505539404 06/23/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5586201

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DAYONG GUO	01/25/2018
CHENXI HU	01/24/2018
PENG GAO	01/25/2018
XINDONG TENG	02/27/2019
HONGTAO GUO	01/24/2018
SHENGTAO SUN	01/25/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16102745

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.

Phone: 404-815-6500

Email: KTSDocketing2@kilpatrick.foundationip.com

Correspondent Name: KILPATRICK TOWNSEND & STOCKTON LLP (HUAW

Address Line 1: 1100 PEACHTREE STREET

Address Line 2: SUITE 2800

Address Line 4: ATLANTA, GEORGIA 30309

ATTORNEY DOCKET NUMBER: 088963-1100376 (028700US)	
NAME OF SUBMITTER:	CHARLES W. GRAY
SIGNATURE:	/Charles W. Gray/
DATE SIGNED:	06/23/2019

PATENT 505539404 REEL: 049560 FRAME: 0385

Total Attachments: 6		
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PATENT REEL: 049560 FRAME: 0386

PATENT

Attorney Docket No. 088963-1100376 (028700US) Client Reference No. 84496228US04

ASSIGNMENT

WHEREAS, WE,

Dayong Guo Chenxi Hu

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

Peng Gao Xindong Teng

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

Hongtao Guo Shengtao Sun Huawei Administration Building Huawei Administration Building

Bantian, Longgang District
Shenzhen, 518129, Guangdong
Bantian, Longgang District
Shenzhen, 518129, Guangdong

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

have invented and own a certain invention entitled:

VIRTUAL NETWORK DEVICE AND RELATED METHOD

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2018-08-14, under U.S. Application No. 16102745 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.

PATENT REEL: 049560 FRAME: 0387 In re Appln. of Guo et al. Attorney Docket No. 088963-1100376 (028700US)

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 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 Jan 25, 2018	Dayong GUO Dayong Guo	
	Dayong Guo	
Date		
	Chenxi Hu	
Date Jan 25, 2018	Peng Gao	
Date	Xindong Teng	
Doto		
Date 5	Hongtao Guo	
Date Jan 25, 2018	Shengton Sun	
	Shengtao Sun	

PATENT

Attorney Docket No. 088963-1100376 (028700US) Client Reference No. 84496228US04

ASSIGNMENT

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Huawei Administration Building

Bantian, Longgang District Shenzhen, 518129, Guangdong

P.R.CHINA; and

Peng Gao

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

P.R.CHINA; and

Hongtao Guo

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

P.R.CHINA: and

Chenxi Hu

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

P.R.CHINA; and

Xindong Teng

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

P.R.CHINA; and

Shengtao Sun

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PATENT

REEL: 049560 FRAME: 0389

In re Appln. of Guo et al. Attorney Docket No. 088963-1100376 (028700US)

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

Date	
	Dayong Guo
Date (an 24, 2018	Chenxi Ha
	Chenxi Hu
Date	
	Peng Gao
Date	
	Xindong Teng
Date Jan 24, 2018	Hongtao Guo
	Hongtao Guo
Date	
***************************************	Shengtao Sun

PATENT

Attorney Docket No. 088963-1100376 (028700US) Client Reference No. 84496228US04

ASSIGNMENT

WHEREAS, WE,

Dayong Guo Chenxi Hu

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

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

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PATENT REEL: 049560 FRAME: 0391 In re Applin, of Guo et al. Attorney Docket No. 088963-1100376 (028700US)

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 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		
	Dayong Guo	
Date	Chenxi Hu	
Date		
	Peng Gao	
Date Feb 27, 2019	Nindong Verg Xindong Teng	
Oate	Hongtao Guo	
Date		
	Shengtao Sun	