504626056 11/03/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SANTOSH PAUL ABRAHAM	10/06/2016
ALIREZA RAISSINIA	10/07/2016
ABHISHEK PRAMOD PATIL	10/07/2016
GEORGE CHERIAN	10/07/2016
SHIVRAJ SINGH SANDHU	02/28/2017

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:	15802647		

CORRESPONDENCE DATA

Fax Number: (713)623-4846

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: sdominguez@pattersonsheridan.com,psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON & SHERIDAN, L.L.P.
Address Line 1: 24 GREENWAY PLAZA, SUITE 1600

Address Line 4: HOUSTON, TEXAS 77046

ATTORNEY DOCKET NUMBER:	DOCKET NUMBER: 157242USD01	
NAME OF SUBMITTER:	MARCUS W. HAMMACK	
SIGNATURE:	/Marcus W. HAMMACK/	
DATE SIGNED:	11/03/2017	

Total Attachments: 5

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ASSIGNMENT

WHEREAS, WE,

- 1. Santosh Paul ABRAHAM, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714 and a resident of San Diego, California,
- 2. Alireza RAISSINIA, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714 and a resident of Monte Sereno, California,
- 3. Abhishek Pramod PATIL, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714 and a resident of San Diego, California,
- 4. George CHERIAN, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714 and a resident of San Diego, California, and
- 5. Shivraj Singh SANDHU, a citizen of India, having a mailing address located at 5775 Morehouse Drive; San Diego, California 92121-1714 and a resident of Milpitas, California,

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 NEIGHBOR AWARE NETWORK CLUSTER CHANGE FOR NEIGHBOR AWARE NETWORK DATA LINK (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, or under International Conventions, Treaties, or Agreements, U.S. Application No. 15/266,768, filed September 15, 2016, Qualcomm Reference No. 157242, and all provisional applications relating thereto, together with U.S. Provisional Application No. 62/221,597, filed September 21, 2015, Qualcomm Reference No. 157242P1, and 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, on 10/6/2016 James Paul ABRAHAM

DATE

Santosh Paul ABRAHAM

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.	57C ·	, on	27-7-2216 DATE	
	LOCATION		DATE	Alireza RAISSINIA
Done at	LOCATION	, on	DATE	Abhishek Pramod PATIL
Done at	LOCATION	, on	DATE	George CHERIAN
Done at	LOCATION	, on	DATE	Shivraj Singh SANDHU

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		
	LOCATION		DATE	Alireza RAISSINIA
Done at	Som On Caro LOCATION	, on	10/7/2016	<u>A</u> X
	LOCATION		DATE	Abhishek Pramod PATIL
Done at	San Diga LOCATION	_ , on	10/7/16	
	LOCATION		DATE	George CHERIAN
Done at		, on		
	LOCATION		DATE	Shivrai Singh SANDHII

QUALCOMM Ref. No. 157242

Page 3 of 3

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		
	LOCATION	ikor ". wima	DATE	Alireza RAISSINIA
Done at		on		
	LOCATION		DATE	Abbishek Pramod PATIL
Done at	· Was and a state of the state	_ , on _	***************************************	
	LOCATION		DATE	George CHERIAN
			,	
Done at	SAN JOSE LOCATION	, on	02/28/17	57/W X-1 1
	LOCATION		DATE	Shivraj Singh SANDHU

PATENT REEL: 044027 FRAME: 0066

RECORDED: 11/03/2017