PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6697598

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HAMED PEZESHKI	04/26/2021
TAO LUO	04/27/2021
SONY AKKARAKARAN	04/26/2021
JUNYI LI	05/01/2021
TAESANG YOO	05/06/2021
QIANG WU	04/26/2021
ARUMUGAM CHENDAMARAI KANNAN	05/05/2021
JINGCHAO BAO	04/30/2021

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17238141

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: 713 623 4844
Email: rross@pattersonsheridan.com, psdocketing@pattersonsheridan.com
Correspondent Name: PATTERSON + SHERIDAN, L.L.P. QUALCOMM
Address Line 1: 24 GREENWAY PLAZA, SUITE 1600
Address Line 4: HOUSTON, TEXAS 77046

ATTORNEY DOCKET NUMBER:	203984US
NAME OF SUBMITTER:	MARCUS W. HAMMACK
SIGNATURE:	/MARCUS W. HAMMACK/

DATE SIGNED:	05/07/2021

Total Attachments: 10
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ASSIGNMENT

WHEREAS, WE,

1. **Hamed PEZESHKI**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

2. **Tao LUO**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

3. **Sony AKKARAKARAN**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

4. **Junyi LI**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

5. **Taesang YOO**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

6. **Qiang WU**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

7. **Arumugam CHENDAMARAI KANNAN**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

8. **Jingchao BAO**, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714,

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 **REPORTING QUANTIZED USER EQUIPMENT (UE) ORIENTATION FOR BEAM SELECTION** (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. **17/238,141**, filed **April 22, 2021**, Qualcomm Reference No. **203984**, and all provisional applications relating thereto, together with U.S. Provisional Application No. **63/015,409**, filed **April 24, 2020**, Qualcomm Reference No. **203984P1**, (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;

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, on 04/26/2021
CITY, STATE DATE
Hamed PEZESHKI

Done at ______________, on ______________
CITY, STATE DATE
Tao LUO

Done at ______________, on ______________
CITY, STATE DATE
Sony AKKARAKARAN

Done at ______________, on ______________
CITY, STATE DATE
Junyi LI

Done at ______________, on ______________
CITY, STATE DATE
Taesang YOO

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

Done at ________________ , on ____________ ____________________
CITY, STATE DATE **Hamed PEZESHKI**

Done at San Diego CA, on 04/27/2021 ____________________
CITY, STATE DATE **Tao LUO**

Done at ________________ , on ____________ ____________________
CITY, STATE DATE **Sony AKKARAKARAN**

Done at ________________ , on ____________ ____________________
CITY, STATE DATE **Junyi LI**

Done at ________________ , on ____________ ____________________
CITY, STATE DATE **Taesang YOO**

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

Done at _______________, on _______________ ______________________________
CITY, STATE DATE **Hamed PEZESHKI**

Done at _______________, on _______________ ______________________________
CITY, STATE DATE **Tao LUO**

Done at Poway, CA, on 4/26/2021 ______________________________
CITY, STATE DATE **Sony AKKARAKARAN**

Done at _______________, on _______________ ______________________________
CITY, STATE DATE **Junyi LI**

Done at _______________, on _______________ ______________________________
CITY, STATE DATE **Taesang YOO**

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

Done at ________________ , on ________________ ________________________
CITY, STATE DATE **Hamed PEZESHKI**

Done at ________________ , on ________________ ________________________
CITY, STATE DATE **Tao LUO**

Done at ________________ , on ________________ ________________________
CITY, STATE DATE **Sony AKKARAKARAN**

Done at Bridgewater, NJ , on 5/1/2021 ________________________
CITY, STATE DATE **Junyi LI**

Done at ________________ , on ________________ ________________________
CITY, STATE DATE **Taesang YOO**

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

Done at ____________________, on ____________________ ________________________________
CITY, STATE DATE **Hamed PEZESHKI**

Done at ____________________, on ____________________ ________________________________
CITY, STATE DATE **Tao LUO**

Done at ____________________, on ____________________ ________________________________
CITY, STATE DATE **Sony AKKARAKARAN**

Done at ____________________, on ____________________ ________________________________
CITY, STATE DATE **Junyi LI**

Done at San Diego, CA, on 5/6/2021 ________________________________
CITY, STATE DATE **Taesang YOO**

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;

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, on 4/26/2021
City, State — Date — **Qiang WU**

Done at ______________, on ______________ ______________
City, State — Date — **Arumugam CHENDAMARAI KANNAN**

Done at ______________, on ______________ ______________
City, State — Date — **Jingchao BAO**

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;

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

Done at ______________, on ______________ ______________________
City, State Date **Qiang WU**

Done at San Diego, CA, on 05/05/2021 C Arumugam
City, State Date **Arumugam CHENDAMARAI KANNAN**

Done at ______________, on ______________ ______________________
City, State Date **Jingchao BAO**

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;

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

Done at ____________ , on ____________ ____________________
City, State Date **Qiang WU**

Done at ____________ , on ____________ ____________________
City, State Date **Arumugam CHENDAMARAI KANNAN**

Done at San Diego, CA , on 04/30/2021 Jingchao B
City, State Date **Jingchao BAO**