505594988 07/29/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5641789

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

CONVEYING PARTY DATA

| Name | Execution Date | |
|-----------------------------|----------------|--|
| QUALCOMM TECHNOLOGIES, INC. | 11/26/2018 | |

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: | 15706541 | |

CORRESPONDENCE DATA

Fax Number: (310)201-5219

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: 310.277.7200

Email: Qualcomm-USPTO@seyfarth.com

Correspondent Name: SEYFARTH SHAW LLP

Address Line 1: 2029 CENTURY PARK EAST, SUITE 3500 LOS ANGELES, CALIFORNIA 90067

| ATTORNEY DOCKET NUMBER: | 174218 |
|-------------------------|---------------------|
| NAME OF SUBMITTER: | PUYA PARTOW-NAVID |
| SIGNATURE: | /Puya Partow-Navid/ |
| DATE SIGNED: | 07/29/2019 |

Total Attachments: 4

source=174218_ASG_QTI to QINC_AsFiled29July2019#page1.tif source=174218_ASG_QTI to QINC_AsFiled29July2019#page2.tif source=174218_ASG_QTI to QINC_AsFiled29July2019#page3.tif source=174218_ASG_QTI to QINC_AsFiled29July2019#page4.tif

PATENT 505594988 REEL: 049893 FRAME: 0656

PATENT ASSIGNMENT

WHEREAS, Qualcomm Technologies, Inc., a Delaware corporation having a place of business located at 5775 Morehouse Drive, San Diego, CA 92121, U.S.A. (hereinafter "ASSIGNOR"), hereby represents and warrants that it is the sole and exclusive owner of all right, title, and interest in, to and under the Patent Items (as defined below).

WHEREAS, ASSIGNOR desires to sell, assign and transfer to ASSIGNEE (as defined below) the Patent Items, with an effective date as of May 1, 2017.

AND WHEREAS, QUALCOMM Incorporated, a Delaware corporation, having a place of business located at 5775 Morehouse Drive, San Diego, California, 92121, U.S.A. (hereinafter "ASSIGNEE"), has agreed to acquire all right, title and interest in, to and under (i) the registered patents and patent applications identified in the Exhibit attached hereto (hereinafter the "Exhibit 1"), and all provisional applications relating thereto; (ii) all patents issuing on any patent applications identified in the Exhibit; (iii) all reissues, reexaminations, extensions, divisionals, renewals, continuations, continuations-in-part and counterparts (whether foreign or domestic) claiming priority to any of the foregoing items in (i) or (ii) above, along with all patents issuing therefrom; and (iv) all inventions and improvements claimed or described in any of the foregoing items (i), (ii) or (iii) (subsections (i), (ii), (iii) and (iv) hereinafter collectively referred to as the "Patent Items").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, there parties hereto agree as follows:

ASSIGNOR does hereby sell, assign, transfer, convey and deliver unto ASSIGNEE, its successors, legal representatives and assigns, all right, title and interest throughout the world in, to and under the Patent Items, including without limitation all foreign patents and any rights of priority based on or relating to the Patent Items.

AND ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States of America, and any Official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications, to issue all patents for the Patent Items to ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this Patent Assignment.

AND ASSIGNOR hereby sells, assigns, transfers, conveys and delivers to ASSIGNEE, its successors, legal representatives and assigns, all rights of enforcement, all claims for damages and all remedies arising out of, relating to or resulting from the Patent Items or any violations thereof, whether accrued prior to the date of this Patent Assignment or hereafter, including but not limited to the right to sue for, seek, collect, recover and retain damages and any other relief arising out of or resulting from any past, present or future infringement or violation of any of the Patent Items, and all other rights, including common law rights, that ASSIGNOR may have relating to the Patent Items, including but not limited to any ongoing or prospective royalties to which ASSIGNOR may be entitled, or that ASSIGNOR may collect for any infringements of any of the Patent Items or from any settlement or agreement related to the Patent Items arising before or after the date of this

Qualcomm Technologies, Inc. - QUALCOMM Incorporated Assignment [174218 Family]

PATENT REEL: 049893 FRAME: 0657 Patent Agreement, such rights to be held and enjoyed by ASSIGNEE, its successors, legal representatives and assigns, as fully and entirely as the same would have been held and enjoyed by ASSIGNOR if this Patent Assignment had not been made.

AND ASSIGNOR hereby represents and warrants that it has full right, power and authority to sell, assign, transfer, convey and deliver all of the subject matter set forth herein, and hereby covenants and agrees that upon the written request of ASSIGNEE, ASSIGNOR will communicate promptly to ASSIGNEE, its successors, legal representatives and assigns, all facts known to ASSIGNOR respecting the Patent Items, and will testify in any legal proceeding, sign all lawful papers, transfer all file histories, make diligent effort to find or reach every inventor of the Patent Items necessary or appropriate in connection with preparation of any lawful document or proceeding relating to the Patent Items, make reasonable efforts to obtain all necessary or appropriate signed and executed documents relating to the Patent Items from every inventor named in the Patent Items, make all rightful declarations and/or oaths and generally do everything possible to aid ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce patent protection for the Patent Items on a worldwide basis in all countries. ASSIGNEE further covenants and agrees that it will wholly refrain from challenging the validity, enforceability or scope of the Patent Items, whether through opposition, re-examination and/or court proceedings.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, I hereunto set my hand this 26th day of November 2018.

Qualcomm Technologies, Inc.

3у: ___

Printed Name: Akash Palkhiwala

Title: Director, Chief Financial Officer

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

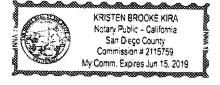
County of San Diego)

On November 26, 2018 before me, Kristen Brooke Kira, Notary Public, personally appeared Akash Palkhiwala, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

ignature <u>Plantonoplas</u> (



IN WITNESS WHEREOF, acknowledged and accepted on this 2010 day of November 2018.

On Behalf of QUALCOMM Incorporated

Printed Name: Raymond B. Hom

Title: V.P., Patent Counsel

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EXHIBIT 1

Patent Schedule

| Docket/Reference Number | Country | Title | Application Number | National Filing / Disclosure Date | Patent <u>Number</u> | Patent Status |
|----------------------------|---------|---|-----------------------|--------------------------------------|-------------------------|---------------|
| 174218IDF | N/A | LEARNING DISENTANGLED INVARIANT REPRESENTATIONS FOR ONE-SHOT INSTANCE RECOGNITION Inventors: Berkay KICANAOGLU, Ran TAO, Arnold SMEULDERS | N/A. | 5/1/2017 | N/A | N/A |
| 174218PI | US | LEARNING DISENTANGLED INVARIANT REPRESENTATIONS FOR ONE-SHOT INSTANCE RECOGNITION | 62/508,277 | 5/18/2017 | | Inactive |
| 174218 | US | LEARNING DISENTANGLED INVARIANT REPRESENTATIONS FOR ONE-SHOT INSTANCE RECOGNITION | 15/706,541 | 9/15/2017 | | Filed |

END of EXHIBIT 1

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PATENT REEL: 049893 FRAME: 0660