PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3485708

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YAN ZHOU	07/20/2015
SIMONE MERLIN	07/17/2015
GWENDOLYN DENISE BARRIAC	08/11/2015
BIN TIAN	07/21/2015

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:	14719000
Application Number:	62002456

CORRESPONDENCE DATA

Fax Number: (303)473-2720

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: 303-473-2700

Email: sesoares@hollandhart.com

Correspondent Name: J. SCOTT KARREN
Address Line 1: HOLLAND & HART LLP

Address Line 2: P.O. BOX 11583

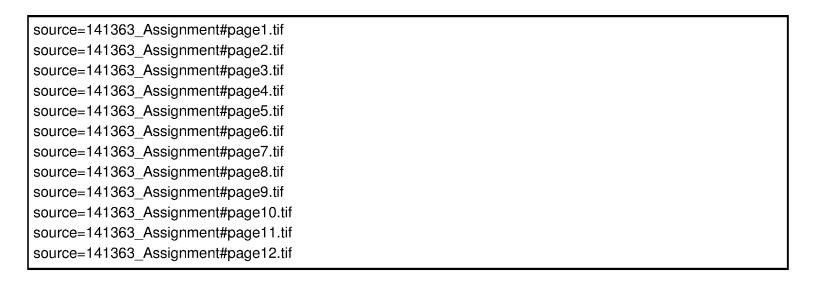
Address Line 4: SALT LAKE CITY, UTAH 84147

ATTORNEY DOCKET NUMBER:	PW148.01 (83043.0616)	
NAME OF SUBMITTER:	J. SCOTT KARREN	
SIGNATURE:	/J. Scott Karren/	
DATE SIGNED:	08/17/2015	

Total Attachments: 12

PATENT REEL: 036339 FRAME: 0520

503439084



WHEREAS, WE,

- 1. Yan Zhou, a citizen of the People's Republic of China, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, and a resident of San Diego, California.
- 2. Simone Merlin, a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, and a resident of San Diego, California,
- 3. Gwendolyn Denise Barriac, 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 Encinitas, California,
- 4. Bin Tian, 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.

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 SOFT TIME DIVISION MULTIPLEXING IN ENHANCED DISTRIBUTED CHANNEL ACCESS (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). 14/719,000 filed May 21, 2015, Qualcomm Reference No. 141363, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/002,456, filed May 23, 2014, Qualcomm Reference No. 141363P1, (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 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	07/20/2015	
	LOCATION		DATE	Yan Zhou
Done at	LOCATION	, on	DATE	Simone Merlin
	LOCATION		DATE	CHARACTER 17.4 VA 14.24
Done at		, on		
	LOCATION		DATE	Gwendolyn Denise Barriac
Done at		, on		NN CD
	LOCATION		DATE	Bin Tian

WHEREAS, WE,

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- 2. Simone Merlin, a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, and a resident of San Diego, California,
- 3. Gwendolyn Denise Barriac, 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 Encinitas, California,
- 4. **Bin Tian**, 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.

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 SOFT TIME DIVISION MULTIPLEXING IN ENHANCED DISTRIBUTED CHANNEL ACCESS (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.

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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;

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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	Yan Zhou
Done at	SAN SIEGO, on	2/17/15	Snew Wal
	LOCATION	DATE	Simone Merlin
Done at _	, on	DATE	Gwendolyn Denise Barriac
	LOCATION	DATE	Concintorian remarkan
Done at	, on		
, .	LOCATION	DATE	Bin Tian

WHEREAS, WE,

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Done at		, on		
	LOCATION		DATE	Yan Zhou
Done at _		, on		Cio N. S. R. S.
	LOCATION		DATE	Simone Merlin
Done at	SANDE	, on	8/11/205	
	LOCATION		DATE	Gwendolyn Denise Barriac
Done at _		_, on		
	LOCATION		DATE	Bin Tian

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PATENT QUALCOMM Ref. No. 141363 Page 3 of 3

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> PATENT REEL: 036339 FRAME: 0533

RECORDED: 08/17/2015