## 505997120 04/02/2020

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
WOOSEOK NAM	03/03/2020
ZHIFEI FAN	02/12/2020
TAO LUO	02/26/2020
YAN ZHOU	03/03/2020
XIAOXIA ZHANG	02/26/2020
JING SUN	02/26/2020

### **RECEIVING PARTY DATA**

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

#### **PROPERTY NUMBERS Total: 2**

Property Type	Number
Application Number:	16719133
Application Number:	62789878

### **CORRESPONDENCE DATA**

**Fax Number:** (303)473-2720

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:** 303-473-2700

**Email:** bmsoares@hollandhart.com

Correspondent Name: MICHAEL DRAPKIN Address Line 1: P.O. BOX 11583

Address Line 4: SALT LAKE CITY, UTAH 84147

ATTORNEY DOCKET NUMBER:	PR257.01 (103038.1109)
NAME OF SUBMITTER:	MICHAEL L. DRAPKIN
SIGNATURE:	/Michael L. Drapkin/
DATE SIGNED:	04/02/2020

PATENT 505997120 REEL: 052295 FRAME: 0840

## **Total Attachments: 4**

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#### ASSIGNMENT

#### WHEREAS, WE,

- 1. Wooseok NAM, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- Zhifei FAN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714.
- Tao LUO, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- 4. Yan ZHOU, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714.
- 5. Xiaoxia ZHANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- 6. Jing SUN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714.

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 CONFIGURING UPLINK CONTROL CHANNEL RESOURCES FOR COMMUNICATIONS IN A SHARED RADIO FREQUENCY 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. 16/719,133 filed **December 18, 2019**, Qualcomm Reference No. 190908, and all provisional applications relating thereto, together with U.S. Provisional

Application No. 62/789,878 filed January 8, 2019, Qualcomm Reference No. 190908P1, (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	Sac Days, CA, on LOCATION	3/3/2020		
-	LOCATION	DATE	Wooseok NAM	
Done at	, on LOCATION	DATE	Zhifei FAN	
Done a		OT/16/OZE	at the state of th	>>
Done at (	C. V. P. C.A., on LOCATION	3/03/2020 DATE	Yan ZHOU	
Cone at-	LOCATION, on	OYA/2020 DATE	Xiaoxia ZHANG	<u> </u>
Done at _	San Disson. (Aon.)	2/26/222	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 , on	DATE	Wooseok NAM
Done at _	San 1200, CA, on LOCATION	U)/12/2010 DATE	Zhifei FAN
Done at _	, on		
	LOCATION , on _	DATE	Tao LUO
Done at _	, on		
	LOCATION	DATE	Yan ZHOU
Done at _	, on _		
	LOCATION	DATE	Xiaoxia ZHANG
Done at	, on_		
	LOCATION	DATE	Jing SUN

PATENT REEL: 052295 FRAME: 0845

RECORDED: 04/02/2020