502018560 08/08/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------|----------------|
| Suckchel YANG | 07/16/2012 |
| Mingyu KIM | 07/16/2012 |
| Joonkui AHN | 07/16/2012 |
| Dongyoun SEO | 07/16/2012 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 13577623 | |

CORRESPONDENCE DATA

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

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: | 0465-3237PUS1 | |
|-------------------------|-----------------|--|
| NAME OF SUBMITTER: | esther h. chong | |

Total Attachments: 4

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> PATENT REEL: 028751 FRAME: 0040

OP \$40,00 13577623

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BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

| Application No. | 13/577,623 | Filed | August 7, 2012 | |
|--|---|---|--|--|
| Insert Name(s) | ***(Given Name | FAMILY NAME (ALL CA | APS))*** | |
| of Inventor(s) | WHEREAS, YANG, Suckchel; K designated as the undersigned) has | | foonkui and SEO, Dongyonn (hereinafte new and useful improvements in: | |
| Insert Title of Invention | METHOD AND APPARATUS FOR ALLOCATION OF DISCONTINUOUS UPLINK RESOURCE 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 | on July 16, 2012 | • | ; and | |
| Application Insert Name of Assignee | AME WHEREAS, LG ELECTRONICS INC. | | | |
| of Assignee of 20 Yeouido-dong, Yeongdeungpo-gu, Seoul of Assignee | | po-gu, Seoul 150-721 R | epublic of Korea | |
| | | t, title and interest in an | nereinafter designated as the Assignee) is d to said invention and in and to any Letters f America and | |
| CHECK BOX IF APPROPRIATE | x in any foreign countries. | | The other column to the column to | |

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.

Page 1 of 2

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Attorney Docket No. 0465-3237PUS1

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 . | 2012, 1.16 | Name of Inventor | (signature) YANG, Suckchel |
|-------------------|--------------|------------------|----------------------------|
| Date ₋ | | Name of Inventor | (signature) KIM, Mingyu |
| Date _ | 2012. 9. 16. | Name of Inventor | (signature) AffN, Joonkui |
| Date _ | 2012. 1.16 | Name of Inventor | (signature) SEO, Dongyoun |

Page 2 of 2

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BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

ASSIGNMENT

| Application No. | 13/577,623 | Filed | August 7, 2012 |
|-------------------------------------|--|---|--|
| Insert Name(s) of Inventor(s) | ***(Given Name FAMIL) | Y NAME (ALL C | APS))*** |
| or inventor (s) | WHEREAS, YANG, Suckchel; KIM, M designated as the undersigned) has (have) | | Joonkui and SEO, Dongyoun (hereinafter new and useful improvements in: |
| Insert Title of Invention | METHOD AND APPARATUS FOR A RESOURCE | LLOCATION | OF DISCONTINUOUS UPLINK |
| | for which an application for Letters Patent undersigned (except in the case of a provisi | | States of America has been executed by the |
| Insert Date of Signing of | on July 16, 2012 | | ; and |
| Application Insert Name of Assignee | WHEREAS, LG ELECTRONICS INC. | | |
| Insert Address of Assignee | of 20 Yeouido-dong, Yeongdeungpo-gu, S | Seoul 150-721 I | Republic of Korea |
| Š | | nd interest in an | thereinafter designated as the Assignee) is and to said invention and in and to any Letters of America and |
| CHECK BOX IF APPROPRIATE | x in any foreign countries. | | |
| | paid, the receipt of which is hereby acknundersigned has (have) sold, assigned antransfer unto said Assignee the full and examerica, its territories, dependencies and any and all Letters Patent(s) which may | owledged, and d transferred, a celusive right to possessions and be granted the | Dollars (\$10.00) to the undersigned in hand other good and valuable consideration, the and by these presents does sell, assign and to the said invention in the United States of the entire right, title and interest in and to prefor in the United States of America, its above is designated, in any and all foreign |

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full

Page 1 of 2

term or terms for which the same may be granted.

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Attorney Docket No. 0465-3237PUS1

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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.

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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) YANG, Suckchel |
|------|------------------|----------------------------|
| Date | Name of Inventor | (signature) KIM, Mingyu |
| Date | Name of Inventor | (signature) AHN, Joonkui |
| Date | Name of Inventor | (signature) SEO, Dongyoun |

Page 2 of 2

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