

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4216568

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HUI MA	07/17/2014
ZHUO CHEN	09/27/2012
YONGQIANG GAO	07/14/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HUAWEI TECHNOLOGIES CO., LTD.
<b>Street Address:</b>	HUAWEI ADMINISTRATION BUILDING, BANTIAN
<b>Internal Address:</b>	LONGGANG DISTRICT,
<b>City:</b>	SHENZHEN, 518129, GUANGDONG, P.R.
<b>State/Country:</b>	CHINA
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15401805
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(972)628-3616
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	972 628 3600
<b>Email:</b>	patents@munckwilson.com
<b>Correspondent Name:</b>	DOCKET CLERK/HTCL
<b>Address Line 1:</b>	P.O. DRAWER 800889
<b>Address Line 4:</b>	DALLAS, TEXAS 75380
<b>NAME OF SUBMITTER:</b>	ROBERT D. MCCUTCHEON
<b>SIGNATURE:</b>	/robert d. mccutcheon/
<b>DATE SIGNED:</b>	01/09/2017
<b>Total Attachments: 13</b>	
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## ASSIGNMENT AGREEMENT

**WHEREAS, HUAWEI TECHNOLOGIES SOFTWARE CO., LTD.**, of Huawei Administration Building B2, Bantian, Longgang District, Shenzhen, 518129, Guangdong, P.R. China, hereinafter referred to as "Assignor" is the owner of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: COMMUNICATIONS METHOD AND APPARATUS

Filing Date: 9/30/2015

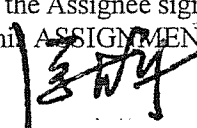
Application No.: 14870508

**WHEREAS, HUAWEI TECHNOLOGIES CO., LTD.**, a corporation of China, located at Huawei Administration Building, Bantian, Longgang District, Shenzhen, 518129, Guangdong, P.R. China, hereinafter referred to as "Assignee", is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable considerations, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents do assign to Assignee all right, title, and interest in and to the invention and application and to all foreign counterparts (including patent, utility mode and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that it will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

This ASSIGNMENT AGREEMENT is hereby agreed by both Assignee and Assignor, and comes into effect on the date when the Assignee signs this ASSIGNMENT AGREEMENT, or the date when the Assignor signs This ASSIGNMENT AGREEMENT, whichever is later.

For and on behalf of Assignor by:  Date: Oct 27, 2016  
 Title: President of **HUAWEI TECHNOLOGIES SOFTWARE CO., LTD.**

For and on behalf of Assignee by:  Date: Oct 27, 2016  
 Title: President of **HUAWEI TECHNOLOGIES CO., LTD.**



# 深圳市华为技术软件有限公司员工聘用协议书

ShenZhen Huawei Technologies  
Software Co., Ltd.

Employment Agreement

聘用方(甲方)Company: 深圳市华为技术软件有限公司

住所 Location: 深圳市龙岗区坂田华为基地B区2号楼

法定代表人 Legal Representative: 孙亚芳

受聘方(乙方) Employee: 陈卓 Zhuo Chen

工号 Employee ID: 00106075 国籍 Nationality: 中国

护照号码 Passport Number/身份证号码 Citizen Identification:  
422226197810283919

户口所在地 Registered Permanent Residence(For Chinese):  
北京市西城区

通信住址 Address for correspondence:  
北京市西城区二环路19号1805房间

enterprise or other entity, in any business undertakings that will conflict with the actual or anticipated interests of Company according to the responsibility of the Employee to act in the best interest of Company at any time.

## 11 知识产权 Intellectual Property Rights

### 11.1 职务成果

#### Service Achievements

11.1.1 双方确认，乙方在甲方工作期间（包括离职之日起一年内），由于履行本人职务或甲方安排的本人职务之外的工作任务，或者主要利用甲方的物质条件和业务信息等，自行或与他人共同构思、开发、创造或研制出的发明创造、实用新型、外观设计、技术诀窍、产品、计算机软件、半导体芯片、作品或其他形式的智力成果，其中所包含的或与之有关的全部知识产权权利或其他财产权利（以下统称“知识产权”）均归甲方所有。

Both Company and the Employee agree that Company owns all the intellectual property rights and/or other property rights (hereinafter referred to as intellectual property rights) included in or related to the inventions, practical innovations, appearance designs, technical know-hows, products, computer software, semiconductor chips, works, and/or intellectual achievements in any other form that are solely or jointly made, researched, developed, or created by the Employee in performing the Employee's duties or fulfilling other tasks appointed by Company, or using physical conditions and business information of Company, during the employment period (including within one year after the Employee leaves the employment).

