506895682 09/29/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6942504

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------------|----------------|
| JING LEI | 07/29/2021 |
| LINHAI HE | 08/25/2021 |
| YONGJUN KWAK | 07/29/2021 |
| HUILIN XU | 07/25/2021 |
| KRISHNA KIRAN MUKKAVILLI | 08/10/2021 |
| WANSHI CHEN | 07/30/2021 |
| HWAN JOON KWON | 09/28/2021 |
| TINGFANG JI | 08/10/2021 |

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

| Property Type | Number |
|---------------------|----------|
| Application Number: | 17443904 |
| Application Number: | 62706077 |

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: 5714320800

Email:docket@harrityllp.comCorrespondent Name:HARRITY & HARRITY, LLPAddress Line 1:11350 RANDOM HILLS RD

Address Line 2: SUITE 600

Address Line 4: FAIRFAX, VIRGINIA 22030

ATTORNEY DOCKET NUMBER: 0097-1952/206907

NAME OF SUBMITTER: SARA STESNEY

| /Sara Stesney/ | | | | |
|---|--|--|--|--|
| 09/29/2021 | | | | |
| | | | | |
| ge1.tif | | | | |
| ge2.tif | | | | |
| ge3.tif | | | | |
| ge4.tif | | | | |
| ge5.tif | | | | |
| ge6.tif | | | | |
| source=206907 Assignment as Filed#page7.tif | | | | |
| source=206907 Assignment as Filed#page8.tif | | | | |
| source=206907 Assignment as Filed#page9.tif | | | | |
| ge10.tif | | | | |
| | | | | |

ASSIGNMENT

WHEREAS, WE,

- 1. Jing LEI, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US.
- 2. Linhai HE, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 3. Yongjun KWAK, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 4. Huilin XU, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 5. Krishna Kiran MUKKAVILLI, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 6. Wanshi CHEN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 7. Hwan Joon KWON, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US.
- 8. Tingfang JI, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US.

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 **BEAM-BASED CONFIGURED GRANT – SMALL DATA TRANSFER OCCASIONS** (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). 17/443,904 filed July 28, 2021, Qualcomm Reference Number 206907, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/706.077, filed July 30, 2020, Qualcomm Reference Number 206907P1, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such 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

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

| Done at $\frac{\int_{0}^{\pi}}{\int_{0}^{\pi}}$ | viDlf, A. | . on | 7/29/2021 | |
|---|----------------------|-------|-----------|----------------|
| | City, State, Country | | Date | Jing LEI |
| Done at | | on | | |
| | City, State, Country | | Date | Linhai HE |
| Done at | | | | |
| | City, State, Country | | Date | Yongjun KWAK |
| Done at | | | | NA TELENANT |
| | City, State, Country | | Date | Huilin XU |
| Done at | | _, on | | |
| | City, State, Country | | Date | Krishna Kiran |
| | | | | MUKKAVILLI |
| Done at | | _, on | | · |
| | City, State, Country | | Date | Wanshi CHEN |
| Dama at | | | | |
| Done at | City, State, Country | | Date | Hwan Joon KWON |
| Done at | | _, on | | |
| | City, State, Country | | Date | Tingfang JI |

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

| Done at | , on | | A GLOUDE STOURD COUNTY ASSESSMENT |
|------------|--|--------------|--|
| | City, State, Country | Date | Jing LEI |
| Done at Sa | in Diago - CA, USA, on for City, State, Country | Jul 25, 2021 | Linkitt |
| | City, State, Country | () Date | Linhai HE |
| Done at | , on | | |
| | City, State, Country | Date | Yongjun KWAK |
| Done at | , on | | |
| | City, State, Country | Date | Huilin XU |
| Done at | , on | | |
| | City, State, Country | Date | Krishna Kiran MUKKAVILLI |
| Done at | , on | | |
| 170nc at | City, State, Country | | Wanshi CHEN |
| Done at | , on | | |
| | | Date | Hwan Joon KWON |
| Done at | , on _ | | |
| | City, State, Country | Date | Tingfang JI |

