505736484 10/23/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5783298

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LALAN JEE MISHRA	07/31/2019
RICHARD DOMINIC WIETFELDT	07/03/2019
HELENA DEIRDRE O'SHEA	09/24/2019

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:	16393081

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.

Email: qualcomm-pto@lozaip.com

Correspondent Name: LOZA & LOZA LLP

Address Line 1: 305 NORTH SECOND AVENUE #127

Address Line 4: UPLAND, CALIFORNIA 91786

ATTORNEY DOCKET NUMBER:	QCOM-3779US (183284)	
NAME OF SUBMITTER:	JULIO LOZA	
SIGNATURE:	/Julio Loza/	
DATE SIGNED:	10/23/2019	

Total Attachments: 9

PATENT 505736484 REEL: 050800 FRAME: 0047

source=183284_ASG_2019_10_21_Signed_As_Filed#page6.tif source=183284_ASG_2019_10_21_Signed_As_Filed#page7.tif source=183284_ASG_2019_10_21_Signed_As_Filed#page8.tif source=183284_ASG_2019_10_21_Signed_As_Filed#page9.tif

ASSIGNMENT

WHEREAS, WE,

- 1. Lalan Jee MISHRA, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121-1714,
- 2. Richard Dominic WIETFELDT, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121-1714.
- 3. Helena Deirdre O'SHEA, 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 VECTOR DECODING IN TIME-CONSTRAINED DOUBLE DATA RATE INTERFACE (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). 16/393,081 filed April 24, 2019, Qualcomm Reference Number 183284, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/682,353, filed June 8, 2018, Qualcomm Reference Number 183289P1, 62/682,361, filed June 8, 2018, Qualcomm Reference Number 183284P1, 62/682,371, filed June 8, 2018, Qualcomm Reference Number 183287P1 (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 natents issuing thereon in the United States;

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 _		_, on	
	City, State	Date	Lalan Jee MISHRA

Qualcomm Reference Number: 183284

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 _______

City, State Date Richard Dominic WIETFELDT

Helena Deirdre O'SHEA

ASSIGNMENT

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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). 16/393,081 filed April 24, 2019, Qualcomm Reference Number 183284, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/682,353, filed June 8, 2018, Qualcomm Reference Number 183289P1, 62/682,361, filed June 8, 2018, Qualcomm Reference Number 183284P1, 62/682,371, filed June 8, 2018, Qualcomm Reference Number 183287P1 (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 natents issuing thereon in the United States;

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;

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	on	
City, State	Date	Lalan Jee MISHRA

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Done at San Diego, on O73 1/19
City, State Date Date Halan Jee MISHRA

ASSIGNMENT

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	on	
City, State	Date	Lalan Jee MISHRA

PATENT

Qualcomm Reference Number: 183284

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 San Diego CA, on 7/3/19 Michael Donna huffells
City, State Date Richard Dominic WIETFELDT

Done at ______, on ______

City, State Date Helena Deirdre O'SHEA

PATENT REEL: 050800 FRAME: 0057

RECORDED: 10/23/2019