PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6159107

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RUISUN	05/07/2020
TENG ZHANG	08/30/2018
YI PAN	05/25/2018
RENZHI YANG	10/18/2018

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:	15779092

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: Isun@kilpatricktownsend.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:	088963-1090285
NAME OF SUBMITTER:	LILY SUN
SIGNATURE:	/Lily Sun/
DATE SIGNED:	06/17/2020

Total Attachments: 8

PATENT REEL: 052969 FRAME: 0921

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WHEREAS, WE,

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

P.R.CHINA; and

Yi Pan

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

P.R.CHINA; and

Teng Zhang

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

P.R.CHINA; and

Renzhi Yang

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

P.R.CHINA.

have invented and own a certain invention entitled:

METHOD AND APPARATUS FOR INDICATING DIRECTION

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2018-05-25, under U.S. Application No. 15779092 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 Assignce 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.

Date May 7 2020	Rui Sun
	Rui Sun
Date	
	Teng Zhang
Date	
	Yi Pan
Date	
	Renzhi Yang

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Date	
	Rui Sun
Date 2018.8.30	Teng Zhong Teng Zhang
Date	
	Yi Pan
Date	· .
	Renzhi Yang

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	Teng Zhang
Date 2018 . 05-25	Yi Pan
	Yi Pan
Data	
Date	
	Renzhi Yang

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Date	Ruí Sun
Date	Teng Zhang
Date	Yi Pan
Date 1918-10-18	Renzhi Yang