## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3160863

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
SEN ZHANG	12/02/2014
ENBO ZHOU	12/10/2014
YABIN YE	12/02/2014

## **RECEIVING PARTY DATA**

Name:	HUAWEI TECHNOLOGIES CO., LTD.
Street Address:	HUAWEI ADMINISTRATION BUILDING, BANTIAN, LONGGANG DISTRICT,
City:	SHENZHEN CITY, GUANGDONG
State/Country:	CHINA
Postal Code:	518129

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14580989

## CORRESPONDENCE DATA

Fax Number:

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.

**Email:** jherrin@s-n-h.com

Correspondent Name: STAAS AND HALSEY LLP
Address Line 1: 1201 NEW YORK AVE., N.W.

Address Line 2: SUITE 700

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	2382.1417
NAME OF SUBMITTER:	GENE M. GARNER, II, REG # 34,172
SIGNATURE:	/Gene M. Garner II/
DATE SIGNED:	12/23/2014

## **Total Attachments: 9**

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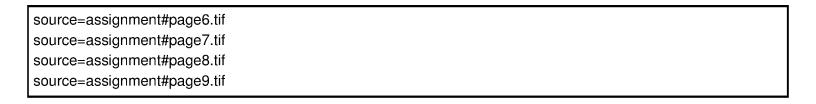
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PATENT

503114255 REEL: 034578 FRAME: 0419



Attorney Docket No. \_\_\_\_\_ Client Reference No. 83416202US04

#### ASSIGNMENT

## WHEREAS, WE,

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

Yabin YE Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA: Enbo ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

have invented and own a certain invention entitled:
METHOD AND APPARATUS FOR CALCULATING NONLINEAR TRANSMISSION
IMPAIRMENT OF OPTICAL FIBER LINK
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

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

In re Appln. ofZhang et al. Attorney Docket No	
reissued, reexamined, and National phase p on the invention, and in enforcing any right applications or patents, and by executing s	ginal, continuation, continuation-in-part, divisional, patents of the U.S. or of any and all foreign countries at the or chooses in action accruing as a result of such statements and other affidavits, it being understood the shall bind, and inure to the benefit of, the assigns ato.
IN WITTNESS WHEREOF, We have he	reunder set our hands on the dates shown below.
Date December 2, 2014	Sen ZHANG Sen ZHANG
Date	Enbo ZHOU
Date	Yabin YE

Attorney Docket No. \_\_\_\_\_ Client Reference No. 83416202US04

#### ASSIGNMENT

## WHEREAS, WE,

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

Yabin YE Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA: Enbo ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

have invented and own a certain invention entitled:

METHOD AND APPARATUS FOR CALCULATING NONLINEAR TRANSMISSION IMPAIRMENT OF OPTICAL FIBER LINK 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.

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Date	Sen ZHANG
Date	Enbo ZHOU
Date	

Yabin YE

Attorney Docket No. \_\_\_\_\_ Client Reference No. 83416202US04

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have invented and own a certain invention entitled:

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IN WITTNESS WHEREOF, We have he	reunder set our hands on the dates shown below.
Date	Sen ZHANG
Date	Enbo ZHOU
TO pular > 10111	Valen YE

Yabin YE

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# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	METHOD AND APPARATUS FOR CALCULATING NONLINEAR TRANSMISSION IMPAIRMENT OF OPTICAL FIBER LINK
As the belo	w named inventor, I hereby declare that:
This declar	(ng prophag anguatian ar
	United States application or PCT international application number
	filed on
The above-i	identified application was made or authorized to be made by me.
) believe that	It am the original inventor or an original joint inventor of a claimed invention in the application.
I hereby acki by fine or imp	nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 prisonment of not more than five (5) years, or both.
	WARNING:
contribute to (other than a to support a postitioners/ap USPTO. Pet application (up patent. Furth referenced in	plicant is cautioned to avoid submitting personal information in documents filed in a patent application that may identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO petition or an application. If this type of personal information is included in documents submitted to the USPTO, oplicants should consider redacting such personal information from the documents before submitting them to the titioner/applicant is advised that the record of a patent application is available to the public after publication of the unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a nermore, the record from an abandoned application may also be available to the public if the application is a published application or an issued patent (see 37 CFR 1.14). Checks and credit card, authorization forms ubmitted for payment purposes are not retained in the application file and therefore are not publicly available.
LEGAL NAI	ME OF INVENTOR
Inventor: Y	/abin YE Date (Optional) :
Signature:	Yalon YE
lote: An applic	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have y filed. Use an additional PTO/AIA/01 form for each additional inventor

This collection of information is required by 36 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	METHOD AND APPARATUS FOR CALCULATING NONLINEAR TRANSMISSION IMPAIRMENT OF OPTICAL FIBER LINK
As the below	w named inventor, I hereby declare that:
This declaration is directed to	
	United States application or PCT international application number
	filed on
The above-i	dentified application was made or authorized to be made by me.
I believe tha	t I am the original inventor or an original joint inventor of a claimed invention in the application.
I hereby ack by fine or im	nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 prisonment of not more than five (5) years, or both
	WARNING:
contribute to (other than a to support a petitioners/a USPTO. Pe application ( patent. Furt referenced in	oplicant is cautioned to avoid submitting personal information in documents filed in a patent application that may identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO petition or an application. If this type of personal information is included in documents submitted to the USPTO, pplicants should consider redacting such personal information from the documents before submitting them to the titioner/applicant is advised that the record of a patent application is available to the public after publication of the unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a hermore, the record from an abandoned application may also be available to the public if the application is a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms ubmitted for payment purposes are not retained in the application file and therefore are not publicly available.
LEGAL NA	AME OF INVENTOR
Inventor: _	Enbo ZHOU  Date (Optional): 2014-12-10
	ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have sly filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Title of Invention	METHOD AND APPARATUS FOR CALCULATING NONLINEAR TRANSMISS OF OPTICAL FIBER LINK	ION IMPAIRMENT
As the belo	pelow named inventor, I hereby declare that:	
This declara		
	United States application or PCT international application number	
	filed on	
The above-i	ve-identified application was made or authorized to be made by me.	
I believe tha	that I am the original inventor or an original joint inventor of a claimed invention in the application	1.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
	WARNING:	
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.		
LEGAL NA	NAME OF INVENTOR	
I .	Sen ZHANG  Date (Optional):	
Signature:	ure: <u>Sen</u> ZHANG	
	application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompa iously filed. Use an additional PTO/AIA/01 form for each additional inventor.	ny this form or must have

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT REEL: 034578 FRAME: 0429

**RECORDED: 12/23/2014**