# 502411261 07/08/2013

### PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
Jack Shyh-Hurng SHAUH	06/28/2013
Srinivasan BALASUBRAMANIAN	06/28/2013
Kuo-Chun LEE	06/21/2013
Sivaramakrishna VEEREPALLI	06/24/2013
Jun WANG	06/24/2013

#### **RECEIVING PARTY DATA**

Name:	QUALCOMM Incorporated	
Street Address:	5775 Morehouse Drive	
City:	San Diego	
State/Country:	CALIFORNIA	
Postal Code:	92121-1714	

# PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	13937126
Application Number:	61719318
Application Number:	61719300

## CORRESPONDENCE DATA

**Fax Number**: 2028576395

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 202.857.6000

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Address Line 4: Washington, DISTRICT OF COLUMBIA 20036-5342

ATTORNEY DOCKET NUMBER: 030284.06488/124436

PATENT

REEL: 030753 FRAME: 0995

P \$120.00 1393/126

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NAME OF SUBMITTER:	Rachele Wittwer
Signature:	/Rachele Wittwer/
Date:	07/08/2013
Total Attachments: 3 source=124436 Signed Assignment#page1.tif source=124436 Signed Assignment#page2.tif source=124436 Signed Assignment#page3.tif	

PATENT REEL: 030753 FRAME: 0996

### ASSIGNMENT

# WHEREAS, WE,

- 1. Jack Shyh-Hurng SHAUH, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
- 2. Srinivasan BALASUBRAMANIAN, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
- 3. Kuo-Chun LEE, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
- 4. Sivaramakrishna VEEREPALLI, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
- 5. Jun WANG, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, 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 MULTIBAND EMBMS ENHANCEMENT USING CARRIER AGGREGATION (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). 13/937,126 filed July 8, 2013. Qualcomm Reference No. 124436, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/719,318, filed October 26, 2012, Qualcomm Reference No. 124436P1, together with U.S. Provisional Application No(s). 61/719,300, filed

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PATENT REEL: 030753 FRAME: 0997 October 26, 2012, Qualcomm Reference No. 124435P1, (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;

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AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, on E/28/2013
LOCATION DATE

Jack Shy-Huring SHAOH

Done at San Viego, on Ob 28 13

Srinivasan BALASUBRAMANIAN

Kuo-Chun LEE

Done at Diego, on 6/24/2015

LOCATION DATE

Sivaramakrishna VEEREPALLI

Done at  $\frac{S_{QA}D_{QQQ}}{LOCATION}$  on  $\frac{6/24/26/3}{DATE}$ 

Jun WANG

LA/1440200.1

PATENT REEL: 030753 FRAME: 0999

**RECORDED: 07/08/2013**