PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ELIZA YINGZI DU	09/04/2014
MING YU CHEN	09/04/2014
ESRA VURAL	09/04/2014
KWOKLEUNG CHAN	09/04/2014
SURYAPRAKASH GANTI	09/05/2014
JOHN KEITH SCHNEIDER	09/08/2014
DAVID WILLIAM BURNS	09/04/2014

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:	14474164

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: 5106631100

Email: jmorrison@wavsip.com

Correspondent Name: WEAVER AUSTIN VILLENEUVE & SAMPSON, LLP

Address Line 1: P.O. BOX 70250

Address Line 4: OAKLAND, CALIFORNIA 94612-0250

ATTORNEY DOCKET NUMBER:	QUALP242C
NAME OF SUBMITTER:	CHRISTIAN D. SCHOLZ
SIGNATURE:	/Christian D. Scholz/
DATE SIGNED:	09/12/2014

Total Attachments: 3

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ASSIGNMENT

WHEREAS, WE,

- 1. **Eliza Yingzi Du,** a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of Cupertino, CA,
- 2. **Ming Yu Chen,** a citizen of Taiwan, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of Santa Clara, CA,
- 3. **Esra Vural**, a citizen of Turkey, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of Santa Clara, CA,
- 4. **Kwokleung Chan**, a citizen of Hong Kong, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of San Jose, CA,
- 5. **Suryaprakash Ganti,** a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of Los Altos, CA,
- 6. **John Keith Schneider**, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of Williamsville, NY,
- 7. **David William Burns**, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of San Jose, CA,

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 FINGER/NON-FINGER DETERMINATION FOR BIOMETRIC SENSORS (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). 14/474,164 filed August 31, 2014,

Qualcomm Reference No. 141655U3, 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;

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.

PATENT QUALCOMM Ref. No. 141655U3 Page 3 of 3

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

Done at S	unta Clara (A_ LOCATION	Sept. 4, 2019	Eliza Yingzi Du
Done at Sen	<u>ta Clara A</u> , on _ LOCATION	09. 04. 1014 DATE	Ming Yu Chen
Done atS	anta Clare, CA LOCATION	09 14.2014 DATE	Esra Vural
Done at $\frac{S_{\hat{a}}}{I}$	<u>ta Clarg</u> on_ LOCATION	9/4/2*14 DATE	Kwokleung Chan
	In Clay, A, on	9/1/2014 DATE	Suryaprakash Ganti
Done at <u>L</u>	Let M OCATION	9/8/2014 DATE	John Keith Schneider
	<u>k Close, CÁ</u> , on <u>k</u> OCATION	<u>3/4/2014</u> DATE	David William Burns

PATENT REEL: 033733 FRAME: 0790

RECORDED: 09/12/2014