PATE
Quelimon Federace Number 206907
Page 3 of 3

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_ | | y on | | |
|-----------------|----------------------|----------|---------------|---|
| | City, State, Country | | Date | Jing LEI |
| Done at_ | | ب on _ | | , |
| | City, State, Country | | Date | Linhai HE |
| Done at | San Dogo CA | , ON | 7 - 29 - 2024 | Yongjun RWAK |
| | City, State, Country | ~ · · | Date | Yongjun KWAK |
| | | | | |
| Done at_ | | | | |
| | City, State, Country | | Date | Hullin XU |
| Done at | | ىد 06. م | | |
| | City, State, Country | | Date | Krishna Kiran |
| | | | | MUKKAVILLI |
| Door er | | - on | | |
| Section to Con- | City, State, Country | | Date | Wasshi CHEN |
| | | | | |
| Done at_ | | J (98) J | | *************************************** |
| | City, State, Country | | Date | Hwan Joon KWON |
| Done at | | _y on _ | | |
| | City Store Country | | | |

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, Country | | Date | Jing LEI |
| Done at | | , on | | |
| | City, Stafe, Country | | Date | Linhaí HE |
| Done at | | _, on _ | | |
| | City, State, Country | | Date | Yongjun KWAK |
| Done at <u>Fer</u> | City, State, Country | _, on | 07/25/2021 | HO |
| | City, State, Country | | Date | Huilin XU |
| Done at | | _, on | | |
| | City, State, Country | | Date | Krishna Kiran MUKKAVILLI |
| Done at | | _, on | | |
| | City, State, Country | | Date | Wanshi CHEN |
| Done at | | _, on | *************************************** | |
| | City, State, Country | | Date | Hwan Joon KWON |
| Done at | | _, on | · | |
| | City, State, Country | | Date | Tingfang JI |

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, Country | | Date | Jing LEI |
| Done at | | , 08 | | |
| | City, State, Country | | Date | Linhai HE |
| Done at | | , on | | |
| | City, State, Country | | Date | Yongjun KWAK |
| Done at | | , on | | |
| | City, State, Country | | Date | Huilin XU |
| Done at 🤼 | <u> </u> | , on <u>d</u> | 8/a/2021 | |
| | City, State, Country | | Dare | Krishna Kiran MUKKAVILLI |
| Done at | | yon | | · · · · · · · · · · · · · · · · · · · |
| | City, State, Country | | Date | Wanshi CHEN |
| Done at | | , on | | |
| | City, State, Country | | Date | Hwan Joon KWON |
| Done st | | . 00 | | |
| | City, State, Country | | Date | Tingfang Ji |

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

| Done at | | | |
|---------|----------------------|-----------|-----------------------------|
| | City, State, Country | Dete | Sing LET |
| Done at | | | |
| | City, State, Country | Date | Linhai HF: |
| Done at | , on | | |
| | City, State, Country | Date | Yongjun KWAK |
| Done at | , cm . | | |
| | City, State, Country | Date | Hollin XU |
| Done at | | | |
| | City, State, Country | Date | Krishoa Kiran MUKKAVILLI |
| Done si | mar Liega Cla Carra | 7/35/2011 | |
| | City, State, Country | Date | Wanshi CHEN |
| Done at | | | |
| | City, State, Country | Date | Hwan Joon X WON |
| Yone at | | | |
| | City, State, Country | Date | Tinafana Ji |

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, Country | | Date | Jing LEI |
| Done at | | , on | | |
| | City, State, Country | | Date | Linhai HE |
| Done at | | . on | | |
| | City, State, Country | | Date | Yongjun KWAK |
| Done at | | , on_ | | |
| | City, State, Country | | Date | Huilin XU |
| Done at | | , on | | |
| | City, State, Country | | Date | Krishna Kiran MUKKAVILLI |
| Done at | | , on | | |
| | City, State, Country | | Date | Wanshi CHEN |
| Sa. Done at | x Diego, G | x.on_ | 9/28/2021 | |
| | City, State, Country | | Date | Hwan Joon KWON |
| Done at | | on_ | | |
| | City, State, Country | | Date | Tingfang JI |

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, Country | | Date | Jing LEI |
| Done at | | , 00 | | |
| | City, State, Country | | Date | Linhai HE |
| Done at | | , ön | | |
| | City, State, Country | | Date | Yongjun KWAK |
| Done at | | , 00 | | |
| | City, State, Country | | Date | Hullin XU |
| Done at | | , on | | |
| | City, State, Country | | Date | Krishna Kiran MUKKAVILLI |
| Done at | | , on | | |
| | City, State, Country | | Date | Wanshi CHEN |
| Done at | | , on | | |
| | City, State, Country | | Date | Hwan Joon KWON |
| Done at | 0140, (A) USA | , on <u>22</u> | /e/mil | |
| | City, State, Country | | | Tingfang JI |

PATENT REEL: 057638 FRAME: 0989

RECORDED: 09/29/2021