

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5908542

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
AHMED KAMEL SADEK	07/23/2018
YISHENG XUE	07/24/2018
SIDDHARTHA MALLIK	01/20/2018
TAMER KADOUS	07/20/2018
XIAOXIA ZHANG	07/20/2018
TAESANG YOO	07/27/2018
MICHAEL MINGXI FAN	08/08/2018
ALEKSANDAR DAMNJANOVIC	07/23/2018
YONGBIN WEI	07/20/2018
JING SUN	07/26/2018
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:	16584366
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	2148558000
Email:	doipdocket@nortonrosefulbright.com
Correspondent Name:	QUALCOMM/NORTON ROSE FULBRIGHT US LLP
Address Line 1:	2200 ROSS AVE
Address Line 2:	SUITE 3600
Address Line 4:	DALLAS, TEXAS 75201
ATTORNEY DOCKET NUMBER:	QLXX.P1189US.C1

PATENT

NAME OF SUBMITTER:	THOMAS J. MEANEY
SIGNATURE:	/THOMAS J. MEANEY/
DATE SIGNED:	01/13/2020
Total Attachments: 5 source=P1189USASN#page1.tif source=P1189USASN#page2.tif source=P1189USASN#page3.tif source=P1189USASN#page4.tif source=P1189USASN#page5.tif	

ASSIGNMENT

WHEREAS, WE,

1. **Ahmed Kamel SADEK**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **San Diego, California**,
2. **Yisheng XUE**, a citizen of the **People's Republic of China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **San Diego, California**;
3. **Siddhartha MALLIK**, a citizen of **India**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **San Diego, California**;
4. **Tamer 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, California**,
5. **Xiaoxia ZHANG**, a citizen of the **People's Republic of China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **San Diego, California**,
6. **Taesang YOO**, a citizen of the **Republic of Korea**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **San Diego, California**;
7. **Michael Mingxi FAN**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **San Diego, California**;
8. **Aleksandar DAMNJANOVIC**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **Del Mar, California**;
9. **Yongbin WEI**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **La Jolla, California**;
10. **Jing SUN**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121** and a resident of **San Diego, California**;

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 **NR-SS UNIFIED OPERATION MODE IN COORDINATED AND UNCOORDINATED BANDS** (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). **15/985,048** filed **May 21, 2018** Qualcomm Reference No. **174007** and all provisional applications relating thereto, together with U.S. Provisional Application No(s). **62/510,534**, filed **May 24, 2017**, Qualcomm Reference No. **174007P1**, (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;

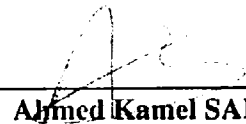
AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said **INVENTIONS** to said **ASSIGNEE**, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

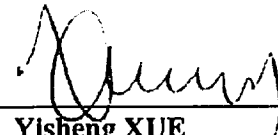
AND WE DO HEREBY sell, assign, transfer, and convey to said **ASSIGNEE**, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have

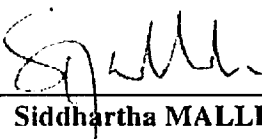
accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

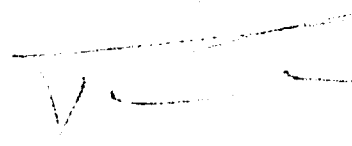
AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, 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;

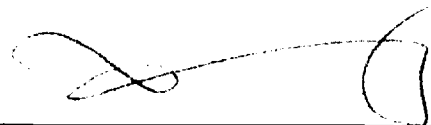
AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, on 7-33-18
LOCATION DATE

Ahmed Kamel SADEK


Done at SAN DIEGO, on 7-24-18
LOCATION DATE

Yisheng XUE

Done at San Diego, on 07/20/2018
LOCATION DATE

Siddhartha MALLIK

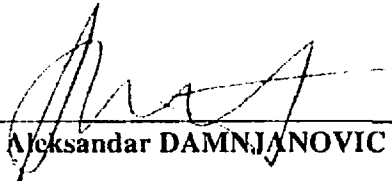
Done at San Diego, on 07/20/18
LOCATION DATE

Tamer KADOUS

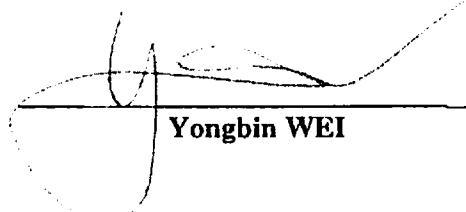
Done at San Diego, on 07/20/18
LOCATION DATE

Xiaoxia ZHANG

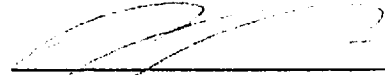
AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, on 7/27/18
LOCATION DATE

Taesang YOO

Done at _____, on _____
LOCATION DATE
Michael Mingxi FAN

Done at San Diego, on 7/23/18
LOCATION DATE

Aleksandar DAMJANOVIC

Done at San Diego, on 7/20/18
LOCATION DATE

Yongbin WEI

Done at San Diego, on 7/20/18
LOCATION DATE

Jing SUN

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

Taesang YOO

Done at San Diego, CA, on 8/8/2018
LOCATION DATE



Michael Mingxi FAN

Done at _____, on _____
LOCATION DATE

Aleksandar DAMNJANOVIC

Done at _____, on _____
LOCATION DATE

Yongbin WEI

Done at _____, on _____
LOCATION DATE

Jing SUN