505297970 01/28/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZHIQIANG LIAO	08/10/2018
ZHENG LIN	04/11/2018
QIYI LU	08/10/2018
XIONGHUI FAN	03/02/2017

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:	16023774

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:	43968-0232001	
NAME OF SUBMITTER:	SUSAN C. JOHNSON	
SIGNATURE:	/Susan C. Johnson/	
DATE SIGNED:	01/28/2019	

Total Attachments: 6

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Attorney Docket No. <u>43968-0232</u>001 Client Reference No. 84633009US05

ASSIGNMENT

WHEREAS, WE,

Zhiqiang Liao Huawei Administration Building

Bantian, Longgang District Shenzhen, 518129, Guangdong

P.R.CHINA; and

Qiyi Lu

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

P.R.CHINA; and

Zheng Lin

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

P.R.CHINA; and

Xionghui Fan

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

P.R.CHINA;

have invented and own a certain invention entitled:

PHASE SHIFTER, ANTENNA, AND RADIO COMMUNICATIONS DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2018-06-29, under U.S. Application No. 16023774 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 Liao et al. Attorney Docket No. <u>43968-0232001</u>

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 August 10, 2018	Zhiqiang Liau
	Zhiqiang Liao
Date	
	Zheng Lin
Date Argust 10, 2018	Qiyi Lu Qiyi Du
V	Qiyi İ l u
Date	
Lar Vol 1 or	Xionghui Fan

Attorney Docket No. <u>43968-0232</u>001 Client Reference No. 84633009US05

ASSIGNMENT

WHEREAS, WE,

Zhiqiang Liao Z Huawei Administration Building H

Bantian, Longgang District Shenzhen, 518129, Guangdong

P.R.CHINA; and

Qiyi Lu

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

P.R.CHINA; and

Zheng Lin

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

P.R.CHINA; and

Xionghui Fan

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In re Appln. of Liao et al. Attorney Docket No. 43968-0232001

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

Date		Zhiqiang Liao
Date	2018. 4.11	Zheng Lin
***************************************		Zheng Lin
Date		
		Qiyi Lu
Date		
		Xionghui Fan

Attorney Docket No. <u>43968-0232</u>001 Client Reference No. 84633009US05

ASSIGNMENT

WHEREAS, WE,

Zhiqiang Liao Zheng Lin Huawei Administration Building Huawei Ad

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

Qiyi Lu Xionghui Fan

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

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In re Applin. of Liao et al. Attorney Docket No. <u>43968-02</u>32001

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		
	Zhiqiang Liao	
Date		
	Zheng Lin	
Date		
	Qiyi Lu	
Date Mar 02 2017		
	Xionghui Fan	***************************************