PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5949739

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAVI CHOUDHARY	01/27/2020
LAE-HOON KIM	01/15/2020
SUNKUK MOON	01/27/2020
YINYI GUO	01/15/2020
FATEMEH SAKI	01/27/2020
ERIK VISSER	01/15/2020

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16685946	

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: 512-200-9737

Email:npasarya@mooreiplaw.comCorrespondent Name:MOORE IP/QUALCOMMAddress Line 1:13359 N HWY 183, #406-243

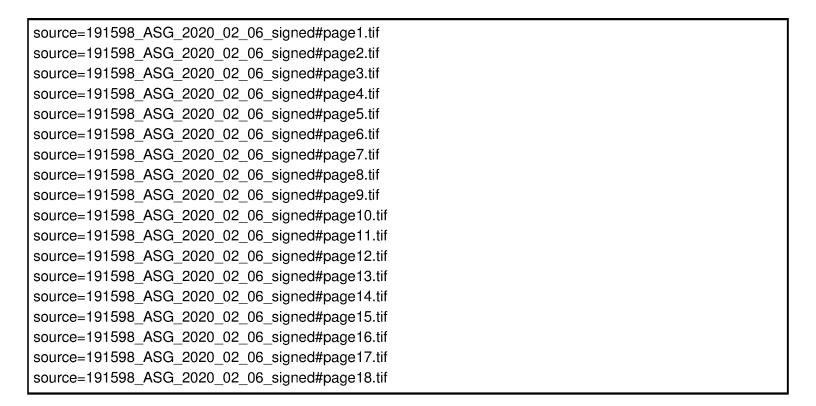
Address Line 4: AUSTIN, TEXAS 78750

ATTORNEY DOCKET NUMBER:	191598
NAME OF SUBMITTER:	NISHI PASARYA
SIGNATURE:	/Nishi Pasarya/
DATE SIGNED:	02/06/2020

Total Attachments: 18

PATENT REEL: 051837 FRAME: 0566

505903022



WHEREAS, WE.

- 1. Ravi CHOUDHARY, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.
- Lae-Hoon KIM, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.
- 3. Sunkuk MOON, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.
- 4. Yinyi GUO, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.
- 5. Fatemeh SAKI, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.
- 6. Erik VISSER, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.

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 MULTI-MODAL USER 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). 16/685,946 filed November 15, 2019. Qualcomm Reference Number 191598, and all provisional applications relating thereto, together with U.S. Provisional Application No. 62/873,775, filed July 12, 2019. Qualcomm Reference Number 1915981P1, (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.

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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 £	San Diega, C	A,on 0	1/27/2020 Date	
	City, Stà f e	iliani, mananini	Date	Ravi Ç HO UDHARY
Done at _	City, State	, on		
	City, State]	Date	Lac-Hoon KIM
Done at		. on		
	City, State		Date	Sunkuk MOON
Done at		an		
	City, State)ate	Yinyi GUO
Noma at		8e		
	City, State		Jete	Fatemeh SAKI
Done at $_$	City, State	, on		Erîk VISSER
	City, State	1)ate	Erik VISSER

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Done at		, on	
	City, State	on Date	Rayi CHOUDHARY
Done at <u>Sa</u>	: Orego: GA City, State	, on <u>1/15/2020</u> Date	Lae-Hoon KIM
Done at	City, State	, on Date	Sunkuk MOON
Done at	City, State	on	Yinyi GUO
Done at	City, State	On Date	Fatemeh SAKI
Done at	Cay Systa	, on	Frik VISSER

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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	9.9	3n	
	City, State	Date	Ravi CHOUDHARY
Done at		On	
	City, State	Date	Lae-Hoon KIM
Done at	Sa Das Q	on <u>//3///3/53/8</u> Date	
	City, State	Date	Sunkuk MOON
Done at		m	
response on the establish	City. State	On Date	Yinyi GUO
Done at	s.i	on .	
	City, State	Date	Fatemeh SAKI
Done at	- di	ñ	
	City, State	Date	Erik VISSER

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Done at		, on	2 2
	City, State	Date	Ravi CHOUDHARY
Done at	City, State	, on	
	City, State	Date	Lae-Hoon KIM
Done at		on	
	City, State	Date	Sunkuk MOON
Done at	S. 7	(1), on (1) (5) 2×26	
	City, State	Date	Yinyi GUO
Done at		, on	
	City, State	Date	Fatemeh SAKI
Done at		, on	
	City, State	Date	Erik VISSER

WHEREAS, WE,

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Done at		, on	
	City, State	Date	Ravi CHOUDHARY
Done at	City, State	, on	
	City, State	Oate	Lac-Hoon KIM
Done at	City, State	, 00	
	City, State	, onDate	Sunkuk MOON
Done at		, on	
	City, State	Date	Yinyi GUO
Done at	Xin Diego, Si	, on <u>63/27/262</u> 0 Date	<u> </u>
	City, State	Date	Fatemeh SAKI
Done at		•on	
50000	City. State	Date	Erik VISSER

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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		, on		
	City. State	Date	Ravi CI	IOUDHARY
Done at	City, State	.00		
	City, State	Date	Lae-Hoo	on KIM
Done at	City, State	, on		
	City, State	Date	Sunkuk	MOON
Done at		, on		
	City, State	Date	Yinyi G	
Done at		, on		
	City, State	Date	Fatemeh	SAKI
Done at	347 DECO	.on US		
	City, State	Date	Erik Yi	SSER

PATENT REEL: 051837 FRAME: 0585

RECORDED: 02/06/2020