11.1.2 乙方同意以所有适当的方式通过适当的途径（包括但不限于申请专利、注册商标、登记软件等，相关费用由甲方承担）协助甲方或甲方指派的第三方，为甲方取得上述知识产权在任一国家、地区或全球范围内的各项权利。前述适当的方式包括但不限于：向甲方披露全部相关信息和数据，签署相关申请书、技术说明书以及甲方认为在申请取得该等权利或向甲方（或其继承者、受让人和指定者）转让知识产权的专属权利、权属和利益时所必需的文书。乙方同意，乙方签署任何该等文书或文件的义务、或促使该等文书或文件被签署的义务，在其与甲方的劳动关系终止之后仍应继续存在。

The Employee agrees to assist Company or a third Company appointed by Company to acquire the rights pertaining to the aforesaid intellectual property rights in any country or region or the whole world for Company in all proper ways through proper channels (including but not limited to patent application, trademark registration and software registration; the related expenses shall be undertaken by Company). The foregoing proper ways include but are not limited to disclosure of all related information and data to Company and signing related applications, technical descriptions, and other writings and documents deemed necessary by Company in applying for these rights or transferring the exclusive rights, ownership and benefits of the intellectual property

rights to Company (or Company's successor, assignee or appointed entity). The Employee agrees that the Employee's obligation to sign these writings and documents or assist in getting these writings and documents signed be valid after the termination of the employment.

11.1.3 甲方有权使用、转让或授权他人使用上述知识产权而无须获得乙方的同意。

Company has the right to use, transfer, or authorize a third party to use the foregoing intellectual property rights without requesting the permission of the Employee.

11.1.4 上述知识产权的署名权（依法律规定而应由甲方署名的除外），由作为发明人、制作者或设计人的乙方享有，并且乙方有权按甲方有关规定获得相应的物质奖励和精神鼓励。The Employee, as the inventor, producer, or designer, owns the right of authorship of the foregoing intellectual property rights (except in cases in which Company owns the right of authorship by law) and the Employee shall be entitled to physical and spiritual rewards according to related regulations of Company.

11.1.5 若乙方作为发明人或设计人的职务发明创造经甲方申请并被授予专利权的，双方理解并同意甲方应当根据甲方当时正在生效的内部相关规章制度规定的奖励支付方式和数额向乙方支付相应奖金。

If the Employee's service invention-creation invented or designed by the Employee is granted a patent right after Company's filing in Company's own name, both Parties understand and agree that Company shall award the Employee a money prize according to the payment method and amount stipulated in the Company's then-current effective internal related rules and regulations.

11.1.6 若甲方因实施前述发明创造专利权并获得了利润，或甲方许可其他第三方实施前述专利权并收取使用费的，双方理解并同意甲方应当根据甲方当时正在生效的内部相关规章制度规定的报酬支付方式和数额向乙方支付相应报酬。

