PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------|----------------|
| Eunjong LEE | 04/02/2013 |
| Youngsoo YUK | 04/02/2013 |
| Heejeong CHO | 04/02/2013 |
| Jeongki KIM | 04/04/2013 |

RECEIVING PARTY DATA

| Name: | LG ELECTRONICS INC. | |
|-----------------|-----------------------------------|--|
| Street Address: | 20 Yeouido-dong, Yeoungdeungpo-gu | |
| City: | Seoul | |
| State/Country: | KOREA, REPUBLIC OF | |
| Postal Code: | 150-721 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13878123 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 2101-5462 |
|-------------------------|----------------|
| NAME OF SUBMITTER: | Harry S. Lee |
| Signature: | /Harry S. Lee/ |

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| Date: | 04/05/2013 | |
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| Total Attachments: 3 source=10-2101-5462-Assignment#page1.tif source=10-2101-5462-Assignment#page2.tif source=10-2101-5462-Assignment#page3.tif | | |

PATENT REEL: 030163 FRAME: 0757

ASSIGNMENT

| | K | |
|--|--|--|
| (1-8) Insert Name(s) of Inventor(s | s) (1) LEE, Eunjong | (5) |
| | (2) YUK, Youngsoo | (6) |
| | (3) CHO, Heejeong | (7) |
| | (4) | (8) |
| | | of one dollar (\$1.00) and other good and valuable of the undersigned, the undersigned agree(s) to assign after and set over to |
| (9) Insert name of Assignee | (9) LG ELECTRONICS, INC | > . |
| (10) Insert state of Incorporation Assignee | of (10) Republic of Korea | |
| (11) Insert address of Assignee | (11) 20 Yeouldo-dong, Yeou | ingdeungpo-gu, Seoul 150-721 Republic of Korea |
| | (hereinafter designated as the invention known as | Assignee) the entire worldwide right, title and interest |
| (12) Insert identification of Invent such as Title, Case Number | tion, (12) METHOD AND APPARA or PATH IN RADIO ACCESS S | ATUS FOR DETERMINING DATA TRANSRECEIVING YSTEM SUPPORTING MULTI-RAT |
| Fareign Application Number | (Application Serial No. for which the undersigned has |) s (have) executed an application for patent in the United ant applications in foreign countries corresponding |
| (13) Insert Date of Signing of Application | (13) | |
| and continuing United States ar | f agree(s) to execute all papers nece nd foreign applications for the abo th applications as the Assignee may | essary in connection with any original, reissue, divisions weldentified invention and also to execute separat deem necessary or expedient. |
| | n or continuation or division thereof a | ssary in connection with any interference which may be and to cooperate with the Assignee in every way possible |
| | | locuments and perform any act which may be necessar or Protection of Industrial Property or similar agreements |
| The undersigned United States patent to the Assigned | | cts which may be necessary to obtain a grant of a vali |
| Patents of the United States result said Assignee, as Assignee of the interest herein assigned, and that the The undersigned hereby appoint this assignment any further iden | ling from said application or any divise entire interest, and hereby, covenante he has (they have) not executed any a nts the Attorneys Associated wi | th Customer No. 035884 the power to insert on y or desirable in order to comply with the rules of |
| Date: April 02, 2013 Sig | gnature of Inventor | |
| Date: Siç | gnature of Inventor | |
| Date: April or 2013 Sig | gnature of Inventor 75178 | |

PATENT REEL: 030163 FRAME: 07.58

ASSIGNMENT

| (1-8) | Insert Name(s) of Inven | tor(s) (1) L | .EE, Eunjong | (5) | | |
|---|---|--|--|---|---|------------------|
| | | (2) \ | YUK, Youngsoo | (6) | | |
| | | (3) (| CHO, Heajeong | (7) | | |
| | | (4) | | (8) | | |
| | | COR | siderations paid to (| sum of one dollar (\$1 each of the undersigned, , transfer and set over to | .00) and other good and vaithe undersigned agree(s) to a | luable ssign, |
| (9) | Insert name of Assigned | 9 (9) | LG ELECTRONIC | S INC. | | |
| (10) | Insert state of Incorpora Assignee | tion of (10) | Republic of Korea | | | |
| (11) | Insert address of Assign | nee (11) | 20 Yeouldo-dong, | Yeoungdeungpo-gu, Sec | ul 150-721 Republic of Korea | |
| | | | einafter designated e invention known a | | e worldwide right, title and inte | rest |
| (12) Insert identification of Invention, such as Title, Case Number or Foreign Application Number | | nber or PAT | | PARATUS FOR DETERM SS SYSTEM SUPPORTI | MINING DATA TRANSRECEIV NG MULTI-RAT | /ING |
| | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | (App for v State | | Il patent applications in fo | n application for patent in the U reign countries corresponding | |
| (13) | Insert Date of Signing o Application | <i>f</i> (13) | | | | |
| and assig | continuing United States | s and foreign a | applications for the | | with any original, reissue, divion and also to execute se expedient. | |
| | The undersiged concerning this application and going aiming evidence and going the second secon | cation or continu | ation or division the | necessary in connection reof and to cooperate with | with any interference which n the Assignee in every way po | nay be adisac |
| in cor | | | | | orm any act which may be necestrial Property or similar agrees | |
| Unite | The undersign of States patent to the Ass | | perform all affirma | tive acts which may be n | ecessary to obtain a grant of a | a valid |
| said / intere The i this s | its of the United States in Assignee, as Assignee of ist herein assigned, and the undersigned hereby ap | esulting from sain fithe entire inter that he has (they points the Atto identification w | id application or an est, and hereby con have) not executed orneys Associate which may be nece | y division or divisions or o cenants that he has (they any agreement in conflic ed with Customer No. essary or desirable in o | Patents to issue any and all to continuing applications thereof have) full right to convey the therewith. 035884 the power to insert rder to comply with the rule: | to the entire |
| | | | | | | |
| Date: | | Signature of In | ventor | | ······································ | |
| Date: | April 2 2013 | Signature of In | ventor | 2006 | | |
| Date: | • | Signature of In | | | | |

ASSIGNMENT

| (1-8) | insert Name(s) of Inventor(s) | (1) KIM, Jeongki | (5) |
|---|--|--|--|
| | | (2) | (6) |
| | | (3) | (7) |
| | | (4) | (8) |
| | | in consideration of the s considerations paid to eac and hereby does assign, tr | um of one dollar (\$1.00) and other good and valuable h of the undersigned, the undersigned agree(s) to assign, ansfer and set over to |
| (9) | Insert name of Assignee | (9) LG ELECTRONICS | NC. |
| (10) | Insert state of Incorporation of Assignee | (10) Republic of Korea | · V |
| (11) | Insert address of Assignee | (11) 20 Yeouldo-dong, Ye | ebungdeungpo-gu, Seoul 150-721 Republic of Korea |
| | | (hereinafter designated as in the invention known as | the Assignee) the entire worldwide right, title and interest |
| (12) Insert identification of Invention, such as Title, Case Number or Foreign Application Number | (12) METHOD AND APPA PATH IN RADIO ACCESS | RATUS FOR DETERMINING DATA TRANSRECEIVING SYSTEM SUPPORTING MULTI-RAT | |
| | | (Application Serial No. for which the undersigned States of America and all p thereto or based thereon. |) has (have) executed an application for patent in the United patent applications in foreign countries corresponding |
| (13) | Insert Date of Signing of Application | (13) | |
| | | | |

- 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.
- 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.
- 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.
- 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: April 04 2013 Signature of Inventor

PATENT REEL: 030163 FRAME: 0760

RECORDED: 04/05/2013