10/21/2015 503532759

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KENCHIEH BRIAN YANG	10/01/2015
JUN WANG	10/08/2015
XIAOXIA ZHANG	10/09/2015
RALPH AKRAM GHOLMIEH	10/01/2015
NAGARAJU NAIK	10/19/2015

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:	14846335
Application Number:	62048191

CORRESPONDENCE DATA

Fax Number: (202)857-6395

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: 202-857-6000

Email: patentdocket@arentfox.com

Correspondent Name: ARENT FOX, LLP Address Line 1: 1717 K STREET, NW

Address Line 4: WASHINGTON, D.C. 20006-5344

ATTORNEY DOCKET NUMBER:	030284.10408/ 144420
NAME OF SUBMITTER:	REBECCA GOLDEN
SIGNATURE:	/REBECCA GOLDEN/
DATE SIGNED:	10/21/2015

Total Attachments: 7

PATENT REEL: 036844 FRAME: 0568

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ASSIGNMENT

WHEREAS, WE,

- 1. **Kenchieh Brian YANG**, a citizen of United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of San Diego, California;
- 2. **Jun WANG,** a citizen of United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of Poway, California;
- 3. **Xiaoxia ZHANG,** a citizen of China, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of San Diego, California;
- 4. Ralph Akram GHOLMIEH, a citizen of United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of San Diego, California; and
- 5. **Nagaraju NAIK**, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714, and a resident of San Diego, 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 **DERIVATION OF EMBMS NEIGHBOR SAI INFORMATION WITH CORRELATION BIT-MAP** (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). 14/846,335 filed September 4, 2015, Qualcomm Reference No. 144420, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/048,191, filed September 9, 2014, Qualcomm Reference No. 144420P1, (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 _	Sin Diego	on /0/1/25	
	LOCÁTION	DATE	Kenchieh Brian YANG
Done at _	LOCATION	onDATE	Jun WANG
Done at _	LOCATION	, on	Xiaoxia ZHANG
Done at _	LOCATION	, on	Ralph Akram GHOLMIEH
Done at _	LOCATION	on	Nagaraju NAIK

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	Kenchieh Brian YANG
Done at	San Digg 0 LOCATION	, on	10/8/2015 DATE	Jun WANG
Done at	LOCATION	_, on _	DATE	Xiaoxia ZHANG
Done at	LOCATION	, on _	DATE	Ralph Akram GHOLMIEH
Done at	LOCATION	, on _	DATE.	Nagaraju NAIK

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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	Kenchieh Brian YANG
Done at	, on	DATE.	Jun WANG
Done at	Says Dregg, on LOCATION	DATE	Xiaoxia ZHANG
Done at	, on LOCATION	DATE	Ralph Akram GHOLMIEH
Done at	, on	DATE	Nagaraju NAIK

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	Kenchieh Brian YANG
Done at	on		Jun WANG
_	LOCATION	DATE	Jun WANG
Done at	LOCATION on _		
	LOCATION LOCATION LOCATION		
Done at	, on _		
•	LOCATION	DATE	Nagaraju NAIK

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ODALCOMM Ref. No. 144420
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AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		on	
	LOCATION	ON	Kenchich Brian YANG
Done at		on	
	LOCATION	ONDATE	Jun WANG
Done at		on	
	LOCATION	DATÊ	Xiaoxia ZHANG
Done at		DAJE DAJE	
	LOCATION	DATE	Ralph Akram GHOLMIEH
Done at	in Dieger	on_10/19/15	N.A.
	LOCATION	DATE	Nagaraju NAIK

PATENT REEL: 036844 FRAME: 0576

RECORDED: 10/21/2015