PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6246738

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LIANG MA	06/05/2020
XIAOJIAN LIU	08/01/2018
CHEN ZHENG	06/05/2020
YUEJUN WEI	06/05/2020
XIN ZENG	04/10/2020

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:	16563396

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.

Email: apsi@fr.com

Correspondent Name: FISH & RICHARDSON P.C.

Address Line 1: P.O. BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

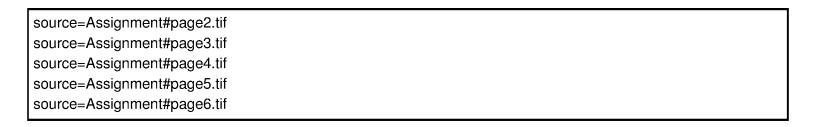
ATTORNEY DOCKET NUMBER:	43968-0904001
NAME OF SUBMITTER:	EMILY PALMER
SIGNATURE:	/Emily Palmer/
DATE SIGNED:	08/12/2020

Total Attachments: 6

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PATENT REEL: 053471 FRAME: 0679

506199999



PATENT REEL: 053471 FRAME: 0680

Attorney Docket No. Client Reference No. 85345220US05

ASSIGNMENT

WHEREAS, WE,

Liang Ma Huawei Administration Building

Bantian, Longgang District Shenzhen, 518129, Guangdong

P.R.CHINA; and

Chen Zheng

Huawei Administration Building Bantian, Longgang District

Shenzhen, 518129, Guangdong

P.R.CHINA; and

Xin Zeng

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

P.R.CHINA:

Xiaojian Liu

Huawei Administration Building

Bantian, Longgang District

Shenzhen, 518129, Guangdong

P.R.CHINA; and

Yuejun Wei

Huawei Administration Building

Bantian, Longgang District

Shenzhen, 518129, Guangdong

P.R.CHINA; and

have invented and own a certain invention entitled:

DATA PROCESSING METHOD, DATA PROCESSING APPARATUS, AND COMMUNICATIONS DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2019-09-06, under U.S. Application No. 16563396 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: 053471 FRAME: 0681

In re Appln. of Ma et al.	
Attorney Docket No.	

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 Jun, 5, 2020	Liang Ma Liang Ma
Date	Xiaojian Liu
Date Jun., 5. 2020	Chen Zheng Chen Zheng
Date Jun. 5, 2020	Ynejun Wei Yuejun Wei
Date	Xin Zeng

Attorney Docket No. Client Reference No. 85345220US05

ASSIGNMENT

WHEREAS, WE,

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

P.R.CHINA; and

Chen Zheng

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

P.R.CHINA; and

Xin Zeng

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

P.R.CHINA:

Xiaojian Liu

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

P.R.CHINA; and

Yuejun Wei

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

P.R.CHINA; and

have invented and own a certain invention entitled:

METHOD, DATA DATA **PROCESSING** PROCESSING APPARATUS. AND COMMUNICATIONS DEVICE

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._

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.

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> **PATENT** REEL: 053471 FRAME: 0683

In re Appln. of Ma et	al.
Attorney Docket No.	

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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	
	Liang Ma
Date Aug/, 2018	xhough lin
v	Xiaojian Liu
Date	
	Chen Zheng
Date	
Date	Yuejun Wei
Date	
-	Xin Zeng

ASSIGNMENT

WHEREAS, WE,

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

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

Xin Zeng Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA; Xiaojian Liu

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

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

have invented and own a certain invention entitled:

DATA PROCESSING METHOD, DATA PROCESSING APPARATUS, AND COMMUNICATIONS DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2019-09-06, under U.S. Application No. 16563396 and

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In re	Appln. ofMaet al.	
	rney Docket No.	

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

Date		
	Liang Ma	
Data		
Date	Xiaojian Liu	·
Date		
	Chen Zheng	
Date		
	Yuejun Wei	
Date Apr lo, 2020	Am Zoney	
•	Xin Zeng //	