

## 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>Hakseong KIM</td> <td>06/17/2013</td> </tr> <tr> <td>Yoan SHIN</td> <td>06/14/2013</td> </tr> <tr> <td>Sungcheol YOO</td> <td>06/14/2013</td> </tr> <tr> <td>Ohsoon SHIN</td> <td>06/14/2013</td> </tr> <tr> <td>Kijun KIM</td> <td>06/21/2013</td> </tr> <tr> <td>Mochan YANG</td> <td>06/14/2013</td> </tr> </tbody> </table>		Name	Execution Date	Hakseong KIM	06/17/2013	Yoan SHIN	06/14/2013	Sungcheol YOO	06/14/2013	Ohsoon SHIN	06/14/2013	Kijun KIM	06/21/2013	Mochan YANG	06/14/2013
Name	Execution Date														
Hakseong KIM	06/17/2013														
Yoan SHIN	06/14/2013														
Sungcheol YOO	06/14/2013														
Ohsoon SHIN	06/14/2013														
Kijun KIM	06/21/2013														
Mochan YANG	06/14/2013														
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														
<table border="1"> <tr> <td>Name:</td> <td>SUNGKYUNKWAN UNIVERSITY FOUNDATION FOR CORPORATE</td> </tr> <tr> <td>Street Address:</td> <td>Sungkyunkwan Univ., 300, Cheoncheon-Dong, Jangan-Gu</td> </tr> <tr> <td>City:</td> <td>Suwon-Si, Gyeonggi-Do</td> </tr> <tr> <td>State/Country:</td> <td>KOREA, REPUBLIC OF</td> </tr> <tr> <td>Postal Code:</td> <td>440-746</td> </tr> </table>		Name:	SUNGKYUNKWAN UNIVERSITY FOUNDATION FOR CORPORATE	Street Address:	Sungkyunkwan Univ., 300, Cheoncheon-Dong, Jangan-Gu	City:	Suwon-Si, Gyeonggi-Do	State/Country:	KOREA, REPUBLIC OF	Postal Code:	440-746				
Name:	SUNGKYUNKWAN UNIVERSITY FOUNDATION FOR CORPORATE														
Street Address:	Sungkyunkwan Univ., 300, Cheoncheon-Dong, Jangan-Gu														
City:	Suwon-Si, Gyeonggi-Do														
State/Country:	KOREA, REPUBLIC OF														
Postal Code:	440-746														
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>13984780</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13984780										
Property Type	Number														
Application Number:	13984780														
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, Kleithon.G.Sayson@bskb.com														

OP \$40.00 13984780

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:	5438-0486PUS1
NAME OF SUBMITTER:	Kleithon Sayson
Signature:	/kleithon sayson/
Date:	08/12/2013

Total Attachments: 6  
source=2013-08-12\_ASSIGNMENT\_0879-1402PUS1#page1.tif  
source=2013-08-12\_ASSIGNMENT\_0879-1402PUS1#page2.tif  
source=2013-08-12\_ASSIGNMENT\_0879-1402PUS1#page3.tif  
source=2013-08-12\_ASSIGNMENT\_0879-1402PUS1#page4.tif  
source=2013-08-12\_ASSIGNMENT\_0879-1402PUS1#page5.tif  
source=2013-08-12\_ASSIGNMENT\_0879-1402PUS1#page6.tif

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 13/984,780 Filed August 09, 2013

Insert Name(s) of Inventor(s) **\*\*\*[Given Name:FAMILY NAME (ALL CAPS)]\*\*\***

WHEREAS, KIM, Hakseong; SHIN, Yoan; YOO, Sungcheol; SHIN, Ohsoon; KIM, Kijun and YANG, Mochan (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD FOR AVOIDING INTER-CELL INTERFERENCE IN WIRELESS ACCESS 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 06/14/2013; 06/17/2013 and 06/21/2013; 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  
and **SUNGKYUNKWAN UNIVERSITY FOUNDATION FOR CORPORATE**  
of Sungkyunkwan Univ., 300, Cheoncheon-Dong, Jangan-Gu, Suwon-Si, Gyeonggi-Do, 440-746 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 2013. 6. 17, Name of Inventor [Signature]  
(signature) KIM, Hakseong

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) SHIN, Yoan

Date \_\_\_\_\_, Name of Inventor or Co-Inventor \_\_\_\_\_  
(signature) YOO, Sungcheol

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) SHIN, Ohsoon

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) KIM, Kijun

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) YANG, Mochan

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 13/984,780 Filed August 09, 2013

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

WHEREAS, KIM, Hakseong; SHIN, Yoan; YOO, Sungcheol; SHIN, Ohsoon; KIM, Kijun and YANG, Mochan (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD FOR AVOIDING INTER-CELL INTERFERENCE IN WIRELESS ACCESS 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 06/14/2013; 06/17/2013 and 06/21/2013; 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  
and **SUNGKYUNKWAN UNIVERSITY FOUNDATION FOR CORPORATE**  
of Sungkyunkwan Univ., 300, Cheoncheon-Dong, Jangan-Gu, Suwon-Si, Gyeonggi-Do, 440-746 Republic of Korea

CHECK BOX IF APPROPRIATE

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  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) KIM, Hakseong
Date <u>2013. 6. 14</u> ,	Name of Inventor _____ (signature) SHIN, Yoan
Date <u>2013. 6. 14</u> ,	Name of Inventor <u>Yoo, Sungcheol</u> (signature) YOO, Sungcheol
Date <u>2013. 6. 14</u> ,	Name of Inventor <u>Shin</u> (signature) SHIN, Ohsoon
Date _____,	Name of Inventor _____ (signature) KIM, Kijun
Date <u>2013. 6. 14</u> ,	Name of Inventor <u>YANG, Mochan</u> (signature) YANG, Mochan

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

Application No. 13/984,780 Filed August 09, 2013

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

WHEREAS, KIM, Hakseong; SHIN, Yoan; YOO, Sungcheol; SHIN, Ohsoon; KIM, Kijun and YANG, Mochan (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title of Invention **METHOD FOR AVOIDING INTER-CELL INTERFERENCE IN WIRELESS ACCESS 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 06/14/2013; 06/17/2013 and 06/21/2013; 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

and **SUNGKYUNKWAN UNIVERSITY FOUNDATION FOR CORPORATE**

of Sungkyunkwan Univ., 300, Cheoncheon-Dong, Jangan-Gu, Suwon-Si, Gyeonggi-Do, 440-746 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.

Attorney Docket No.: 5438-0486PUS1

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) KIM, Hakseong

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) SHIN, Yoan

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) YOO, Sungcheol

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) SHIN, Ohsoon

Date 2013 / 6 / 21, Name of Inventor \_\_\_\_\_  
(signature) KIM, Kijun

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature) YANG, Mochan