PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5084041

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BO GAO	07/27/2018
DEKUN LIU	07/28/2018
XUMING WU	07/25/2018
JIANHE GAO	07/28/2018

RECEIVING PARTY DATA

Name:	Huawei Technologies Co., Ltd.				
Street Address:	luawei 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:	15431390

CORRESPONDENCE DATA

Fax Number: (312)616-5700

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.

Phone: 312-616-5600

Email: assignments@leydig.com

Correspondent Name: LEYDIG, VOIT & MAYER, LTD.

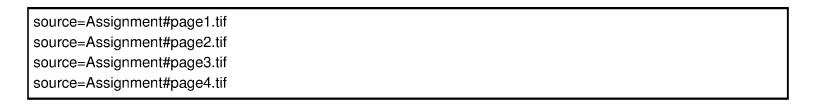
Address Line 1: TWO PRUDENTIAL PLAZA, SUITE 4900

Address Line 2: 180 N. STETSON AVENUE

Address Line 4: CHICAGO, ILLINOIS 60601-6731

ATTORNEY DOCKET NUMBER:	HW725735
NAME OF SUBMITTER:	LEANNA BULTEMA
SIGNATURE:	/Leanna Bultema/
DATE SIGNED:	08/06/2018

Total Attachments: 4



ASSIGNMENT

WHEREAS, WE,

Bo Gao Dekun Liu

Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
B.B. CHENA and Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
B.B. CHENA and

P.R.CHINA; and P.R.CHINA; and

Xuming Wu Jianhe Gao

Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong

B. D. GHENIA and A. Strategier and Stra

P.R.CHINA; and P.R.CHINA;

have invented and own a certain invention entitled:

PASSIVE OPTICAL NETWORK COMMUNICATIONS METHOD, APPARATUS AND SYSTEM

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-02-13, under U.S. Application No. 15431390 and

WHEREAS, HUAWEI TECHNOLOGIES CO.,LTD., 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

In re Appln. of Gao et al. Attorney Docket No. HW725735

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 July 27, 2018	Bo Gao
	Bo Gao
Date	
	Dekun Liu
Date	
	Xuming Wu
Date	
	Jianhe Gao

ASSIGNMENT

WHEREAS, WE,

Bo Gao Dekun Liu

Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong

P.R.CHINA; and P.R.CHINA; and

Xuming Wu Jianhe Gao

Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
Huawei Administration Building
Bantian, Longgang District
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