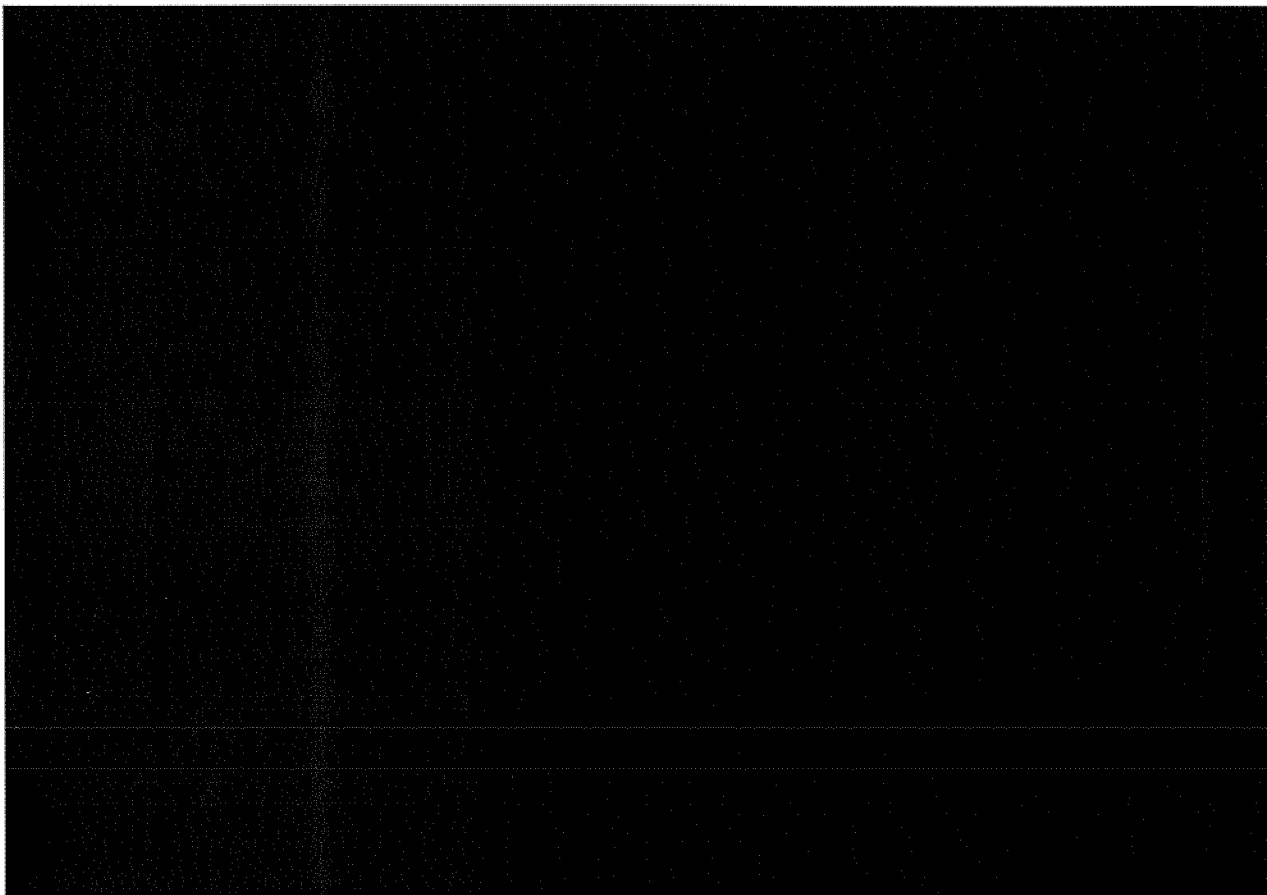
If Company exploits the foresaid patent for invention-creation to make a profit, or Company grants the license to the third party to exploit the foresaid patent to receive the royalty fees, both Parties understand and agree that Company shall pay the Employee remunerations according to the payment method and amount stipulated in the Company's then-current effective internal related rules and regulations.

11.1.7 甲乙双方同意，甲方向乙方支付的薪酬待遇中，已考虑了因乙方职务发明创造被授予专利权及甲方实施或许可前述专利权在所有适用法及本协议下乙方应当获得的全部奖励、报酬及其他利益。

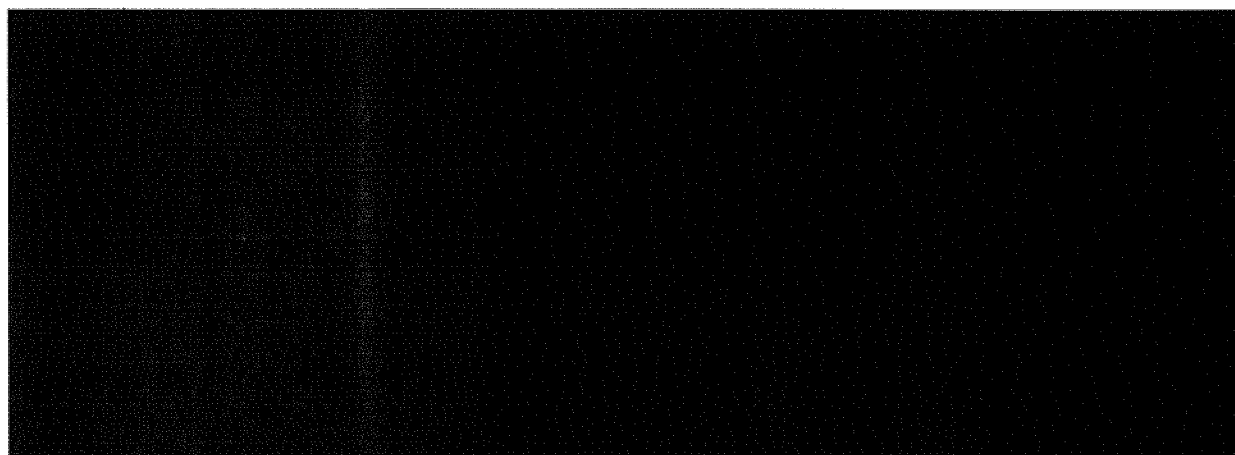
Both Parties agree that, Company has taken all the reward, remunerations and other interests which the Employee deserves in all applicable jurisdictions and under this Agreement into consideration in the salary and benefits paid to the Employee under this Agreement due to: i) the Employee's service invention-creation which has been granted a patent right; or ii) Company's exploitation or granting the license to the third party of the foresaid patent.

