PATENT ASSIGNMENT

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------|----------------|
| Ruobin Zheng | 03/19/2010 |

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: | 12787036 |

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ATTORNEY DOCKET NUMBER: 13674-200

NAME OF SUBMITTER: Gustavo Siller, Jr.

Total Attachments: 3

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Client/Matter No. 13674-200 Client Ref. No. 0714776US

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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): | | | | | |
| RUOBIN ZHENG/MARCH 19, 2010 Name: HUAWEI TECHNOLOGIE LTD. | S CO., | | | | |
| Additional name(s) of conveying party(ies) attached? | t, | | | | |
| Assignment | ⊠ No | | | | |
| 4. Application or Patent Number(s). | | | | | |
| A. Patent Application No.(s): B. Patent No.(s): | | | | | |
| Additional numbers attached? ☐ Yes ⊠ No | | | | | |
| 5. Name and address of party to whom correspondence concerning document should be mailed: 6. Total no. of applications & patents involved. | d: <u>1</u> | | | | |
| 7. Total Fee (37 CFR 1.21(h) & 3.41) \$ 40.00 | | | | | |
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| b. ⊠ Charge fee and/or any Deficiencies to Dep Account Number 23-1925 | | | | | |
| Authorized User Name: Brinks Hofer Gilso | | | | | |
| Authorized User Name: Brinks Hofer Gilso 9 Signature: /Gustavo Siller. Jr./ | | | | | |
| Authorized User Name: Brinks Hofer Gilso | | | | | |

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PATENT

ASSIGNMENT

Attorney Docket No.

Client Reference No. 0714776US

WHEREAS, I,

024752 2010-05-10 09,48,10

Ruobin ZHENG Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA.

have invented and own a certain invention entitled:

AGGREGATION NODE DEVICE OF PASSIVE OPTICAL NETWORK AND PASSIVE OPTICAL NETWORK SYSTEM

| for which invention we have executed ar | n application (provisional or non-provision | al) 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 on the invention, and in enforcing any rights or chooses in action accruing as a result of such

In re Appln. of Zheng et al. Attorney Docket No.

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

Rudow Theng Rudoin ZHENG