

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7773576

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT																						
NATURE OF CONVEYANCE:	Corrective Assignment to correct the DATE IN WHICH THE 6TH INVENTOR SIGNED THE ASSIGNMENT previously recorded on Reel 057751 Frame 0447. Assignor(s) hereby confirms the ASSIGNMENT.																						
CONVEYING PARTY DATA																							
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>LE LIU</td><td>09/20/2021</td></tr><tr><td>ALBERTO RICO ALVARINO</td><td>10/08/2021</td></tr><tr><td>PETER GAAL</td><td>09/29/2021</td></tr><tr><td>KAZUKI TAKEDA</td><td>09/20/2021</td></tr><tr><td>JING SUN</td><td>09/27/2021</td></tr><tr><td>WANSHI CHEN</td><td>09/19/2021</td></tr><tr><td>AYAN SENGUPTA</td><td>09/19/2021</td></tr><tr><td>JUAN MONTOJO</td><td>09/27/2021</td></tr><tr><td>MOSTAFA KHOSHNEVISAN</td><td>09/19/2021</td></tr><tr><td>PRASAD REDDY KADIRI</td><td>10/04/2021</td></tr></tbody></table>	Name	Execution Date	LE LIU	09/20/2021	ALBERTO RICO ALVARINO	10/08/2021	PETER GAAL	09/29/2021	KAZUKI TAKEDA	09/20/2021	JING SUN	09/27/2021	WANSHI CHEN	09/19/2021	AYAN SENGUPTA	09/19/2021	JUAN MONTOJO	09/27/2021	MOSTAFA KHOSHNEVISAN	09/19/2021	PRASAD REDDY KADIRI	10/04/2021	
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RECEIVING PARTY DATA																							
<table border="1"><tr><td>Name:</td><td>QUALCOMM INCORPORATED</td></tr><tr><td>Street Address:</td><td>5775 MOREHOUSE DRIVE</td></tr><tr><td>City:</td><td>SAN DIEGO</td></tr><tr><td>State/Country:</td><td>CALIFORNIA</td></tr><tr><td>Postal Code:</td><td>92121-1714</td></tr></table>	Name:	QUALCOMM INCORPORATED	Street Address:	5775 MOREHOUSE DRIVE	City:	SAN DIEGO	State/Country:	CALIFORNIA	Postal Code:	92121-1714													
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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:	(303)473-2700																						
Email:	skfredrickson@hollandhart.com, qualcommformaldocs@hollandhart.com																						
Correspondent Name:	MICHAEL DRAPKIN																						
Address Line 1:	P.O. BOX 11583																						

PATENT

Address Line 4: SALT LAKE CITY, UTAH 84147	
ATTORNEY DOCKET NUMBER:	PS862.01 (107922.1776)
NAME OF SUBMITTER:	MICHAEL L. DRAPKIN
SIGNATURE:	/Michael L. Drapkin/
DATE SIGNED:	02/01/2023
Total Attachments: 13 source=208680 Corrective Assignment#page1.tif source=208680 Corrective Assignment#page2.tif source=208680 Corrective Assignment#page3.tif source=208680 Corrective Assignment#page4.tif source=208680 Corrective Assignment#page5.tif source=208680 Corrective Assignment#page6.tif source=208680 Corrective Assignment#page7.tif source=208680 Corrective Assignment#page8.tif source=208680 Corrective Assignment#page9.tif source=208680 Corrective Assignment#page10.tif source=208680 Corrective Assignment#page11.tif source=208680 Corrective Assignment#page12.tif source=208680 Corrective Assignment#page13.tif	

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EPAS ID: PAT6961709

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
LE LIU	09/20/2021
ALBERTO RICO ALVARINO	10/08/2021
PETER GAAL	09/29/2021
KAZUKI TAKEDA	09/20/2021
JING SUN	09/27/2021
WANSHI CHEN	09/18/2021 09/19/2021
AYAN SENGUPTA	09/19/2021
JUAN MONTOJO	09/27/2021
MOSTAFA KHOSHNEVISAN	09/19/2021
PRASAD REDDY KADIRI	10/04/2021
RECEIVING PARTY DATA	
Name:	QUALCOMM INCORPORATED
Street Address:	5775 MOREHOUSE DRIVE
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121-1714
PROPERTY NUMBERS Total: 2	
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<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

v1

ASSIGNMENT

WHEREAS, WE,

1. **Le LIU**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
2. **Alberto RICO ALVARINO**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
3. **Peter GAAL**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
4. **Kazuki TAKEDA**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
5. **Jing SUN**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
6. **Wanshi CHEN**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
7. **Ayan SENGUPTA**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
8. **Juan MONTOJO**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
9. **Mostafa KHOSHNEVISAN**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A.**,
10. **Prasad Reddy KADIRI**, 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 **CONFIGURATION FOR GROUP-COMMON DOWNLINK CHANNELS WITH REPETITIONS** (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). 17/472,452 filed September 10, 2021, Qualcomm Reference Number 208680, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 63/090,036 filed October 09, 2020, Qualcomm

PATENT**REEL: 062609 FRAME: 0106**

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Reference Number 208680P1, (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 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 Santa Clara, CA, on 9/20/2021 Le Liu
City, State, Country Date Le LIU

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

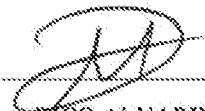
Done
at

San Diego, CA, US
City, State, Country

on

10/8/21

Date



Alberto RICO ALVARINO

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, U.S.A. on 09/29/2021 
City, State, Country Date Peter GAAL

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

Done at Tokyo, Japan, on Sept. 20, 2021 Kazuki Takeda
City, State, Country Date Kazuki TAKEDA

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

Done
at

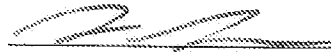
San Diego, CA, USA

City, State, Country

on

9/27/2021

Date



Jing SUN

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

Done
at

Shanghai, China

City, State, Country

on

9/19/2021

Date

[Signature]

Wanshi CHEN

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, USA, on 09/19/2021 Ayan Sengupta.
City, State, Country Date Ayan SENGUPTA

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

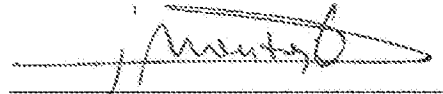
Done
at

SAN DIEGO, CA, USA

on

9/27/21

Date



Juan MONTOJO

City, State, Country

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, USA on 9, 19, 2021 Mkh
City, State, Country Date Mostafa KHOSHNEVISAN

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

City, State, Country

on

10/04/2021

Date

Prasad

Prasad Reddy KADIRI