502466764 08/21/2013

PATENT ASSIGNMENT

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Xiaoying Xu | 08/08/2013 |
| Xiaoxiao Zheng | 08/08/2013 |
| Lingli Pang | 08/08/2013 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13972499 |

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| ATTORNEY DOCKET NUMBER: 13 | 3674-1310 | |
|----------------------------|---------------------|--|
| NAME OF SUBMITTER: | Gustavo Siller, Jr. | |

PATENT REEL: 031054 FRAME: 0733 \$40,00 139724

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| Signature: | /Gustavo Siller, Jr./ |
|---|-----------------------|
| Date: | 08/21/2013 |
| Total Attachments: 3 source=13674-1310Recordation#page1.tif source=13674-1310Recordation#page2.tif source=13674-1310Recordation#page3.tif | |

PATENT REEL: 031054 FRAME: 0734

Client/Matter No. 13674-1310 Client Ref. No. 83098449US04

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| | 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): |
| | XIAOYING XU/AUGUST 8, 2013 XIAOXIAO ZHENG/AUGUST 8, 2013 LINGLI PANG/AUGUST 8, 2013 | | Name: HUAWEI TECHNOLOGIES CO.,LTD. |
| | | = | Address: Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong |
| | Iditional name(s) of conveying party(ies) attached? | | P.R.China |
| 3. | , , , | | |
| | Execution Date(s): August 8, 2013 Assignment | | Additional name(s) and addresses attached? ☐ Yes ☒ No |
| 4. | 4. Application or Patent Number(s). | | |
| A. | Patent Application No.(s): | В. | Patent No.(s): |
| | Additional numbers a | tached | l? ☐ Yes ⊠ No |
| 5. | Name and address of party to whom correspondence concerning document should be mailed: | 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. | |
| 9. | Signature: /Gustavo Siller, Jr./ | | August 21, 2013 |
| | Signature | | Date |
| | Gustavo Siller, Jr. | _ | Total no. of pages including coversheet, |
| | Name of Person Signing | | attachments and documents: 3 |

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PATENT REEL: 031054 FRAME: 0735

Attorney Docket No. Client Reference No. 83098449US04

ASSIGNMENT

WHEREAS, WE,

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

Lingli PANG Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; Xiaoxiao ZHENG Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

| have invented and own a certain invention | on entitled: | |
|---|-----------------------------------|-------------------------|
| METHOD, DEVICE AND SYSTEM FO | OR PROCESSING GROUP ME | SSAGE |
| for which invention we have executed a | n 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

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PATENT REEL: 031054 FRAME: 0736

| In re App | oln. of Xu 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 Aug 8,2013 | Xi'goying XU Xiaoying XU |
|------------------|---------------------------------------|
| Date Ang 8, >01) | Min YU Witness |
| Date Aug 8. 2013 | Witness / I// |
| | The same party and the same stray and |
| Date Aug 8, 2013 | Xiauxiau ZHENG. Xiauxiau ZHENG |
| Date Augs. 2013 | Jun CHFA/ Witness |
| Date Aug 8, 2013 | Oong CHEV Witness |
| | |
| Date Aug 8, 2013 | Lingli PANG |
| Date Aug 8, 2013 | Lingii PANG Liz FENG Witness |
| Date Augh. 2013 | Ying MUANG Witness |

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