505931427 02/24/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5978145

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GUANGHUA ZHONG	02/19/2020
SHUXIN GOU	10/18/2018
JISONG HUANG	11/15/2018

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:	16047856

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: alec.matsumoto@wbd-us.com, IPDocketing@wbd-us.com,

bstzkgsreport@wbd-us.com

Correspondent Name: WOMBLE BOND DICKINSON (US) LLP

Address Line 1: P.O. BOX 7037

Address Line 4: ATLANTA, GEORGIA 30357-0037

ATTORNEY DOCKET NUMBER:	210167.0183.1 (P184)
NAME OF SUBMITTER:	KEVIN G. SHAO
SIGNATURE:	/Kevin G. Shao/
DATE SIGNED:	02/24/2020

Total Attachments: 6

source=84647064US04 Assignment#page1.tif source=84647064US04 Assignment#page2.tif source=84647064US04 Assignment#page3.tif

PATENT 505931427 REEL: 051904 FRAME: 0039

source=84647064US04 Assignment#page4.tif source=84647064US04 Assignment#page5.tif source=84647064US04 Assignment#page6.tif

> PATENT REEL: 051904 FRAME: 0040

PATENT

Attorney Docket No. Client Reference No. 84647064US04

ASSIGNMENT

WHEREAS, WE,

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

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

have invented and own a certain invention entitled:

TOUCH POINT POSITIONING METHOD AND APPARATUS, AND TERMINAL DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2018-07-27, under U.S. Application No. 16047568 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

making application for and obtaining reissued, reexamined, and National phase on the invention, and in enforcing any	his assignment, and render all necessary assistance in original, continuation, continuation-in-part, divisional, use patents of the U.S. or of any and all foreign countries rights or chooses in action accruing as a result of such ing statements and other affidavits, it being understood ment shall bind, and inure to the benefit of, the assigns hereto.
IN WITNESS WHEREOF, We have	hereunder set our hands on the dates shown below.
Date_ Feb 19. 2020	Guanghua Zhong
Date	Shuxin Gou
Date	

Jisong Huang

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

> PATENT REEL: 051904 FRAME: 0042

PATENT

Attorney Docket No. Client Reference No. 84647064US04

ASSIGNMENT

WHEREAS, WE,

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

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

have invented and own a certain invention entitled:

TOUCH POINT POSITIONING METHOD AND APPARATUS, AND TERMINAL DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2018-07-27, under U.S. Application No. 16047568 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

In re Appln. of Zhong et al. Attorney Docket No	
making application for and obtaining origin reissued, reexamined, and National phase par on the invention, and in enforcing any rights applications or patents, and by executing sta	ssignment, and render all necessary assistance in hal, continuation, continuation-in-part, divisional, tents of the U.S. or of any and all foreign countries s or chooses in action accruing as a result of such attements and other affidavits, it being understood shall bind, and inure to the benefit of, the assigns of
IN WITNESS WHEREOF, We have here	under set our hands on the dates shown below.
Date	Guanghua Zhong
Date Oct 18, 2018	Shuxin Gou
Date	Jisong Huang

PATENT

Attorney Docket No. Client Reference No. 84647064US04

ASSIGNMENT

WHEREAS, WE,

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

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

have invented and own a certain invention entitled:

TOUCH POINT POSITIONING METHOD AND APPARATUS, AND TERMINAL DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2018-07-27, under U.S. Application No. 16047568 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

In	re	App	oln.	of :	Zho	ng	et	al.	
Αt	to	nev	Do	cke	t N	ο.			

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		
	Guanghua Zhong	
Date		
	Shuxin Gou	
Date_ 298-11-15	查表示	
	Jisana Huana	