

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6178646

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT										
NATURE OF CONVEYANCE:	Corrective Assignment to correct the CORRECT VALUE QUALCOMM INCORPORATED 5775 MOREHOUSE DRIVE SAN DIEGO, CALIFORNIA 92121-1714 previously recorded on Reel 050226 Frame 0503. Assignor(s) hereby confirms the ASSIGNEE: PREVIOUS VALUE: QUALCOMM INCORPORATED 5575 MOREHOUSE DRIVE SAN DIEGO, CALIFORNIA 92121-1714.										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>MOO YOUNG KIM</td><td>11/16/2015</td></tr><tr><td>NILS GUNTHER PETERS</td><td>11/12/2015</td></tr><tr><td>DIPANJAN SEN</td><td>12/02/2015</td></tr></tbody></table>	Name	Execution Date	MOO YOUNG KIM	11/16/2015	NILS GUNTHER PETERS	11/12/2015	DIPANJAN SEN	12/02/2015			
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RECEIVING PARTY DATA											
<table border="1"><tr><td>Name:</td><td>QUALCOMM INCORPORATED</td></tr><tr><td>Street Address:</td><td>5775 MOREHOUSE DRIVE</td></tr><tr><td>City:</td><td>SAN DIEGO</td></tr><tr><td>State/Country:</td><td>CALIFORNIA</td></tr><tr><td>Postal Code:</td><td>92121-1714</td></tr></table>	Name:	QUALCOMM INCORPORATED	Street Address:	5775 MOREHOUSE DRIVE	City:	SAN DIEGO	State/Country:	CALIFORNIA	Postal Code:	92121-1714	
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Property Type	Number										
Application Number:	16557650										
CORRESPONDENCE DATA											
Fax Number:	(858)658-2502										
<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:	8586584351										
Email:	US-Docketing@qualcomm.com										
Correspondent Name:	QUALCOMM INCORPORATED										
Address Line 1:	5775 MOREHOUSE DRIVE										
Address Line 4:	SAN DIEGO, CALIFORNIA 92121-1714										
ATTORNEY DOCKET NUMBER:	150968U1C1C1										
NAME OF SUBMITTER:	SHAE STEFFAN										
SIGNATURE:	/SHAE STEFFAN/										
DATE SIGNED:	06/30/2020										
Total Attachments: 13											

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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1

Stylesheet Version v1.2

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CORRESPONDENCE DATA											
Fax Number:	(858)658-2502										
Phone:	651 735 1100										

Email: pairedocketing@ssiplaw.com <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> Correspondent Name: SHUMAKER & SIEFFERT, P. A. Address Line 1: 1625 RADIO DRIVE, SUITE 100 Address Line 4: WOODBURY, MINNESOTA 55125	
ATTORNEY DOCKET NUMBER:	150968U1C1C1
NAME OF SUBMITTER:	SHAE STEFFAN
Signature:	/SHAE STEFFAN/
Date:	08/30/2019
Total Attachments: 9 source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page1.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page2.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page3.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page4.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page5.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page6.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page7.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page8.tif source=150968U1C1_Assignment_as_filed_Nov_7-2018.pdf_21407384_1#page9.tif	
RECEIPT INFORMATION EPAS ID: PAT5696853 Receipt Date: 08/30/2019	

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ASSIGNMENT

WHEREAS, WE,

1. **Moo Young Kim**, a citizen of Korea, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, California,
2. **Nils Günther Peters**, a citizen of Germany, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, California,
3. **Dipanjana Sen**, a citizen of United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, California,

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 SIGNALING LAYERS FOR SCALABLE CODING OF HIGHER ORDER AMBISONIC AUDIO DATA (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. 14/878,691 filed **October 8, 2015**, Qualcomm Reference No. 150968U1, and all provisional applications relating thereto, together with U.S. Provisional Application Nos. 62/062,584, filed **October 10, 2014**, Qualcomm Reference No. 146721P1; 62/084,461, filed **November 25, 2014**, Qualcomm Reference No. 146721P3; 62/087,209, filed **December 3, 2014**, Qualcomm Reference No. 150968P1; 62/088,445, filed **December 5, 2014**, Qualcomm Reference No. 150968P2; 62/145,960, filed **April 10, 2015**, Qualcomm Reference No. 146721P4; 62/175,185, filed **June 12, 2015**, Qualcomm Reference No. 150968P3; 62/187,799, filed **July 1, 2015**, Qualcomm Reference No. 150968P4; 62/209,764, filed **August 25, 2015**, Qualcomm Reference No. 156875P1, (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 San Diego, on Nov. 16, 2015
LOCATION DATE


Moo Young Kim

Done at _____, on _____
LOCATION DATE

Nils Günther Peters

Done at _____, on _____
LOCATION DATE

Dipanjana Sen

ASSIGNMENT

WHEREAS, WE,

1. **Moo Young Kim**, a citizen of Korea, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, California,
2. **Nils Günther Peters**, a citizen of Germany, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of San Diego, California,
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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 SIGNALING LAYERS FOR SCALABLE CODING OF HIGHER ORDER AMBISONIC AUDIO DATA (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. **14/878,691** filed **October 8, 2015**, Qualcomm Reference No. **150968U1**, and all provisional applications relating thereto, together with U.S. Provisional Application Nos. **62/062,584**, filed **October 10, 2014**, Qualcomm Reference No. **146721P1**; **62/084,461**, filed **November 25, 2014**, Qualcomm Reference No. **146721P3**; **62/087,209**, filed **December 3, 2014**, Qualcomm Reference No. **150968P1**; **62/088,445**, filed **December 5, 2014**, Qualcomm Reference No. **150968P2**; **62/145,960**, filed **April 10, 2015**, Qualcomm Reference No. **146721P4**; **62/175,185**, filed **June 12, 2015**, Qualcomm Reference No. **150968P3**; **62/187,799**, filed **July 1, 2015**, Qualcomm Reference No. **150968P4**; **62/209,764**, filed **August 25, 2015**, Qualcomm Reference No. **156875P1**, (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

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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 Moo Young Kim

Done at San Diego, on Nov 12 2015
LOCATION DATE Re/EPS
Nils Günther Peters

Done at _____, on _____
LOCATION DATE Dipanjan Sen

ASSIGNMENT

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