11.1.8 甲乙双方同意，若前述专利权被无效，或甲方合理的认为前述专利权存在被无效的可能，甲方有权不发放或酌情减少前述奖励和 / 或报酬。

Both Parties agree that, if the foresaid patent is invalid or unenforceable or Company has reasonable doubt that the foresaid patent has the possibility to be invalid or unenforceable, Company has the right to withdraw or decrease the foresaid money prize and/or remunerations herein.



later.





## 签 字 页

## Signatures

本协议为甲方、乙方双方真实意思表示，在此签字确认。

This Agreement describes true intentions of both Parties and the Parties hereto execute the Agreement.

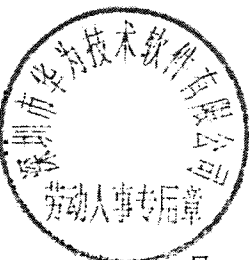
甲方：深圳市华为技术软件有限公司

乙方：受聘方

Company: ShenZhen Huawei Technologies Software Co., Ltd. Employee:

公章

Seal



签字: 陈卓 Zhuo Chen

Signature:

日期: \_\_\_\_年\_\_\_\_月\_\_\_\_日

日期: 2012 年 09 月 27 日

Date: \_\_\_\_\_ (MM DD, YYYY)

Date: \_\_\_\_\_ (MM DD, YYYY)

本协议一式两份，其中一份本人已收到并保存。

This Agreement shall be in duplicate, one of which has been received and held by myself.

签字: 陈卓 Zhuo Chen

Signature:

日期: 2012 年 09 月 27 日

Date: \_\_\_\_\_ (MM DD, YYYY)





# 深圳市华为技术软件有限公司员工聘用协议书

ShenZhen Huawei Technologies  
Software Co., Ltd.

Employment Agreement

聘用方(甲方)Company: 深圳市华为技术软件有限公司

住所 Location: 深圳市龙岗区坂田华为基地B区2号楼

法定代表人 Legal Representative: 孙亚芳

受聘方(乙方) Employee: 马慧 Hui Ma

工号 Employee ID: 00286754 国籍 Nationality: 中国

护照号码 Passport Number/身份证号码 Citizen Identification:  
11010819820202224X

户口所在地 Registered Permanent Residence(For Chinese):  
北京市

通信住址 Address for correspondence:  
北京市海淀区展春园小区2-1-601

PATENT

REEL: 040904 FRAME: 0475

enterprise or other entity, in any business undertakings that will conflict with the actual or anticipated interests of Company according to the responsibility of the Employee to act in the best interest of Company at any time.

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#### Service Achievements

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11.1.2 乙方同意以所有适当的方式通过适当的途径（包括但不限于申请专利、注册商标、登记软件等，相关费用由甲方承担）协助甲方或甲方指派的第三方，为甲方取得上述知识产权在任一国家、地区或全球范围内的各项权利。前述适当的方式包括但不限于：向甲方披露全部相关信息和数据，签署相关申请书、技术说明书以及甲方认为在申请取得该等权利或向甲方（或其继承者、受让人和指定者）转让知识产权的专属权利、权属和利益时所必需的文书。乙方同意，乙方签署任何该等文书或文件的义务、或促使该等文书或文件被签署的义务，在其与甲方的劳动关系终止之后仍应继续存在。The Employee agrees to assist Company or a third Company appointed by Company to acquire the rights pertaining to the aforesaid intellectual property rights in any country or region or the whole world for Company in all proper ways through proper channels (including but not limited to patent application, trademark registration and software registration; the related expenses shall be undertaken by Company). The foregoing proper ways include but are not limited to disclosure of all related information and data to Company and signing related applications, technical descriptions, and other writings and documents deemed necessary by Company in applying for these rights or transferring the exclusive rights, ownership and benefits of the intellectual property



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11.1.3 甲方有权使用、转让或授权他人使用上述知识产权而无须获得乙方的同意。

Company has the right to use, transfer, or authorize a third party to use the foregoing intellectual property rights without requesting the permission of the Employee.

