PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| Anahid Robert Safavi | 07/25/2011 |
| Jianghua Liu | 07/21/2011 |
| Mattias Wennstrom | 07/21/2011 |

RECEIVING PARTY DATA

| Name: | HUAWEI TECHNOLOGIES CO., LTD. | |
|-------------------|-------------------------------------|--|
| Street Address: | Huawei Administration Building | |
| Internal Address: | Address: Bantian, Longgang District | |
| City: | Shenzhen, Guangdong | |
| State/Country: | CHINA | |
| Postal Code: | 518129 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 13197420 | |

Gustavo Siller, Jr.

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 13674-541

Total Attachments: 3

NAME OF SUBMITTER:

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> PATENT REEL: 026695 FRAME: 0692

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Client/Matter No. 13674-541 81363351US07

| 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): | | | |
| ANAHID ROBERT SAFAVI/JULY 25, 2011 JIANGHUA LIU/JULY 21, 2011 MATTIAS WENNSTRÖM/JULY 21, 2011 | Name: HUAWEI TECHNOLOGIES CO., LTD. | | | |
| | Address: Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong 518129 | | | |
| 3. Nature of Conveyance/Execution Date(s): | 010120 | | | |
| Execution Date(s): July 25, 2011 and July 21, 2011 | | | | |
| Assignment | Additional name(s) and addresses attached? ☐ Yes ☒ No Name | | | |
| 4. Application or Patent Number(s). | is document is being filed together with a new application. | | | |
| A. Patent Application No.(s): | B. Patent No.(s): | | | |
| Additional numbers attached? ☐ Yes ☐ No | | | | |
| 5. Name and address of party to whom correspond concerning document should be mailed: | dence 6. Total no. of applications & patents involved: 1 | | | |
| | 7. Total Fee (37 CFR 1.21(h) & 3.41) \$ 40.00 | | | |
| BRINKS HOFER GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610 | Authorize charge by credit card Authorize charge to Deposit Account No. 23-1925 Enclosed None required (government interest not affecting title) | | | |
| Phone: (312) 321-4200 | 8. Payment Information: | | | |
| 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./ | August 3, 2011 | | | |
| 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: 026695 FRAME: 0693

Attorney Docket No.
Client Reference No. 81363351US07

ASSIGNMENT

WHEREAS, WE,

Anahid Robert Safavi Floor 3, 4 Skalholtsgatan 9-11 Box 54, SE-164 40 Kista, Sweden; and

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

Mattias Wennstrom Arkeologvägen 20, 75443 Uppsala, Sweden; and

have invented and own a certain invention entitled:

| A METHOD AND SYSTEM FOR ASSIGNING | |
|---|------------|
| REFERENCE SIGNALS IN A MULTI-ANTENNA CONTEXT | |
| 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 HERBY 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

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| In re Appln. of Anahid et al. Attorney Docket No. 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 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 July 25, 2011 Date July 25, 2011 Date July 26 2011 | Anahid Robert Safavi (u Jian Witness Witness Witness | |
| Date July 21, 2011 Date July 21, 2011 Date July 21, 2011 | Jianghua ZZU Jianghua LIU Wen LUO Witness Lyuan Wh Witness | |
| Date July 21. 2011 Date July 21. 2011 Date July 11. 201 | Mattias Wennstrom Wen LVO Witness Gran Wa | |

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