

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7114800

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the SPELLING OF THE FOURTH INVENTOR'S NAME previously recorded on Reel 058489 Frame 0261. Assignor(s) hereby confirms the ASSIGNMENT.
CONVEYING PARTY DATA	
Name	Execution Date
ANANTHARAMAN BALASUBRAMANIAN	12/22/2021
KAPIL GULATI	11/29/2021
SHUANSHUAN WU	11/19/2021
HONG CHENG	12/23/2021
SHAILESH PATIL	12/06/2021
GENE WESLEY MARSH	11/30/2021
SONY AKKARAKARAN	11/12/2021
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:	17520511
CORRESPONDENCE DATA	
Fax Number:	(303)473-2720
<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:	3034732700
Email:	skfredrickson@hollandhart.com
Correspondent Name:	MICHAEL DRAPKIN
Address Line 1:	P.O. BOX 11583
Address Line 4:	SALT LAKE CITY, UTAH 84147
ATTORNEY DOCKET NUMBER:	PX0752 (111334.0771)
NAME OF SUBMITTER:	MICHAEL L. DRAPKIN
SIGNATURE:	/Michael L. Drapkin/

DATE SIGNED:	01/11/2022
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Total Attachments: 10

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- source=2106418_Corrective Assignment#page2.tif
- source=2106418_Corrective Assignment#page3.tif
- source=2106418_Corrective Assignment#page4.tif
- source=2106418_Corrective Assignment#page5.tif
- source=2106418_Corrective Assignment#page6.tif
- source=2106418_Corrective Assignment#page7.tif
- source=2106418_Corrective Assignment#page8.tif
- source=2106418_Corrective Assignment#page9.tif
- source=2106418_Corrective Assignment#page10.tif

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7095025

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ANANTHARAMAN BALASUBRAMANIAN	12/22/2021
KAPIL GULATI	11/29/2021
SHUANSHUAN WU	11/19/2021
HONG CHEN <u>CHENG</u>	12/23/2021
SHAILESH PATIL	12/06/2021
GENE WESLEY MARSH	11/30/2021
SONY AKKARAKARAN	11/12/2021
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:	17520511
CORRESPONDENCE DATA	
Fax Number:	(303)473-2720
<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:	3034732700
Email:	skfredrickson@hollandhart.com
Correspondent Name:	MICHAEL DRAPKIN
Address Line 1:	P.O. BOX 11583
Address Line 4:	SALT LAKE CITY, UTAH 84147
ATTORNEY DOCKET NUMBER:	PX0752 (111334.0771)
NAME OF SUBMITTER:	MICHAEL L. DRAPKIN
SIGNATURE:	/Michael L. Drapkin/
DATE SIGNED:	12/28/2021

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ASSIGNMENT

WHEREAS, WE,

1. **Anantharaman BALASUBRAMANIAN**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,**
2. **Kapil GULATI**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,**
3. **Shuanshuan WU**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,**
4. **Hong CHENG**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,**
5. **Shailesh PATIL**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,**
6. **Gene Wesley MARSH**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.,**
7. **Sony AKKARAKARAN**, 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 **SECURITY TECHNIQUES FOR RANGING IN WIRELESS NETWORKS** (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). 17/520,511** filed **November 05, 2021**, **Qualcomm Reference Number 2106418**, and all provisional applications relating thereto (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;

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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 the United States or 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 me 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;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, CA, United States

on

12/22/2021

Anantharaman

City, State, Country


Date

Anantharaman BALASUBRAMANIAN

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at Belle Mead, NJ, United States on 11/29/2021 *Kapil Gulati*
City, State, Country Date Kapil GULATI

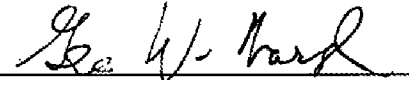
AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, CA, United States on 11/19/2021 
City, State, Country Date Shuanshuan WU

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, CA, United States on 6 DEC, 2021 SLHP
City, State, Country Date Shailesh PATIL

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, CA, United States on 4/30/2021 
City, State, Country Date Gene Wesley MARSH

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with the above.

	Poway, CA, United States	on	11/12/2021
Date of			
City, State, Country		Date	Sony AKKARAKARAN

Signature