11.1.4 上述知识产权的署名权(依法律规定而应由甲方署名的除外),由作为发明人、制作者或设计人的乙方享有,并且乙方有权按甲方有关规定获得相应的物质奖励和精神鼓励。

The Employee, as the inventor, producer, or designer, owns the right of authorship of the foregoing intellectual property rights (except in cases in which Company owns the right of authorship by law) and the Employee shall be entitled to physical and spiritual rewards according to related regulations of Company.

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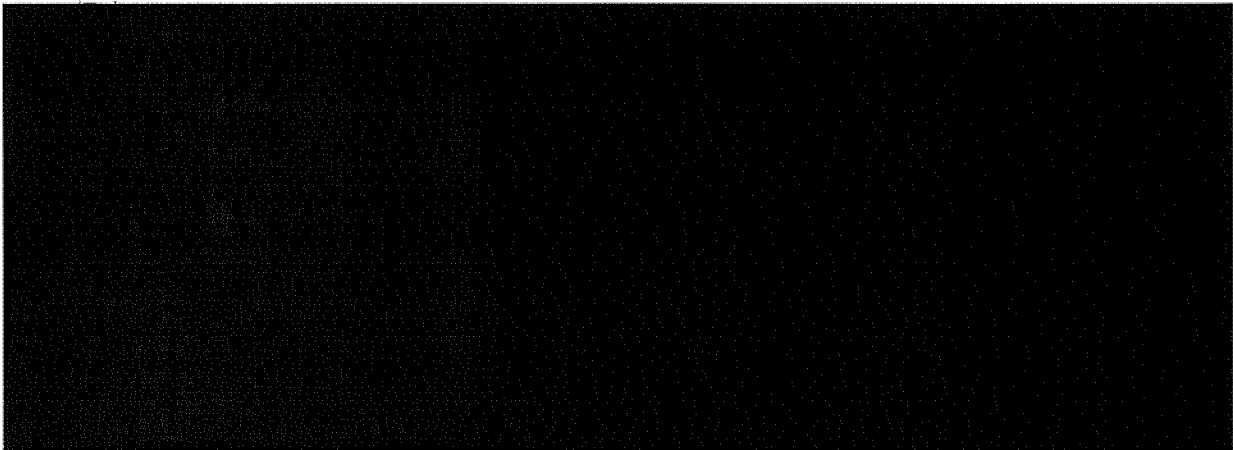
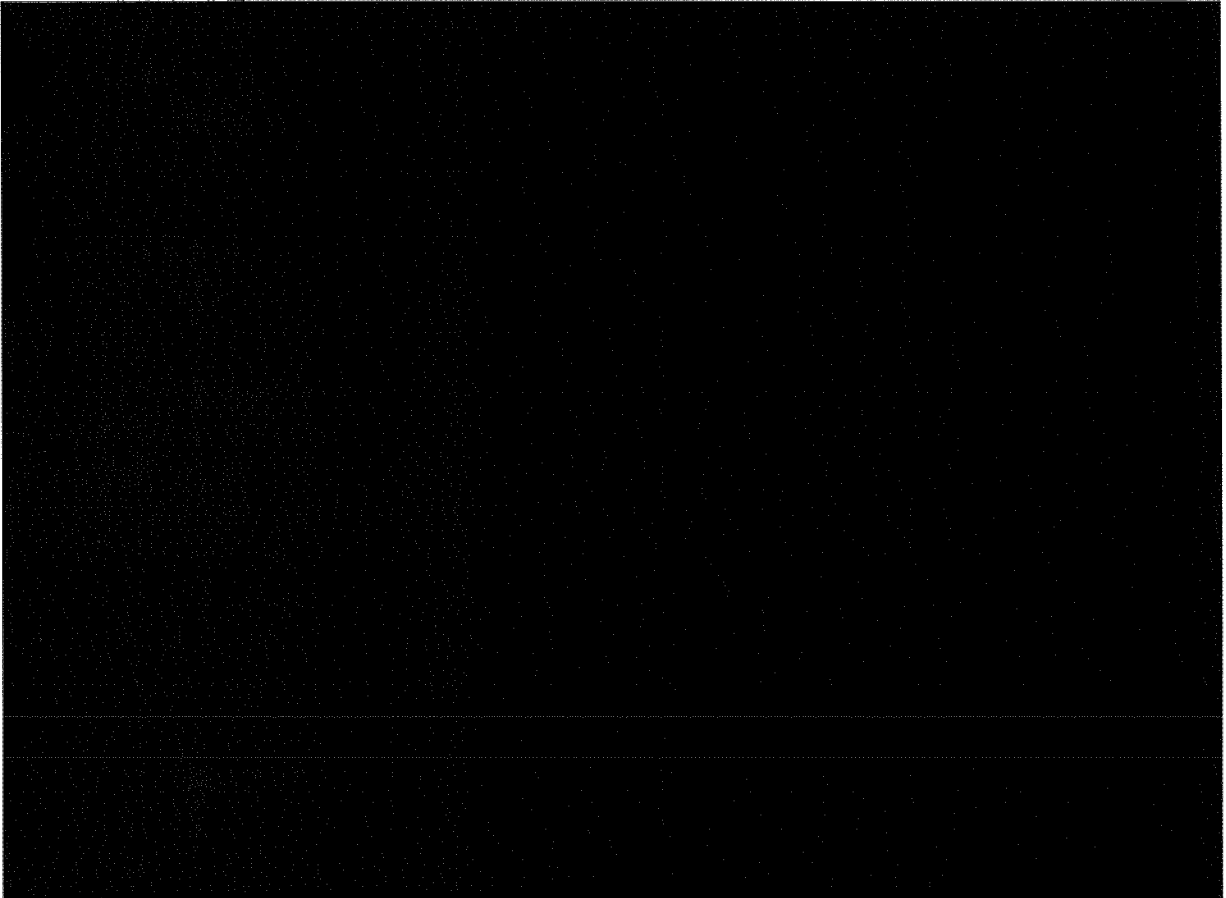
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11.1.7 甲乙双方同意,甲方向乙方支付的薪酬待遇中,已考虑了因乙方职务发明创造被授予专利权及甲方实施或许可前述专利权在所有适用法及本协议下乙方应当获得的全部奖励、报酬及其他利益。

