PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT			
CONVEYING PART	Ύ DATA					
		Name	Execution Date			
Wanshi Chen			08/02/2013			
Hao Xu		08/01/2013				
Peter Gaal		08/02/2013				
Tao Luo		08/01/2013				
Stefan Geirhofer			08/01/2013			
Aleksandar Damnja	anovic		08/01/2013			
RECEIVING PARTY	(DATA					
Name:	QUALCOMM	QUALCOMM Incorporated				
Street Address:		5775 Morehouse Drive				
City:	San Diego					
State/Country:	CALIFORNIA					
Postal Code:	92121-1714					
PROPERTY NUMB	ERS Total: 1					
Property Type		Nu	Number			
		13951250				
CORRESPONDEN	CE DATA					
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		Mail when the fax attempt is unsucce	essful.			
Phone:						
Email:	mmiles@pattersonsheridan.com,					
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Address Line 1: Address Line 2:	Suite 150					
Address Line 2: Suite 1500 Address Line 4: Houston, TEXAS 77056						
ATTORNEY DOCK	ET NUMBER:	123711US				
			PATENT			
502464654			REEL: 031045 FRAME: 0348			

NAME OF SUBMITTER:	Randol W. Read	
Signature:	/Randol W. READ/	
Date:	08/20/2013	
Total Attachments: 4 source=123711_Assignment#page1.tif source=123711_Assignment#page2.tif source=123711_Assignment#page3.tif source=123711_Assignment#page4.tif		

PATENT QUALCOMM Ref. No. 123711 Page 1 of 3

ASSIGNMENT

WHEREAS, WE,

1. Wanshi Chen, a citizen of China, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, and a resident of San Diego, CA;

2. Hao Xu, 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, CA;

3. Peter Gaal, 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, CA;

4. **Tao Luo**, 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**, CA;

5. Stefan Geirhofer, a citizen of Austria, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, and a resident of San Diego, CA; and

6. Aleksandar Damnjanovic, 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 Del Mar, 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 **METHODS AND APPARATUS FOR COORDINATED MULTIPOINT (CoMP) COMMUNICATIONS** (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. **13/951,250**, filed **July 25, 2013**, Qualcomm Reference No. **123711** and all provisional applications relating thereto, together with U.S.

Provisional Application No. 61/678,561, filed August 1, 2012, Qualcomm Reference No. 123711P1; U.S. Provisional Application No. 61/707,196, filed September 28, 2012, Qualcomm Reference No. 123711P2; U.S. Provisional Application No. 61/721,935, filed November 2, 2012, Qualcomm Reference No. 123711P3; and U.S. Provisional Application No. 61/754,389, filed January 18, 2013, Qualcomm Reference No. 123711P4, (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, 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;

PATENT QUALCOMM Ref. No. 123711 Page 3 of 3

18

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 Diago, on	8/472013	
	LOCATION	DATE	Wanshi Chen
Done at	<u>SAX Diejo</u> , on LOCATION	<i>≫/1/2013</i> date	Hao Xu
Done at	Sail Dieby, on LOCATION	08/02/2013 DATE	Peter Gaal
Done at	San Dieg, on . LOCATION	08/01/2013 (DATE	Tao Luo
Done at	LOCATION	DATE	Stefan Geirhofer
Done at	Carb Breze on LOCATION	<u>X ></u> DATE	Aleksandar Damnjanovje

PATENT REEL: 031045 FRAME: 0352 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	Wanshi Chen
Done at	LOCATION	, on DATE	Hao Xu
Done at	LOCATION	, on DATE	Peter Gaal
Done at	LOCATION	, on DATE	Tao Luo
Done at	LOCATION	, on <u>8/1/2013</u> DATE	
Done at	LOCATION	, on DATE	Aleksandar Damnjanovic

RECORDED: 08/20/2013