

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7035357

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
HUAN-CHU HUANG	06/09/2021
RONGJIE MA	11/11/2021
XIANJING JIAN	11/11/2021
ZHIMIN ZHU	11/11/2021
RECEIVING PARTY DATA	
Name:	VIVO MOBILE COMMUNICATION CO.,LTD.
Street Address:	#283, BBK ROAD, WUSHA, CHANG'AN, DONGGUAN
City:	GUANGDONG
State/Country:	CHINA
Postal Code:	523860
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17531603
CORRESPONDENCE DATA	
Fax Number:	(571)327-5452
<i>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.</i>	
Phone:	5713275450
Email:	ipntlaw@ipntlaw.com
Correspondent Name:	IP&T GROUP LLP
Address Line 1:	102 MAPLE AVE. E
Address Line 4:	VIENNA, VIRGINIA 22180
ATTORNEY DOCKET NUMBER:	219045PCTUS-VIVO-ICWCA
NAME OF SUBMITTER:	DRAGAN PLAVSIC
SIGNATURE:	/Dragan Plavsic/
DATE SIGNED:	11/19/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 8	
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WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such inventions; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such inventions and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such inventions in the Assignee, and for securing, maintaining and enforcing proper patent protection for such inventions;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

The assignment of said invention is effective as of the earlier of (1) the date of execution shown below or (2) the filing date of the first filed of said patent applications.

STATEMENTS

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part.

LEGAL NAME OF INVENTOR	
Inventor: <u>HuanChun Huang</u>	Date: <u>2021/6/19</u>
Signature: <u>HuanChun Huang</u>	

**ASSIGNMENT OF AND DECLARATION (37 CFR 1.63) FOR APPLICATION
FOR UNITED STATES LETTERS PATENT**

WHEREAS Rongjie MA, hereinafter referred to collectively as the assignor and inventor, has invented a certain improvement relating to

ANTENNA ELEMENT AND ELECTRONIC DEVICE

said application being attached hereto;

said application having been filed in the United States Patent and Trademark Office on _____, as Application Serial No. _____, and was amended on _____ (if applicable);

the specification of which was filed under the Patent Cooperation Treaty on May 13, 2020, Serial No. PCT/CN2020/090051, the United States of America being designated.

AND WHEREAS VIVO MOBILE COMMUNICATION CO.,LTD., of the P.R.China, having a place of business at #283, BBK Road, Wusha, Chang'an, Dongguan, Guangdong 523860, China hereinafter referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof (i.e. divisional, continuation, and continuation-in-part applications), and in and to said invention and improvements ("invention") and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

As an above-named inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that I am the original inventor or an original joint inventor of a

claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNOR (INVENTOR):

Signature: Rongjie MA

Date: 2-21/11/11

Printed or Typed Name: Rongjie MA

**ASSIGNMENT OF AND DECLARATION (37 CFR 1.63) FOR APPLICATION
FOR UNITED STATES LETTERS PATENT**

WHEREAS Xianjing JIAN, hereinafter referred to collectively as the assignor and inventor, has invented a certain improvement relating to

ANTENNA ELEMENT AND ELECTRONIC DEVICE

said application being attached hereto;

said application having been filed in the United States Patent and Trademark Office on _____, as Application Serial No. _____, and was amended on _____ (if applicable);

the specification of which was filed under the Patent Cooperation Treaty on May 13, 2020, Serial No. PCT/CN2020/090051, the United States of America being designated.

AND WHEREAS VIVO MOBILE COMMUNICATION CO.,LTD., of the P.R.China, having a place of business at #283, BBK Road, Wusha, Chang'an, Dongguan, Guangdong 523860, China hereinafter referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof (i.e. divisional, continuation, and continuation-in-part applications), and in and to said invention and improvements ("invention") and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

As an above-named inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that I am the original inventor or an original joint inventor of a

claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNOR (INVENTOR):

Signature: Xianjing JIAN

Date: 2021/11/11

Printed or Typed Name: Xianjing JIAN

**ASSIGNMENT OF AND DECLARATION (37 CFR 1.63) FOR APPLICATION
FOR UNITED STATES LETTERS PATENT**

WHEREAS Zhimin ZHU, hereinafter referred to collectively as the assignor and inventor, has invented a certain improvement relating to

ANTENNA ELEMENT AND ELECTRONIC DEVICE

said application being attached hereto;

said application having been filed in the United States Patent and Trademark Office on _____, as Application Serial No. _____, and was amended on _____ (if applicable);

the specification of which was filed under the Patent Cooperation Treaty on May 13, 2020, Serial No. PCT/CN2020/090051, the United States of America being designated.

AND WHEREAS VIVO MOBILE COMMUNICATION CO.,LTD., of the P.R.China, having a place of business at #283, BBK Road, Wusha, Chang'an, Dongguan, Guangdong 523860, China hereinafter referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof (i.e. divisional, continuation, and continuation-in-part applications), and in and to said invention and improvements ("invention") and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

As an above-named inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that I am the original inventor or an original joint inventor of a

claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNOR (INVENTOR):

Signature: Zhimin ZHU

Date: 2021/11/11

Printed or Typed Name: Zhimin ZHU