Both Parties agree that, Company has taken all the reward, remunerations and other interests which the Employee deserves in all applicable jurisdictions and under this Agreement into consideration in the salary and benefits paid to the Employee under this Agreement due to: i) the Employee's service invention-creation which has been granted a patent right; or ii) Company's exploitation or granting the license to the third party of the foresaid patent.

11.1.8 甲乙双方同意，若前述专利权被无效，或甲方合理的认为前述专利权存在被无效的可能，甲方有权不发放或酌情减少前述奖励和 / 或报酬。

Both Parties agree that, if the foresaid patent is invalid or unenforceable or Company has reasonable doubt that the foresaid patent has the possibility to be invalid or unenforceable, Company has the right to withdraw or decrease the foresaid money prize and/or remunerations herein.





## 签 字 页 Signatures

本协议为甲方、乙方双方真实意思表示，在此签字确认。

This Agreement describes true intentions of both Parties and the Parties hereto execute the Agreement.

甲方：深圳市华为技术软件有限公司

乙方：受聘方

Company: ShenZhen Huawei Technologies  
Software Co., Ltd. Employee:

公章:

签字:

Hui Ma

Seal:

Signature:

日期: 年 月 日

日期: 2014年 7 月 17 日

Date: (MM DD, YYYY)

Date: (MM DD, YYYY)

本协议一式两份，其中一份本人已收到并保存。

This Agreement shall be in duplicate, one of which has been received and held by myself.

签字:

Hui Ma

Signature:

日期: 2014年 7 月 17 日

Date: (MM DD, YYYY)

**PATENT**

Attorney Docket No. \_\_\_\_\_  
Client Reference No. 83736895US04

**ASSIGNMENT**

**WHEREAS, WE,**

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

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

Yongqiang GAO  
Huawei Administration Building  
Bantian, Longgang District  
Shenzhen, 518129, Guangdong  
P.R. CHINA;

have invented and own a certain invention entitled:

**COMMUNICATIONS METHOD AND APPARATUS**

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 9/30/2015, under U.S. Application No. 14870508 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

In re Appln. of Ma et al.  
Attorney Docket No. \_\_\_\_\_

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 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 \_\_\_\_\_

\_\_\_\_\_  
Hui MA

Date \_\_\_\_\_

\_\_\_\_\_  
Zhuo CHEN

Date July 14, 2016

Yongqiang GAO  
Yongqiang GAO