505843129 12/31/2019

EPAS ID: PAT5890065

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIAOFENG ZHANG	01/15/2018
LIXIA QIU	03/22/2018
KE CHEN	11/06/2019

RECEIVING PARTY DATA

Name:	Huawei Technologies Co., Ltd.	
Street Address:	Huawei Administration Building	
nternal Address: Bantian, Longgang District		
City:	Shenzhen, Guangdong	
State/Country:	CHINA	
Postal Code:	518129	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16731801

CORRESPONDENCE DATA

Fax Number: (312)616-5700

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: (312) 616-5600

Email: assignments@leydig.com
Correspondent Name: LEYDIG, VOIT & MAYER, LTD.

Address Line 1: TWO PRUDENTIAL PLAZA, SUITE 4900

Address Line 2: 180 NORTH STETSON AVENUE Address Line 4: CHICAGO, ILLINOIS 60601-6731

ATTORNEY DOCKET NUMBER: HW746963

NAME OF SUBMITTER: MARALEA ACHACOSO

SIGNATURE: /Maralea Achacoso/
DATE SIGNED: 12/31/2019

Total Attachments: 6

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PATENT 505843129 REEL: 051394 FRAME: 0432



PATENT REEL: 051394 FRAME: 0433

Attorney Docket No. HW736007 Client Reference No. 84287222US09

ASSIGNMENT

WHEREAS, WE,

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

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

have invented and own a certain invention entitled:

INPUT/OUTPUT APPARATUS OF MULTIPLEXER, AND MULTIPLEXER

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-10-27, under U.S. Application No. 15796239 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 Zhang et al. Attorney Docket No. <u>HW736007</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 Jonuary 15,2018	Xierofeny Zhonoz	
	Xiaofeng Zhang	
Date		
	Lixia Qiu	
Date		
	Ke Chen	

ASSIGNMENT

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

Date	Xiaofeng Zhang
Date Mar. 22, 2018	Lixia Qiu
	Lixia Qiu
Date	
	Ke Chen

PATENT

Attorney Docket No. HW736007 Client Reference No. 84287222US09

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PATENT REEL: 051394 FRAME: 0438

In re Appin, of Zhang et al. Attorney Docket No. HW736007

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

Date		
		Xiaofeng Zhang
Date		
		Lixia Qiu
Date	2019年11月6日	Chanke
		Ke Chen

RECORDED: 12/31/2019