PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6188791

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
HAIM MENDEL WEISSMAN	05/04/2016
RAVIV LIOR	05/04/2016
XIAOYIN HE	10/27/2015
VLADIMIR APARIN	03/17/2016

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:	16922811

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: cesimon@hollandhart.com
Correspondent Name: NATHAN J. MUTTER
Address Line 1: P.O. BOX 11583

Address Line 4: SALT LAKE CITY, UTAH 84147

ATTORNEY DOCKET NUMBER:	PQ412.01.01 (81679.4685)	
NAME OF SUBMITTER: NATHAN J. MUTTER		
SIGNATURE:	/Nathan J. Mutter/	
DATE SIGNED:	07/07/2020	

Total Attachments: 9

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PATENT 506142060 REEL: 053142 FRAME: 0555



ASSIGNMENT

WHEREAS, WE,

- 1. **Haim Mendel Weissman,** a citizen of Israel, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, and a resident of Haifa, Israel,
- 2. **Lior Raviv**, a citizen of Israel, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, and a resident of Atlit, Israel,
- 3. **Xiaoyin He**, a citizen of the People's Republic of China, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, and a resident of San Diego, California,
- 4. **Vladimir Aparin**, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, 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 **TRANSCEIVER CONFIGURATION FOR MILLIMETER WAVE WIRELESS COMMUNICATIONS** (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). 14/838,672 filed August 28, 2015, Qualcomm Reference No. 151749, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/119,764, filed February 23, 2015, Qualcomm Reference No. 151749P1, with U.S. Provisional Application No(s). 62/119,766, filed February 23, 2015, Qualcomm Reference No. 151754P1, and with U.S. Provisional Application No(s). 62/120,815, filed February 25, 2015, Qualcomm Reference No. 151751P1, (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	Israel/Heija	Mey 04 2046	and the second s
	LOCATION	DATE	Haim Mendel Weissman
Done at 3	1900 LOCATION	May Oh 2016 WATE	Lior Raviv
Done at _	LOCATION , on	DATE	Xiaoyin He
Done at	LOCATION on		
		DATE	Vladimir Aparin

ASSIGNMENT

WHEREAS, WE,

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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;

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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	٥ ر	en	
	LOCATION	DATE	Haim Mendel Weissman
Done at _		***************************************	
	LOCATION	DATE	Lior Raviv
Done at	En Digo .o	n_ <i>10/27/2015</i>	1, a 1/2
) see distribution	LOCATION	DATE	Xiaoyin He
Done at _	, o	on DATE	Vladimir Aparin

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PATENT

QUALCOMM Ref. No. 151749 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	, on		
	LOCATION	DATE	Haim Mendel Weissman
Done at _	, on	***************************************	
	LOCATION	DATE	Lior Raviv
Done at	, on		
<u> </u>	LOCATION	DATE	Xiaoyin He
Dome at	San Diego, on	3/17/2014	Vladina Aran
~	LOCATION	DATE	Vladimir Aparin

PATENT REEL: 053142 FRAME: 0565

RECORDED: 07/07/2020