506341783 11/06/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6388536

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the TYPO IN THE ASSIGNEE NAME FROM HUAWEI DEVICE CO., LTD. TO HUAWEI TECHNOLOGIES CO., LTD. previously recorded on Reel 053407 Frame 0638. Assignor(s) hereby confirms the ASSIGNMENT.
RESUBMIT DOCUMENT ID:	506220432

CONVEYING PARTY DATA

Name	Execution Date
JINLIN PENG	06/12/2019
PENGPENG DONG	06/23/2020
ZONGJIE WANG	12/18/2017
PENG ZHANG	06/10/2019

RECEIVING PARTY DATA

Name:	HUAWEI TECHNOLOGIES CO., LTD.
Street Address:	HUAWEI 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:	16402818

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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:
 858-678-5070

 Email:
 apsi@fr.com

Correspondent Name: FISH & RICHARDSON P.C. (HUAWEI TECHNOLOGIES)

Address Line 1: P.O. BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER: 43968-0599001	
NAME OF SUBMITTER:	JOHN GUSTAV-WRATHALL
SIGNATURE: /John Gustav-Wrathall/	

PATENT 506341783 REEL: 054294 FRAME: 0941

DATE SIGNED:	11/06/2020	
Total Attachments: 10		
source=43968-0599001_COR_ASN#pa	ge1.tif	
source=43968-0599001_COR_ASN#pa	ge2.tif	
source=43968-0599001_COR_ASN#page3.tif		
source=43968-0599001_COR_ASN#page4.tif		
source=43968-0599001_COR_ASN#page5.tif		
source=43968-0599001_COR_ASN#page6.tif		
source=43968-0599001_COR_ASN#page7.tif		
source=43968-0599001_COR_ASN#page8.tif		
source=43968-0599001_COR_ASN#page9.tif		
source=43968-0599001_COR_ASN#pa	ge10.tif	

PATENT REEL: 054294 FRAME: 0942

506189167 08/05/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6235906

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JINLIN PENG	06/12/2019
PENGPENG DONG	06/23/2020
ZONGJIE WANG	12/18/2017
PENG ZHANG	06/10/2019

RECEIVING PARTY DATA

Name:	HUAWEI DEVICE CO., LTD.
Street Address:	HUAWEI 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:	16402818

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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:
 858-678-5070

 Email:
 apsi@fr.com

Correspondent Name: FISH & RICHARDSON P.C. (HUAWEI TECHNOLOGIES)

Address Line 1: P.O. BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	43968-0599001	
NAME OF SUBMITTER:	JOHN GUSTAV-WRATHALL	
SIGNATURE:	/John Gustav-Wrathall/	
DATE SIGNED:	08/05/2020	

Total Attachments: 8

source=43968-0599001_ASN#page1.tif

PATENT REEL: 05**32**97 FRAME: 0938



PATENT REEL: 05**32**9**4** FRAME: 09**38**

Attorney Docket No. <u>43968-0599001</u> Client Reference No. 85227872US06

ASSIGNMENT

WHEREAS, WE,

Jinlin Peng Huawei Administration Building

Bantian, Longgang District Shenzhen, 518129, Guangdong

P.R.CHINA; and

Zongjie Wang

Huawei Administration Building Bantian, Longgang District

Shenzhen, 518129, Guangdong

P.R.CHINA; and

Pengpeng Dong

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

P.R.CHINA; and

Peng Zhang

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

P.R.CHINA;

have invented and own a certain invention entitled:

DATA TRANSMISSION METHOD AND APPARATUS

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2019-05-03, under U.S. Application No. 16402818 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 other writings and do such additional acts as the Assignee may deem necessary or desirable to

PATENT REEL: 054294 FRAME: 0945

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.

Jun 12,	2019	Jinlin Peng
LV ATC with a manufacture of the larger plant and an analysis of the larger plant and a second and a larger plant and a larger	agen Egypty and Branch and the Control of the Branch and State (State (S	Jinlin Peng
Date		Pengpeng Dong
Date		Zongjie Wang
Date		Peng Zhang

REEL: 054294 FRAME: 0946

PATENT

Attorney Docket No. 43968-0599001 Client Reference No. 85227872US06

ASSIGNMENT

WHEREAS, WE,

Jinlin Peng

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

P.R.CHINA; and

Zongjie Wang

Huawei Administration Building Bantian, Longgang District

Shenzhen, 518129, Guangdong

P.R.CHINA; and

Pengpeng Dong

Huawei Administration Building Bantian, Longgang District

Shenzhen, 518129, Guangdong

P.R.CHINA: and

Peng Zhang

Huawei Administration Building Bantian, Longgang District

Shenzhen, 518129, Guangdong

P.R.CHINA;

have invented and own a certain invention entitled:

DATA TRANSMISSION METHOD AND APPARATUS

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2019-05-03, under U.S. Application No. 16402818 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 Assignce 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

1

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	Jinlin Peng
Date 2020-6-23	Pengeng Dong Pengpeng Dong
Date	Zongjie Wang
Date	Peng Zhang

PATENT

Attorney Docket No. <u>43968-0599001</u> Client Reference No. 85227872US06

ASSIGNMENT

WHEREAS, WE,

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

P.R.CHINA; and

Zongjie Wang

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

P.R.CHINA; and

Pengpeng Dong

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

P.R.CHINA; and

Peng Zhang

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

P.R.CHINA;

have invented and own a certain invention entitled:

DATA TRANSMISSION METHOD AND APPARATUS

for which invention we have execute	d an application (provisional of	or non-provisional) for a U.S
patent, which was filed on,	under U.S. Application No	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: 054294 FRAME: 0949

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	
	Jinlin Peng
Date	
	Pengpeng Dong
Date 2017. 12.18	Zorgie Wang Zongjie Wang
Date	Peng Zhang

PATENT Attorney Docket No. 43968-0599001 Client Reference No. 85227872US06

ASSIGNMENT

WHEREAS, WE,

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

P.R.CHINA; and

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

P.R.CHINA; and

Pengpeng Dong

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

P.R.CHINA; and

Peng Zhang

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

P.R.CHINA:

have invented and own a certain invention entitled:

DATA TRANSMISSION METHOD AND APPARATUS

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2019-05-03, under U.S. Application No. 16402818 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 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	
	Jinlin Peng
Date	
	Pengpeng Dong
Date	
	Zongjie Wang
Date 2019/6/10	Peng ZHANG
	Peng Zhang