### 506647250 05/05/2021

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6694060

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
HUNG DINH LY	04/09/2021
WANSHI CHEN	04/14/2021
PETER PUI LOK ANG	04/09/2021
AAMOD KHANDEKAR	04/30/2021

### **RECEIVING PARTY DATA**

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

### **PROPERTY NUMBERS Total: 3**

Property Type	Number
Application Number:	62914526
Application Number:	62914849
Application Number:	16949033

### **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: 5714320800

Email: nparcell@harrityllp.com HARRITY & HARRITY, LLP **Correspondent Name:** 11350 RANDOM HILLS ROAD Address Line 1:

Address Line 2: SUITE 600

Address Line 4: FAIRFAX, VIRGINIA 22030

ATTORNEY DOCKET NUMBER:	0097-1077/200117
NAME OF SUBMITTER:	KYLIE PAIGE
SIGNATURE:	/KYLIE PAIGE/
DATE SIGNED:	05/05/2021

**PATENT REEL: 056146 FRAME: 0706** 

506647250

# Total Attachments: 12 source=200117 Assignment as Filed 5 May 2021#page1.tif source=200117 Assignment as Filed 5 May 2021#page2.tif source=200117 Assignment as Filed 5 May 2021#page3.tif source=200117 Assignment as Filed 5 May 2021#page4.tif source=200117 Assignment as Filed 5 May 2021#page5.tif source=200117 Assignment as Filed 5 May 2021#page6.tif source=200117 Assignment as Filed 5 May 2021#page7.tif source=200117 Assignment as Filed 5 May 2021#page8.tif source=200117 Assignment as Filed 5 May 2021#page9.tif source=200117 Assignment as Filed 5 May 2021#page10.tif source=200117 Assignment as Filed 5 May 2021#page11.tif source=200117 Assignment as Filed 5 May 2021#page12.tif

### WHEREAS, WE,

- 1. Hung Dinh LY, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 2. Wanshi CHEN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 3. Peter Pui Lok ANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 4. Aamod KHANDEKAR, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,

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 **BANDWIDTH PART SWITCHING FOR DUAL ACTIVE PROTOCOL STACK HANDOVER** (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). 16/949,033 filed October 9, 2020, Qualcomm Reference Number 200117 and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/914,849, filed October 14, 2019, Qualcomm Reference Number 200117P2, and U.S. Provisional Application No(s). 62/914,526, filed October 13, 2019, Qualcomm Reference Number 200117P1, (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;

## PATENT Qualcomm Reference Number 200117 Page J of 3

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

Done at	Sair Nigo, (4). Cay, Sairt	.an <u>04/09/2021</u> Date	Hang Diab t.Y
Done at_	Cuty, State	, on	Wanshi CHEN
Done at _	Cby, State	, on Date	Peter Pui Lak ANG
Done at _	City, State	, on	Azmod KHANDEKAR

### WHEREAS, WE,

- 1. Hung Dinh LY, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 2. Wanshi CHEN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 3. Peter Pui Lok ANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
- 4. Aamod KHANDEKAR, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,

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 **BANDWIDTH PART SWITCHING FOR DUAL ACTIVE PROTOCOL STACK HANDOVER** (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). 16/949,033 filed October 9, 2020, Qualcomm Reference Number 200117 and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/914,849, filed October 14, 2019, Qualcomm Reference Number 200117P2, and U.S. Provisional Application No(s). 62/914,526, filed October 13, 2019, Qualcomm Reference Number 200117P1, (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 ,	y.€	20		
••	City, State	Date	Hung Dinh LY	
v Done ai≪	Surpro-CA	00 4/14/20V		
••	City, State	Date	Wanshi CHEN	*****
Done at	. 6	sn		
como un	City, State	Date	Peter Pui Lok ANG	
Done at _		n <u></u>		
	City, State	Date	Asmod KHANDEKAR	

### WHEREAS, WE,

- 1. Hung Dinh LY, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, US,
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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). 16/949,033 filed October 9, 2020, Qualcomm Reference Number 200117 and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/914,849, filed October 14, 2019, Qualcomm Reference Number 200117P2, and U.S. Provisional Application No(s). 62/914,526, filed October 13, 2019, Qualcomm Reference Number 200117P1, (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:

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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	, on		
***	City, State	Date	Hung Dinh LY
Dana et	on		
Done at _	City, State,	Date	Wanshi CHEN
Done at_	San Degy Gon City, State	4/9/2021 Date	Peter Pui Lok ANG
Done at _	, on _	Date	Aamod KHANDEKAR

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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		, on	
	City, State	Date	Hung Dinh LY
Done at		, on	
_	City, State	Date	Wanshi CHEN
Done at		• on	
Done at _	City, State	Date	Peter Pui Lok ANG
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Done at _	Son () lego CA	on 04/30	/2021 Agmod KHANDEKAR

PATENT REEL: 056146 FRAME: 0719

RECORDED: 05/05/2021