PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

Version v1.1 EPAS ID: PAT2868760

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CARLOS MARCELO DIAS PAZOS	04/05/2014
NERMEEN AHMED BASSIOUNY	04/09/2014
THADI MANJUNATH NAGARAJ	04/09/2014
JOSEPH PETER BARONE	04/09/2014
JUN WANG	04/09/2014

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:	14022085	

CORRESPONDENCE DATA

Fax Number: (214)855-8200

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: 214.855.8000

Email: lisa.decordova@nortonrosefulbright.com

Correspondent Name: THOMAS MEANEY/FULBRIGHT & JAWORSKI LLP

Address Line 1: 2200 ROSS AVENUE

Address Line 2: SUITE 2800

Address Line 4: DALLAS, TEXAS 75201

ATTORNEY DOCKET NUMBER:	OOCKET NUMBER: QLXX.P0132US/11304597		
NAME OF SUBMITTER:	THOMAS J. MEANEY		
SIGNATURE:	/Thomas J. Meaney/		
DATE SIGNED:	05/23/2014		

Total Attachments: 4

source=QLXXP0132US#page1.tif

source=QLXXP0132US#page2.tif source=QLXXP0132US#page3.tif source=QLXXP0132US#page4.tif

ASSIGNMENT

WHEREAS, WE.

- 1. Carlos Marcelo Dias Pazos, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of Carlsbad CA.
- 2. Nermeen Ahmed Bassiouny, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, CA,
- 3. Thadi Manjunath Nagaraj, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, CA,
- 4. **Joseph Peter Barone**, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, CA,
- 5. Jun Wang, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of Poway, 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 SIGNALING OF REFRESH RATE FOR EFFICIENT DATA UPDATE IN DISTRIBUTED COMPUTING ENVIRONMENTS (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). 14/022,085 filed September 9, 2013. Qualcomm Reference No. 124422, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/703,188, filed September 19, 2012, Qualcomm Reference No. 124422P1. (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

NRF No.: QLXX.P0132US

PATENT QUALCOMM Ref. No. 124422 Page 2 of 3

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 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;

NRF No.: QLXX.P0132US

PATENT QUALCOMM Ref. No. 124422 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 SAN DIEGO, on O4/09/2014

Done at SAN DIEGO, on O4/09/2014

LOCATION

DATE

Carlos Marcelo Dias Pazos

Nermeen Ahmed Bassiouny

Done at SAN DIEGO, on O4/09/2014

LOCATION

DATE

Thadi Manjunath Nagaraj

Done at SAN DIEGO O4/09/2014

LOCATION

DATE

Jun Wang

NRF No.: QLXX.P0132US

PATENT QUALCOMM Ref. No. 124422 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	LOCATION , on		
	LOCATION	DATE	Carlos Marcelo Dias Pazos
Done at _	LOCATION , on		
_	LOCATION	DATE	Nermeen Ahmed Bassiouny
Done at _	LOCATION , on		
	LOCATION	DATE	Thadi Manjunath Nagaraj
Done at _	LOCATION , on	DA'EL	Leave I. Data a D.
	LOCATION	DATE	Joseph Peter Barone
Done at \s	San Digge, on	4/9/2014	
	LOCATION	DATE	Jun Wang

NRF No.: QLXX.P0132US

PATENT REEL: 032954 FRAME: 0812

RECORDED: 05/23/2014