506607753 04/13/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6654558

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
QI XUE	03/11/2021
SRINIVAS KATAR	03/15/2021
CHAO ZOU	03/11/2021
NAVEEN GANGADHARAN	03/11/2021
NEELAKANTAN NURANI KRISHNAN	04/02/2021
SANDIP HOMCHAUDHURI	03/01/2021
XIAOLONG HUANG	03/15/2021
ANISH ASHOK	04/12/2021

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17188275

CORRESPONDENCE DATA

Fax Number: (669)272-0771

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: 669-272-0777

Email: uspto@paradiceli.com

Correspondent Name: PARADICE AND LI LLP/QUALCOMM

Address Line 1: 1999 S. BASCOM AVE.

Address Line 2: SUITE 300

Address Line 4: CAMPBELL, CALIFORNIA 95008

ATTORNEY DOCKET NUMBER:	QCA2100715U2
NAME OF SUBMITTER:	MEG DRURY
SIGNATURE:	/Meg Drury/

DATE SIGNED: 04/13/2021 **Total Attachments: 26** source=2100715U2 Assignment#page1.tif source=2100715U2 Assignment#page2.tif source=2100715U2 Assignment#page3.tif source=2100715U2 Assignment#page4.tif source=2100715U2 Assignment#page5.tif source=2100715U2 Assignment#page6.tif source=2100715U2 Assignment#page7.tif source=2100715U2 Assignment#page8.tif source=2100715U2 Assignment#page9.tif source=2100715U2 Assignment#page10.tif source=2100715U2 Assignment#page11.tif source=2100715U2 Assignment#page12.tif source=2100715U2 Assignment#page13.tif source=2100715U2 Assignment#page14.tif source=2100715U2 Assignment#page15.tif source=2100715U2 Assignment#page16.tif source=2100715U2 Assignment#page17.tif source=2100715U2 Assignment#page18.tif source=2100715U2 Assignment#page19.tif source=2100715U2 Assignment#page20.tif source=2100715U2 Assignment#page21.tif source=2100715U2 Assignment#page22.tif source=2100715U2 Assignment#page23.tif source=2100715U2 Assignment#page24.tif source=2100715U2 Assignment#page25.tif source=2100715U2 Assignment#page26.tif

WHEREAS, WE,

- 1. Qi XUE, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 2. Srinivas KATAR, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 3. Chao ZOU, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714.
- 4. **Naveen GANGADHARAN**, having a mailing address located at **5775 Morehouse Drive**, **San Diego**, California **92121-1714**,
- 5. **Neelakantan NURANI KRISHNAN**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**,
- 6. Sandip HOMCHAUDHURI, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 7. Xiaolong HUANG, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 8. **Anish ASHOK**, 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 **SYNCHRONOUS CHANNEL ACCESS CONTROL OF A WIRELESS SYSTEM** (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). 17/188,275, filed March 1, 2021, Qualcomm Reference Number 2100715U2, and all provisional applications relating thereto, (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: 2100715U2
Page 3 of 4

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

San	Diego, CA, U	SA 3/11/21	62
Done at	City, State, Country	Date	Qi XUE
Done at _	, on City, State, Country	Date	Srinivas KATAR
Done at	, or City, State, Country	1 Date	Chao ZOU
Done at	City, State, Country	1 Date	Naveen GANGADHARAN
Done at	, or City, State, Country	1	Neelakantan NURANI KRISHNAN
)	Sandin HOMCHAUDHURI

PATENT

Qualcomm Reference Number: 2100715U2

Page 4 of 4

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, Country	Date	Xiaolong HUANG	
Done at	?	on	_	
	City, State, Country	Date	Anish ASHOK	

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- 2. Srinivas KATAR, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
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 Morehouse Drive, San Diego, California 92121-1714,
- Sandip HOMCHAUDHURI, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 7. Xiaolong HUANG, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- Anish ASHOK, 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 SYNCHRONOUS CHANNEL ACCESS CONTROL OF A WIRELESS SYSTEM (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). 17/188.275, filed March 1, 2021, Qualcomm Reference Number 2100715U2, and all provisional applications relating thereto, (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 putent protection for said INVENTIONS in all countries;

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Qualcomm Reference Number: 2100715U2
Page 3 of 4

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

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	City, State, Country	,	Date	Qi XUE
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	City, State, Country		Date	Srinivas KATAR
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Done at	City, State, Country	, on	Date	Chao ZOU
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Done at		, on		AY
	City, State, Country		Date	Naveen GANGADHARAN
Done at		, on		
	City, State, Country		Date	Neelakantan NURANI KRISHNAN
Numario		A#6		
Done at	City, State, Country	, un	Date	Sandip HOMCHAUDHURI
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Qualcomm Reference Number: 2100715U2
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AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

	City, State, Country	Date	Xiaolong HUANG	
Done at)		
	City, State, Country	Date	Anish ASHOK	

WHEREAS, WE,

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- 2. Srinivas KATAR, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
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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.

