PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mingguang Xu	03/02/2009
Miguel Griot	03/17/2009
Pranav Dayal	02/02/2009
Ayman Fawzy Naguib	03/17/2009

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:	12363727

CORRESPONDENCE DATA

Fax Number: (858)658-2502

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

Phone: 858-845-4265

Email: llawlor@qualcomm.com

Correspondent Name: QUALCOMM INCORPORATED

Address Line 1: 5775 MOREHOUSE DR.

Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER: 082546

NAME OF SUBMITTER: Leeanne Lawlor

Total Attachments: 5

source=082546_Assignment#page1.tif

PATENT REEL: 022518 FRAME: 0172 540.00 12363/2

DATENT

source=082546_Assignment#page2.tif source=082546_Assignment#page3.tif source=082546_Assignment#page4.tif source=082546_Assignment#page5.tif

> PATENT REEL: 022518 FRAME: 0173

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 We,

- 1. Mingguang Xu, a citizen of China, having a place of residence at 2145 Sheridan Road,

 Example 11, 60208, US; and 1512 Central Street, Apt. 883, Example 11, 60201, US

 M.X.
- 2. Miguel Griot, a citizen of Italy, having a place of residence at 313 16th Street, Apartment #6, Huntington, CA, 92648, US; and
- 3. Pranav Dayal, a citizen of India, having a place of residence at 8520 Costa Verde Boulevard, #3407, San Diego, CA, 92122, US; and
- 4. Ayman Fawzy Naguib, a citizen of the United States, having a place of residence at 991 Cranberry Drive, Cupertino, CA, 95014, US,

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 METHODS AND SYSTEMS FOR MIMO PREAMBLE DETECTION by us devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on January 31, 2009, and assigned Application Number 12/363,727, including, without limitation, all provisional patent applications, including Provisional Application Number 61/105,000, filed on October 13, 2008, and all original and reissue patents granted thereof (in the United States and any foreign county), and all divisions, and continuations 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 we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to me 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 Attorney Docket No.: 082546

Done at <u>Evanston</u> , <u>Illino</u>	is this 2nd day of March, 2009,
	Mingguarg Xu
	MINGGUANG XU
Done at, Californ	tia this day of, 2009.
	MIGUEL GRIOT
Done at San Diego, California this _	day of, 2009.
-	PRANAV DAYAL
Done at, Californi	ia this day of, 2009.
-	AYMAN FAWZV NACHIR

PATENT

Attorney Docket No.: 082546

Done at		thisda	y of, 200
		MINGGUANG	XU
Done at SAN DE	<u>್ , California</u> this	<u>_{</u> } 	<u> </u>
,	_U	40185=	
	(MIGUEL GRI	
Done at San Diego, (C alifornia this6	lay of	, 2009.
		PRANAV DAY	
Done at	, California this	day of	, 2009.
		AYMAN FAW	ZY NAGUIB

PATENT

Attorney Docket No.: 082546

Done at		this	day of	, 2009.
		MINGGU	ANG XU	
Done at	, California this	day	of,	2009.
Done at San Diego, C	California this 2 da	MIGUEL iy of		
			DAYAL	
Done at	, California this _	day:	of,;	2009.
		AVMAN	FAWZV NAC	E1885

PATENT

Attorney Docket No.: 082546

Done at	this	day of	, 2009.
		JANG XU	
Done at, Californ	ia this day	of,2	2009.
	MIGUEL	GRIOT	
Done at San Diego, California this _	day of	, 2009.	
	PRANAV	DAYAL	
Done at <u>Scalas Classo</u> , Californ i	la this <u>make</u> day	of <u>March</u> , 21	009.
	AYMAN	FAWZÝ NAGU	IB