503307790 05/14/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3354408

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAMER ADEL KADOUS	05/06/2015
AHMED KAMEL SADEK	03/10/2015
TINGFANG JI	04/03/2015
MINGXI FAN	03/15/2015

RECEIVING PARTY DATA

Name:	QUALCOMM INCORPORATED
Street Address:	5775 MOREHOUSE DRIVE
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121-1714

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14620377

CORRESPONDENCE DATA

Fax Number: (703)621-7155

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: 7036217140

Email: meo.docket@mg-ip.com

Correspondent Name: MUNCY, GEISSLER, OLDS & LOWE, P.C. QUAL

Address Line 1: 4000 LEGATO ROAD, SUITE 310

Address Line 4: FAIRFAX, VIRGINIA 22033

ATTORNEY DOCKET NUMBER:	QC143438
NAME OF SUBMITTER:	MARK E. OLDS
SIGNATURE:	/Mark E. Olds/
DATE SIGNED:	05/14/2015

Total Attachments: 6

source=143438_Assignment_As-Filed_2015-05-14#page1.tif source=143438_Assignment_As-Filed_2015-05-14#page2.tif source=143438_Assignment_As-Filed_2015-05-14#page3.tif

PATENT 503307790 REEL: 035643 FRAME: 0384

source=143438_Assignment_As-Filed_2015-05-14#page4.tif source=143438_Assignment_As-Filed_2015-05-14#page5.tif source=143438_Assignment_As-Filed_2015-05-14#page6.tif

ASSIGNMENT

WHEREAS, WE,

- 1. Tamer Adel KADOUS, 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. Ahmed Kamel SADEK, 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. Tingfang JI, 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. **Mingxi FAN**, 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 CARRIER SENSE ADAPTIVE TRANSMISSION (CSAT) MEASUREMENTS IN SHARED SPECTRUM (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). 14/620,377, filed February 12, 2015, Qualcomm Reference No. 143438, and all provisional applications relating thereto, together with U.S. Provisional Application No. 61/940,595, filed February 17, 2014, Qualcomm Reference No. 143438P1, and U.S. Provisional Application No. 61/978,701, filed April 11, 2014, Qualcomm Reference No. 143562P1 (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;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at 🔇	LOCATION	on <u>as/as/30</u> /5	Tamer Adel KADOUS
Done at _	LOCATION	, on DATE	Ahmed Kamel SADEK
Done at _	LOCATION	, on	Tingfang JI
Done at _	LOCATION	, on	Mingxi FAN

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	Tamer Adel KADOUS
Done at _	San Die 40 LOCATION	_, on <u>03/(0/(5</u> DATE	Ahmed Kamel SADEK
Done at _	LOCATION	_, on	Tingfang JI
Done at _	LOCATION	_, on	Mingxi FAN

AND WE HEREBY coverant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	. 00		
	LOCATION	DATE	Tamer Adel KADOUS
Done at	, on		
	LOCATION	DATE	Ahmed Kamel SADEK
Done at _	C. Vies, on	04/03/15	
	LOCATION §	DATE	Tingfang JI
Done at _	, on		
	LOCATION	DATE	Mingxi FAN

PATENT
QUALCOMM Ref. No. 143438
Page 3 of 3

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	, 01	n	
	LOCATION	DATE	Tamer Adel KADOUS
Done at	, 01	n	
	LOCATION	DATE	Ahmed Kamel SADEK
Done at	, oi)	
	LOCATION	DATE	Tingfang JI
		4 /	
Done at	<u> </u>	1 3/15/2016	
	LOCATION	ĎATE	Minoxi FAN

PATENT REEL: 035643 FRAME: 0391

RECORDED: 05/14/2015