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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). 17/188,275, filed March 1, 2021, Qualcomm Reference Number 2100715U2, and all provisional applications relating thereto, (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;

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Page 3 of 4

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, Country]	Date	Qi XUE
Done at _	City, State, Country		 Date	Srinivas KATAR
Done at	San Jose, CA, US	_{Aon} 03/11	/2021	Chao Zou
	City, State, Country	,	Date	Chao ZOU
Done at		, on		
	City, State, Country		Date	Naveen GANGADHARAN
Done at		, on		
	City, State, Country)	Date	Neelakantan NURANI KRISHNAN
Done at		, on	ANNOGORANA KANGARANAN KANGARANA	
	City, State, Country		Date	Sandip HOMCHAUDHURI

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

Done at			SZS NO LOWER THE LA NIZY	
	City, State, Country	Date	Xiaolong HUANG	
Done at	, on _			
	City, State, Country	Date	Anish ASHOK	

WHEREAS, WE,

- 1. Qi XUE, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 2. Srinivas KATAR, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
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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 SYNCHRONOUS CHANNEL ACCESS CONTROL OF A WIRELESS SYSTEM (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). 17/188,275, filed March 1, 2021, Qualcomm Reference Number 2100715U2, and all provisional applications relating thereto, (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;

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PATENT

Qualcomm Reference Number: 2100715U2

Page 3 of 4

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

Done at			
	City, State, Country	Date	Qi XUE
2.	• • • • • • • • • • • • • • • • • • •		*
Done at .			Srinivas KATAR
	City, State, Country	Date	Srinivas KATAR
Done at			
	City, State, Country	Date	Chao ZOU
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Jone at	City, State, Country	Date	Naveen GANGADHARAN
Done at	City, State, Country	Date	Neelakantan NURANI KRISHNAN
	ent, many country		
Done at		1.4	
	City, State, Country	Date	Sandin HOMCHAUDHURI

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

Done at		72.4.	Windlaws HHILA MIST	
	City, State, Country	Date	Xiaolong HUANG	
Done at	, on			
	City, State, Country	Date	Anish ASHOK	

AND WE HEREBY covenant that WE will not execute any writing or do any act

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State of Congress Country	, ca	Date	Srinivas KATAR
Done u City, State, Country	, an	Date	Chao ZOU
Done at Car, State, Country	.08	Date	Naveen CANGADHARAN
SAN JOSE, CA, VSA Done si City State Country	, on <u>04</u> ,	02 202) Date	Hedelector Nectalemann NURANI KRISHNAN
Done at	on	Due	Sandip HOMCHAUDHURI

WHEREAS, WE,

- 1. Qi XUE, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
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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). 17/188,275, filed March 1, 2021, Qualcomm Reference Number 2100715U2, and all provisional applications relating thereto, (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

 ${\it Qualcomm~Reference~Number:~2100715U2}$

Page 3 of 4

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, Country	Date	Qi XUE
Done at _	, on		Srinivas KATAR
Done at	, on	Date	Chao ZOU
	сну, запе, Сошигу	Date	Chao 2.00
Done at	, on _		
	City, State, Country	Date	Naveen GANGADHARAN
Done at	, on _		
	City, State, Country	Date	Neelakantan NURANI KRISHNAN
Dona at	San Jose, CA, USA _{on}	3/1/2021	Mamba.
Done at	City, State, Country	Date	Sandip HOMCHAUDHURI

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, Country	Date	Xiaolong HUANG	
Done at	, on		***************************************	***************************************
	City, State, Country	Date	Anish ASHOK	

PATENT Qualcomm Reference Number: 2100715U2 Page 4 of 4

AND WE HEREBY covenant that whatsoever conflicting with these presents.	WE will not execute any writing or do an	ıy act
Done at 3(1) 505 Con 3/15/	201) 1/25	
City, State, Country Date	Xiaolong HUANG	
Done at, on		
City, State, Country Date	Anish ASHOK	

WHEREAS, WE,

- 1. Qi XUE, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 2. Srinivas KATAR, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 3. Chao ZOU, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714.
- 4. Naveen GANGADHARAN, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 5. Neelakantan NURANI KRISHNAN, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 6. Sandip HOMCHAUDHURI, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 7. Xiaolong HUANG, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714,
- 8. Anish ASHOK, 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 SYNCHRONOUS CHANNEL ACCESS CONTROL OF A WIRELESS SYSTEM (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). 17/188,275, filed March 1, 2021, Qualcomm Reference Number 2100715U2, and all provisional applications relating thereto, (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: 2100715U2

Page 3 of 4

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	City, State, Country		Qi XUE
Done at _	,0		
	City, State, Country	Date	Srinivas KATAR
Done at		, on	
	City, State, Country	Date	Chao ZOU
Done at		, on Date	Naveen GANGADHARAN
	City, State, Country	Date	Naveen GANGADHARAN
Done at		, on	
	City, State, Country	Date	Neelakantan NURANI KRISHNAN
	City, State, Country	Date	Sandin HOMCHAUDHURI

PATENT
Qualcomm Reference Number: 2100715U2
Page 4 of 4

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

Done at	, 00		D	
City, State	e, Country	Date	Xiaolong HUANG	
Kolhu	CITY,	š ,	1 Selement	

Anish ASHOK

Done at CA, USA, on 04/2/2021

PATENT REEL: 056004 FRAME: 0672

RECORDED: 04/13/2021