PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7502929

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
QUANZHONG GAO	06/11/2021
HUI GAO	08/23/2022
HONGJIE HU	08/23/2022
FENGYONG QIAN	06/03/2021
CHENGZHI ZHU	08/23/2022

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:	17196703

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:	HW753238
NAME OF SUBMITTER:	KAJAL AMIN
SIGNATURE:	/Kajal Amin/
DATE SIGNED:	08/24/2022

PATENT REEL: 060890 FRAME: 0585

507456037

Total Attachments: 6 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif

ASSIGNMENT

WHEREAS, WE,

Quanzhong Gao

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

P.R.CHINA; and

Hongjie Hu

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

P.R.CHINA; and

Chengzhi Zhu

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

P.R.CHINA;

Hui Gao

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

P.R.CHINA; and

Fengyong Qian

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

P.R.CHINA; and

have invented and own a certain invention entitled:

METHOD AND APPARATUS FOR ADJUSTING HALF-POWER ANGLE OF ANTENNA

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2021-03-09, under U.S. Application No. 17196703 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.

In re Appln. of Gao et al. Attorney Docket No. <u>HW753238</u>

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 2021.6.11	Quanzhong Gao	
Date	Hui Gao	
Date	Hongjie Hu	
Date	Fengyong Qian	
Date	Chengzhi Zhu	

ASSIGNMENT

WHEREAS, WE,

Quanzhong Gao

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

P.R.CHINA; and

Hongjie Hu

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

P.R.CHINA; and

Chengzhi Zhu

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

P.R.CHINA;

Hui Gao

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

P.R.CHINA; and

Fengyong Qian

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

P.R.CHINA; and

have invented and own a certain invention entitled:

METHOD AND APPARATUS FOR ADJUSTING HALF-POWER ANGLE OF ANTENNA

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2021-03-09, under U.S. Application No. 17196703 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.

In re Appln. of Gao et al. Attorney Docket No. HW753238

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	
	Quanzhong Gao
Date 2022.08.23	Hui Gao
	Hui Gao
Date_	Hongie Hu
	Hongjie Hu
Date	
	Fengyong Qian
Date_2072. 8.23	Changzhi Zhu Chengzhi Zhu
	Chengžhi Zhu

ASSIGNMENT

WHEREAS, WE,

Quanzhong Gao

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

P.R.CHINA; and

Hongjie Hu

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

P.R.CHINA; and

Chengzhi Zhu

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

P.R.CHINA;

Hui Gao

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

P.R.CHINA; and

Fengyong Qian

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

P.R.CHINA; and

have invented and own a certain invention entitled:

METHOD AND APPARATUS FOR ADJUSTING HALF-POWER ANGLE OF ANTENNA

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2021-03-09, under U.S. Application No. 17196703 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.

In re Appln. of Gao et al. Attorney Docket No. HW753238

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	
	Quanzhong Gao
Date	Hui Gao
Date	Hongjie Hu
Date June 03, 202	CZAW Fengyong Fengyong Qian
Date	Chengzhi Zhu