505534792 06/20/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5581589

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIPENG ZHU	05/29/2019
LINHAI HE	05/28/2019
MUTAZ ZUHIER AFIF SHUKAIR	05/29/2019
XIAOXIA ZHANG	06/14/2019
GAVIN BERNARD HORN	05/29/2019
MASATO KITAZOE	05/31/2019
XIAO FENG WANG	05/29/2019
TOM CHIN	06/05/2019

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	16374531		

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: 713 623 4844

Email: rross@pattersonsheridan.com, psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON & SHERIDAN, L.L.P. QUALCOMM

Address Line 1: 24 GREENWAY PLAZA, SUITE 1600

Address Line 4: HOUSTON, TEXAS 77046

ATTORNEY DOCKET NUMBER:	182686US
NAME OF SUBMITTER:	PUJA S. DETJEN
SIGNATURE:	/Puja S. Detjen/

PATENT 505534792 REEL: 049532 FRAME: 0583

DATE SIGNED:	06/20/2019			
Total Attachments: 12				
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WHEREAS, WE,

- 1. Xipeng ZHU, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714.
- 2. Linhai HE, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714.
- 3. Mutaz Zuhier Afif SHUKAIR, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714,
- 4. Xiaoxia ZHANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714.
- 5. Gavin Bernard HORN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714,
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- 7. Xiao Feng WANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714.
- 8. Tom CHIN, 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 POWER HEADROOM REPORTING IN COVERAGE EDGE (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, or under International Conventions, Treaties, or Agreements, U.S. Application No. 16/374,531, filed April 3, 2019, Qualcomm Reference No. 182686, and all provisional applications relating thereto,

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		on	
-	LOCATION	DATE	Xipeng ZHU
Done at	LOCATION	_ , on DATE	Linhai HE
Done at	LOCATION	, on	Mutaz Zuhier Afif SHUKAIR
Done at	LOCATION	on DATE	Xiaoxia ZHANG
Done at	LOCATION	on DATE	Gavin Bernard HORN
Done at	Tokyo Location	May 2019 on 31 2019	Masato KITAZOE
Done at	LOCATION	on DATE	Xiao Feng WANG
Done at	LOCATION	_ , on	Tan CHIN

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- 8. Tom CHIN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714,

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AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	San Diego, chor LOCATION	May 29 2019_ DATE	Xipeng ZHU
Done at	San Dieso, CA , or LOCATION	May 28, 2019 _	Linhai HE
Done at	LOCATION , or	DATE	Mutaz Zuhier Afif SHUKAIR
Done at	Som Does; or LOCATION	06/14/2019 _	Xiaoxia ZHANG
Done at	San View , (A), or LOCATION	May 29 2019	Gavin Bernard HORN
Done at	LOCATION , or	DATE	Masato KITAZOE
Done at	SAN DOSTON , or LOCATION	05/29/20/9 _	Xiao Feng WANG
Done at	LOCATION , or	DATE	Tom CHIN

WHEREAS, WE,

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	LOCATION		DATE	Xipeng ZHU
Done at	LOCATION	, on	DATE	Linhai HE
Done at	LOCATION	, on	05/29/2019 DATE	Mutaz Zuhier Afif SHUKAIR
Done at	LOCATION	, on	DATE	Xiaoxia ZHANG
Done at	LOCATION	, on	DATE	Gavin Bernard HORN
Done at	LOCATION	, on	DATE	Masato KITAZOE
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PATENT

QUALCOMM Ref. No. 182686

Page 3 of 3

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		, on		Done at
Xipeng ZHU	DATE		LOCATION	
Linhai HE	DATE	, on	LOCATION	Done at
Mutaz Zuhier Afif SHUKAIR	DATE	_ , on	LOCATION	Done at
Xiaoxia ZHANG	DATE	_ , on .	LOCATION	Done at
Gavin Bernard HORN	DATE	_ , on .	LOCATION	Done at
Masato KITAZOE	DATE	, on	LOCATION	Done at
	DATE	, on _	LOCATION	Done at
Tom CHIN	06/05/2019 DATE	, on	San Digo	Done at

PATENT REEL: 049532 FRAME: 0596

RECORDED: 06/20/2019