

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6137492

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the FIRST NAME OF THE THIRD ASSIGNOR IN THE CONVEYING PARTY DATA previously recorded on Reel 048620 Frame 0129. Assignor(s) hereby confirms the FIRST NAME OF THE THIRD ASSIGNOR SHOULD BE CHUNPING.
CONVEYING PARTY DATA	
Name	Execution Date
HECTOR IVAN OPORTA	02/06/2019
ZHAOHUI ZHU	02/06/2019
CHUNPING SONG	03/08/2019
WILLIAM RADER	02/08/2019
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:	16001073
CORRESPONDENCE DATA	
Fax Number:	(713)623-4846
<i>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.</i>	
Phone:	713-623-4844
Email:	gochoa@pattersonsheridan.com,psdocketing@pattersonsheridan.com
Correspondent Name:	PATTERSON & SHERIDAN, LLP
Address Line 1:	24 GREENWAY PLAZA
Address Line 2:	SUITE 1600
Address Line 4:	HOUSTON, TEXAS 77046
ATTORNEY DOCKET NUMBER:	176468US
NAME OF SUBMITTER:	STEVEN E. ROBERTS
SIGNATURE:	/Steven E. ROBERTS/
DATE SIGNED:	06/04/2020

Total Attachments: 14

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
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<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>HECTOR IVAN OPORTA</td><td>02/06/2019</td></tr><tr><td>ZHAOHUI ZHU</td><td>02/06/2019</td></tr><tr><td>CHUMPING SONG</td><td>03/08/2019</td></tr><tr><td>WILLIAM RADER</td><td>02/08/2019</td></tr></tbody></table>	Name	Execution Date	HECTOR IVAN OPORTA	02/06/2019	ZHAOHUI ZHU	02/06/2019	CHUMPING SONG	03/08/2019	WILLIAM RADER	02/08/2019	
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<p>Fax Number:</p> <p>Phone: 713 623 4844</p> <p>Email: rross@pattersonsheridan.com, psdocketing@pattersonsheridan.com</p> <p><i>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.</i></p> <p>Correspondent Name: PATTERSON & SHERIDAN, L.L.P. QUALCOMM</p> <p>Address Line 1: 24 GREENWAY PLAZA, SUITE 1600</p> <p>Address Line 4: HOUSTON, TEXAS 77046</p>											
ATTORNEY DOCKET NUMBER:	176468US										
NAME OF SUBMITTER:	STEVEN E. ROBERTS										
Signature:	/STEVEN E. ROBERTS/										

PATENT**REEL: 052837 FRAME: 0722**

Date:

03/18/2019

Total Attachments: 12

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RECEIPT INFORMATION**EPAS ID:** PAT5425865**Receipt Date:** 03/18/2019**PATENT**

ASSIGNMENT

WHEREAS, WE,

1. **Hector Ivan OPORTA**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **San Jose, California**,
2. **Zhaohui ZHU**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **San Jose, California**,
3. **Chunping SONG**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **Sunnyvale, California**,
4. **William RADER**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **Carrboro, North Carolina**,

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-UP SEQUENCING AND HIGH VOLTAGE PROTECTION FOR CHARGE PUMP CONVERTERS** (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. **16/001,073**, filed **June 6, 2018**, Qualcomm Reference No. **176468**, and all provisional applications relating thereto, together with U.S. Provisional Application No. **62/572,212**, filed **October 13, 2017**, Qualcomm Reference No. **176468P1**, and 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;

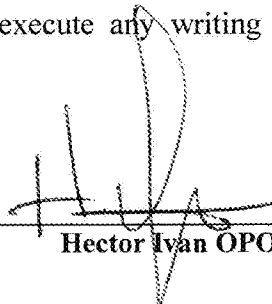
AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, 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 Santa Clara, CA, on 2/6/19
LOCATION DATE


Hector Ivan OPORTA

Done at _____, on _____
LOCATION DATE

Zhaohui ZHU

Done at _____, on _____
LOCATION DATE

Chunping SONG

Done at _____, on _____
LOCATION DATE

William RADER

ASSIGNMENT

WHEREAS, WE,

1. **Hector Ivan OPORTA**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **San Jose, California**,
2. **Zhaohui ZHU**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **San Jose, California**,
3. **Chunping SONG**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **Sunnyvale, California**,
4. **William RADER**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, California 92121-1714**, and a resident of **Carrboro, North Carolina**,

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-UP SEQUENCING AND HIGH VOLTAGE PROTECTION FOR CHARGE PUMP CONVERTERS** (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. **16/001,073**, filed **June 6, 2018**, Qualcomm Reference No. **176468**, and all provisional applications relating thereto, together with U.S. Provisional Application No. **62/572,212**, filed **October 13, 2017**, Qualcomm Reference No. **176468P1**, and 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;

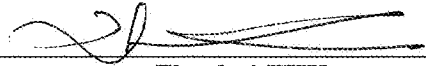
AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, 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 _____, on _____
LOCATION DATE **Hector Ivan OPORTA**

Done at Santa Clara, CA, on 02/06/2019
LOCATION DATE 
Zhaohui ZHU

Done at _____, on _____
LOCATION DATE **Chunping SONG**

Done at _____, on _____
LOCATION DATE **William RADER**

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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;


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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 _____
LOCATION DATE Hector Ivan OPORTA

Done at _____, on _____
LOCATION DATE Zhaohui ZHU

Done at San Jose, Costa Rica, on 3/8/2019
LOCATION DATE 
Chunping SONG

Done at _____, on _____
LOCATION DATE William RADER

ASSIGNMENT

WHEREAS, WE,

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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 _____
LOCATION DATE Hector Ivan OPORTA

Done at _____, on _____
LOCATION DATE Zhaohui ZHU

Done at _____, on _____
LOCATION DATE Chunping SONG

Done at Raleigh, NC, on 2/8/2012
LOCATION DATE William RADER