505588496 07/24/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5635296

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAMES FRANCIS GEEKIE	06/26/2019
RAGHU NARAYAN CHALLA	07/18/2019
RUHUA HE	07/03/2019
MIHIR VIJAY LAGHATE	06/26/2019

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:	16390913

CORRESPONDENCE DATA

Fax Number:

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: 214-855-8000

Email: tamerie.ballance@nortonrosefulbright.com

Correspondent Name: QUALCOMM/NORTON ROSE FULBRIGHT US LLP

Address Line 1: 2200 ROSS AVE Address Line 2: SUITE 3600

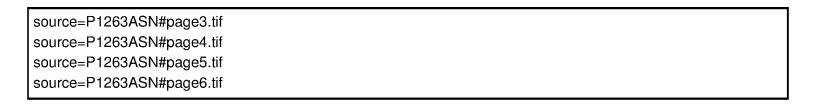
Address Line 4: DALLAS, TEXAS 75201

ATTORNEY DOCKET NUMBER:	QLXX.P1263US
NAME OF SUBMITTER:	R. ROSS VIGUET
SIGNATURE:	/R. ROSS VIGUET/
DATE SIGNED:	07/24/2019

Total Attachments: 6

source=P1263ASN#page1.tif source=P1263ASN#page2.tif

PATENT 505588496 REEL: 049853 FRAME: 0380



ASSIGNMENT

WHEREAS, WE,

- 1. James Francis GEEKIE, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 2. Raghu Narayan CHALLA, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 3. Ruhua HE, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 4. Mihir Vijay LAGHATE, having a mailing address located at 5775 Morehouse Drive, San Diego, California 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 ANTENNA ELEMENT FEED PATH COMPONENT MANAGEMENT FOR 5G-NR MILLIMETER WAVE (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). 16/390,913, filed April 22, 2019, Qualcomm Reference Number 183559, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/684,101, filed June 12, 2018, Qualcomm Reference Number 183559P1, (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 applications, continuation 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;

Done at <u>Sa</u>	n Diego, CA	, on	6/26/19	James Francis GEEKIE
	City, State		Date	// James Francis GEEKIE
Done at		, on		
	City, State		Date	Raghu Narayan CHALLA
Done at		, on		
	City, State		Date	Ruhua HE
Done at		, on		
	City, State		Date	Mihir Vijay LAGHATE

Done at		, on		
	City, State		Date	James Francis GEEKIE
Done at Sc	an Dro , CA	, on	7/18/19	i Nog y Nacy
	City, State	 ·	Date	Raghu Narayan CHALLA
Done at		, on _		
	City, State		Date	Ruhua HE
Done at		, on		
	City, State		Date	Mihir Vijay LAGHATE

Done at		_ , on		
	City, State		Date	James Francis GEEKIE
Done at		_ , on		
	City, State		Date	Raghu Narayan CHALLA
Done at	San Piego	_ , on	7/3/2019	Ruhel
	City, State		Date	Ruhua HE
Done at		_ , on		
	City, State		Date	Mihir Vijay LAGHATE

Done at		on,		
	City, State		Date	James Francis GEEKIE
Done at .	- · · · · · · · · · · · · · · · · · · ·	on_		
	City, State		Date	Raghu Narayan CHALLA
Done at		_, on		
	City, State		Date	Ruhua HE
Done at	San Diego CA City, State	_ , on	6/26/2019	NVLoglate
	City, State		Date	Mihir Vijay LAGHATE

PATENT REEL: 049853 FRAME: 0387

RECORDED: 07/24/2019