506946112 10/27/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6992949

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WEIMIN DUAN	02/11/2021
ALEXANDROS MANOLAKOS	02/10/2021
SEYONG PARK	10/19/2021
TINGFANG JI	02/22/2021

RECEIVING PARTY DATA

Name:	QUALCOMM INCORPORATED
Street Address: 5775 MOREHOUSE DRIVE	
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121-1714

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17171557

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: 5106631100 Email: tyee@wavsip.com

Correspondent Name: WEAVER AUSTIN VILLENEUVE & SAMPSON LLP

Address Line 1: P.O. BOX 70250

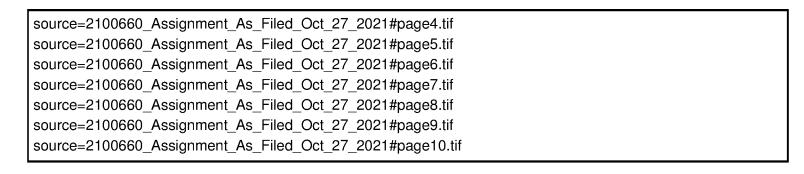
Address Line 4: OAKLAND, CALIFORNIA 94612-0250

ATTORNEY DOCKET NUMBER:	QLCMP147US/2100660
NAME OF SUBMITTER:	TANYA YEE
SIGNATURE:	/Tanya Yee/
DATE SIGNED:	10/27/2021

Total Attachments: 10

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PATENT 506946112 REEL: 057938 FRAME: 0157



ASSIGNMENT

WHEREAS, WE,

- 1. Weimin DUAN, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,
- 2. Alexandros MANOLAKOS, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,
- 3. Seyong PARK, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,
- 4. Tingfang JI, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **UE PASSIVE RF SENSING WITH CELLULAR-BASED BISTATIC/MULTISTATIC RADAR** (collectively the "**INVENTIONS**") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, **QUALCOMM Incorporated** (hereinafter "**ASSIGNEE**"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). 17/171,557 filed February 9, 2021, Qualcomm Reference Number 2100660, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

Done at	Sin Diego, CA, USA 02/	11/2024	Wor	
	City, State, Country	Date	Weimin DUAN	
-				
Done at	, on			
	City, State, Country	Date	Alexandros MANOLAKOS	
Done at	, on			
•	City. State, Country	Date	Seyong PARK	
Done at	, 00			
	City, State, Country	Date	Tingfang JI	

Page 1 of 3

ASSIGNMENT

WHEREAS, WE,

- 1. Weimin DUAN, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,
- 2. Alexandros MANOLAKOS, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,
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- 4. Tingfang JI, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **UE PASSIVE RF SENSING WITH CELLULAR-BASED BISTATIC/MULTISTATIC RADAR** (collectively the "**INVENTIONS**") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, **QUALCOMM Incorporated** (hereinafter "**ASSIGNEE**"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). 17/171,557 filed February 9, 2021, Qualcomm Reference Number 2100660, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

Done at	City, State, Country	Date	Weimin DUAN
Done at	Example 6,000 on City, State, Country	7 (10/701/ Date	Alexandros MANOLAKOS
Done at	, on _ City, State, Country	Date	Seyong PARK
Done at	, on, on	Date	Tingfang JI

Done at	, on		
	City, State, Country	Date	Weimin DUAN
Done at	, on		
	City, State, Country	Date	Alexandros MANOLAKOS
Done at	Sur 7: ego, (A) City, State, Country	USA 10/19/2021	
	City, State, Country	Date	Seyong PARK
Done at	, on		
	City, State, Country	Date	Tinofano II

ASSIGNMENT

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- 4. Tingfang JI, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,

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Done at	, on _		
•	City, State, Country	Date	Weimin DUAN
Done at	, on		
	City, State, Country	Date	Alexandros MANOLAKOS
Done at	on , on	Data	Causas DABV
	City, State, Country	Date	Seyong PARK
Done at	Sarligo, CA, USA, on	2/22/2021	
	City, State, Country	Date	Tingfang JI

PATENT REEL: 057938 FRAME: 0168

RECORDED: 10/27/2021