506251503 09/15/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIAOMING ZHU	01/11/2020
WENXIN BAI	01/11/2020
JIN KONG	01/11/2020

RECEIVING PARTY DATA

Name:	HUAWEI TECHNOLOGIES CO., LTD.	
Street Address:	Huawei Administration Building	
Internal Address:	Bantian, Longgang District	
City:	Shenzhen	
State/Country:	CHINA	
Postal Code:	518129	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16564327

CORRESPONDENCE DATA

Fax Number: (972)731-2289

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: 972-731-2288

Email: dallaspatents@dfw.conleyrose.com

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ATTORNEY DOCKET NUMBER:	4747-04000 (85214361US03)
NAME OF SUBMITTER:	OCTAVIO T. DACOSTA
SIGNATURE:	/Octavio T. DaCosta/
DATE SIGNED:	09/15/2020

Total Attachments: 4

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PATENT 506251503 REEL: 053771 FRAME: 0083

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PATENT REEL: 053771 FRAME: 0084

Attorney Docket No. <u>4747-0400</u>0 Client Reference No. 85214361US03

ASSIGNMENT

WHEREAS, WE,

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

Jin Kong Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA. Wenxin Bai Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA; and

have invented and own a certain invention entitled:

INTERNET PROTOCOL SECURITY TUNNEL MAINTENANCE 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 2019-09-09, under U.S. Application No. 16564327 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

PATENT REEL: 053771 FRAME: 0085 In re Appln. of Zhu et al. Attorney Docket No. <u>4747-04</u>000

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 1220-0 -	Xiaoming 2hu
	Xiaoming Zhu
Date	Wenxin Bai
Date	Jin Kong

In re Appln. of Zhu et al. Attorney Docket No. 4747-04000

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IN WITNESS WHEREOF, We have hereunder set our hands on the dates shown below.

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	Xiaoming Zhu
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In re Appln. of Zhu et al. Attorney Docket No. 4747-04000

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Date		Xiaoming Zhu
Date		Wenxin Bai
Date	2020. .	Jûn Kang Jin Kong