PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: **ASSIGNMENT**

CONVEYING PARTY DATA

Na	nme	Execution Date
Xiaoxia Zhang		08/31/2009

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12542509

CORRESPONDENCE DATA

Fax Number: (858)658-2502

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

Email: us-docketing@qualcomm.com Correspondent Name: QUALCOMM Incorporated Address Line 1: 5775 Morehouse Drive

Address Line 4: San Diego, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER: 082443

NAME OF SUBMITTER: Gayle Gestick

Total Attachments: 2

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> **PATENT** REEL: 023483 FRAME: 0316

ASSIGNMENT

TO WHOM IT MAY CONCERN:

For the sum of One Dollar and other valuable consideration to us in hand paid, receipt of which is hereby acknowledged, be it known that I.

 Xiaoxia Zhang, a citizen of China, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, United States of America; and a resident of San Diego, California, United States of America.

have sold, assigned and transferred and by these presents do sell, assign, transfer and set over unto QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, its successors, legal representatives, or assigns, the entire right, title and interest in and to a certain invention relating to A-PERIODIC PUCCH TRANSMISSION ON PUSCH by me devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on August 17, 2009, and assigned Serial No. 12/542,509, including Provisional Application Number 61/089,849, filed on August 18, 2008, and Provisional Application Number 61/090,718, filed on August 21, 2008, and all original and reissue patents granted thereof (in the United States and any foreign country), and all divisionals, continuations and continuations-in-part thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that I have full right to do so, and agree that I will communicate to said corporation or its representatives all facts known to us respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

> PATENT REEL: 023483 FRAME: 0317

ASSIGNMENT

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at San Diego, California this day of ______, 2009.

Xiaoxia Zhang

REEL: 023483 FRAME: 0318

RECORDED: 11/06/2009