502161888 12/13/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------|----------------|
| Sheng Liu | 11/30/2012 |
| Rongdao Yu | 11/30/2012 |
| Tao Wu | 11/30/2012 |

RECEIVING PARTY DATA

| Name: | Huawei Technologies Co., Ltd. | |
|-------------------|--------------------------------|--|
| Street Address: | Huawei Administration Building | |
| Internal Address: | Bantain, Longgang District | |
| City: | SHENZHEN, GUANGDONG | |
| State/Country: | CHINA | |
| Postal Code: | 518129 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13713562 |

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 13674-1109

NAME OF SUBMITTER: Gustavo Siller, Jr.

Total Attachments: 3

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> PATENT REEL: 029463 FRAME: 0976

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Client/Matter No. 13674-1109 Client Ref. No. 82773657US04

| RECORDATION FOR | M COVER SHEET | | | |
|---|---|--|--|--|
| RECORDATION FORM COVER SHEET PATENTS ONLY | | | | |
| To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below: | | | | |
| 1. Name of conveying Party(ies): | 2. Name and Address of receiving Party(ies): | | | |
| SHENG LIU/NOVEMBER 30, 2012 RONGDAO YU/NOVEMBER 30, 2012 TAO WU/NOVEMBER 30, 2012 | Name: HUAWEI TECHNOLOGIES CO., LTD. | | | |
| Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No 3. Nature of Conveyance/Execution Date(s): | Address: Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P. R. China | | | |
| Execution Date(s): November 30, 2012 | | | | |
| Assignment | Additional name(s) and addresses attached? ☐ Yes ☒ No | | | |
| 4. Application or Patent Number(s). | | | | |
| A. Patent Application No.(s): | B. Patent No.(s): | | | |
| Additional numbers attac | ched? ☐ Yes ⊠ No | | | |
| Name and address of party to whom correspondence concerning document should be mailed: | 6. Total no. of applications & patents involved: 1 | | | |
| BRINKS HOFER GILSON & LIONE PO BOX 10395 | 7. Total Fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorize charge by credit card ☐ Authorize charge to Deposit Account No. 23-1925 ☐ Enclosed ☐ None required (government interest not affecting title) | | | |
| CHICAGO, IL 60610 | 8. Payment Information: | | | |
| Phone: (312) 321-4200 Fax: (312) 321-4299 | a. Credit Card: Last 4 Numbers Expiration Date | | | |
| | b. Charge fee and/or any Deficiencies to Deposit Account Number 23-1925 Authorized User Name: Brinks Hofer Gilson & Lione | | | |
| 9. Signature: /Gustavo Siller, Jr./ | December 13, 2012 | | | |
| Signature | Date | | | |
| /Gustavo Siller, Jr./ Name of Person Signing | Total no. of pages including coversheet, attachments and documents: 3 | | | |

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, PO Box 1450, Alexandria, VA 22313-1450

PATENT REEL: 029463 FRAME: 0977

Attorney Docket No. _____ Client Reference No. 81355984US04

ASSIGNMENT

WHEREAS, WE,

Sheng LIU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Tao WU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA: Rongdao YU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

have invented and own a certain invention entitled:
WIRELESS ACCESS METHOD, DEVICE, AND SYSTEM
for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on______, under U.S. Application No.____ and

WHEREAS, HUAWEI TECHNOLOGIES CO., LTD., of Huawei Administration Building, Bantian, Longgang District, Shenzhen, 518129, Guangdong, P.R. China, hereinafter referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, Therefore, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries

| In re Appln. of Li | iu et al. |
|--------------------|-----------|
| Attorney Docket | No |

on the invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

In WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

| Date 2012.11.30 | Sheng LIU Sheng LIU Flufe i ZHW Witness |
|---------------------|--|
| Date 2012.11.30 | Hong CHENG Witness |
| Date 2017 11.30 | Rongolaso YU Rongdao YU Ceyan CHEN Witness |
| Date 2012.11.30 | Vinggang DU Witness |
| Date 20 2 1 30 | Tao WU DIFAI |
| Date 2012. 11.30 | Tao WU Legan CHEN . Witness |
| Date 7012. 11.30 | Weishan LU Witness |