bong LEE

Date _____, Name of Inventor _____
(signature) Min Seok NOH

Date 04/10/09, Name of Inventor 
(signature) Jin Sam KWAK

Date _____, Name of Inventor _____
(signature) Yeong Hyeon KWON

Attorney Docket No. 0465-2093PUS1

Date _____,	Name of Inventor _____ (signature) Hyun Woo LEE
Date <u>2009.4.10</u> ,	Name of Inventor _____ (signature) Jin Soo CHOI
Date _____,	Name of Inventor _____ (signature) Dong Cheol KIM
Date _____,	Name of Inventor _____ (signature) Sung Ho MOON
Date _____,	Name of Inventor _____ (signature) Bin Chul IHM
Date _____,	Name of Inventor _____ (signature) Moon Il LEE

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 12/343,295 Filed December 23, 2008

Insert Name(s) of Inventor(s) ***** (Given Name FAMILY NAME (ALL CAPS)) *****

WHEREAS, Seung Hee HAN; Jin Young CHUN; Wook Bong LEE; Min Seok NOH; Jin Sam KWAK; Yeong Hyeon KWON; Hyun Woo LEE; Jin Soo CHOI; Dong Cheol KIM; Sung Ho MOON; Bin Chul IHM; and Moon Il LEE (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD FOR TRANSMITTING AND RECEIVING SIGNALS USING MULTI-BAND RADIO FREQUENCIES**

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 March 10, 2009 and April 10, 2009; and

Insert Name of Assignee **WHEREAS, LG Electronics Inc.**

Insert Address of Assignee **of 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, REPUBLIC OF KOREA 150-721**

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 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.

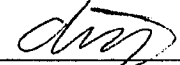
The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the 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) Seung Hee HAN

Date Apr. 10. 2009, Name of Inventor 
(signature) Jin Young CHUN

Date _____, Name of Inventor _____
(signature) Wook Bong LEE

Date _____, Name of Inventor _____
(signature) Min Seok NOH

Date 04/10/09, Name of Inventor 
(signature) Jin Sam KWAK

Date _____, Name of Inventor _____
(signature) Yeong Hyeon KWON

Date _____, Name of Inventor _____
(signature) Hyun Woo LEE

Date _____, Name of Inventor _____
(signature) Jin Soo CHOI

Date _____, Name of Inventor _____
(signature) Dong Cheol KIM

Date _____, Name of Inventor _____
(signature) Sung Ho MOON

Date _____, Name of Inventor _____
(signature) Bin Chul IHM

Date *March 10th 2009*, Name of Inventor _____
(signature) *[Handwritten Signature]* Moon Il LEE