

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT																
NATURE OF CONVEYANCE:	ASSIGNMENT																
CONVEYING PARTY DATA																	
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>ALFRED ASTERJADHI</td> <td>10/09/2013</td> </tr> <tr> <td>SIMONE MERLIN</td> <td>10/10/2013</td> </tr> <tr> <td>SANTOSH PAUL ABRAHAM</td> <td>10/16/2013</td> </tr> <tr> <td>MAARTEN MENZO WENTINK</td> <td>10/14/2013</td> </tr> <tr> <td>HEMANTH SAMPATH</td> <td>01/02/2014</td> </tr> </tbody> </table>		Name	Execution Date	ALFRED ASTERJADHI	10/09/2013	SIMONE MERLIN	10/10/2013	SANTOSH PAUL ABRAHAM	10/16/2013	MAARTEN MENZO WENTINK	10/14/2013	HEMANTH SAMPATH	01/02/2014				
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<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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CORRESPONDENCE DATA																	
Fax Number:	(858)707-4001																
Phone:	9497600404																
Email:	efiling@knobbe.com																
Correspondence will be sent via US Mail when the email attempt is unsuccessful.																	

Correspondent Name: KNOBBE MARTENS OLSON & BEAR, LLP
Address Line 1: 2040 MAIN STREET
Address Line 2: 14TH FLOOR
Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER: QFDM.614A

NAME OF SUBMITTER: ERIC NELSON

Signature: /Eric Nelson/

Date: 01/17/2014

Total Attachments: 15

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ASSIGNMENT

WHEREAS, WE,

1. **Alfred Asterjadhi**, a citizen of Albania, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of San Diego, CA,
2. **Simone Merlin**, a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of San Diego, CA,
3. **Santosh Paul Abraham**, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of San Diego, CA,
4. **Maarten Menzo Wentink**, a citizen of the Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of Naarden, the Netherlands,
5. **Hemanth Sampath**, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of San Diego, CA,

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 APPARATUS AND METHODS FOR FRAME CONTROL DESIGN (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). 13/957,366 filed August 1, 2013, Qualcomm Reference No. 123608, and all provisional applications relating thereto, together with U.S. Provisional Application Nos. 61/680,198, filed August 6, 2012, Qualcomm Reference No. 123608P1, U.S. Provisional Application No. 61/732,019, filed November 30, 2012, Qualcomm Reference No. 123608P2, U.S. Provisional Application No. 61/759,325, filed January 31, 2013, Qualcomm Reference No. 123608P3, U.S. Provisional Application No. 61/760,604, filed February 4, 2013, Qualcomm Reference No. 123608P4, U.S. Provisional

Application No. 61/763,410, filed February 11, 2013, Qualcomm Reference No. 123608P5, and U.S. Provisional Application No. 61/799,477, filed March 15, 2013, Qualcomm Reference No. 123608P6, (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 10/09/13
LOCATION DATE


Alfred Asterjadhi

Done at _____, on _____
LOCATION DATE

Simone Merlin

Done at _____, on _____
LOCATION DATE

Santosh Paul Abraham

Done at _____, on _____
LOCATION DATE

Maarten Menzo Wentink

Done at _____, on _____
LOCATION DATE

Hemanth Sampath

15893576
072913

ASSIGNMENT

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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). 13/957,366 filed August 1, 2013, Qualcomm Reference No. 123608, and all provisional applications relating thereto, together with U.S. Provisional Application Nos. 61/680,198, filed August 6, 2012, Qualcomm Reference No. 123608P1, U.S. Provisional Application No. 61/732,019, filed November 30, 2012, Qualcomm Reference No. 123608P2, U.S. Provisional Application No. 61/759,325, filed January 31, 2013, Qualcomm Reference No. 123608P3, U.S. Provisional Application No. 61/760,604, filed February 4, 2013, Qualcomm Reference No. 123608P4, U.S. Provisional

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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;

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;

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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 Alfred Asterjadhi

Done at SAN DIEGO, on 10/10/13
LOCATION DATE Simone Merlin
Simone Merlin

Done at _____, on _____
LOCATION DATE Santosh Paul Abraham

Done at _____, on _____
LOCATION DATE Maarten Menzo Wentink

Done at _____, on _____
LOCATION DATE Hemanth Sampath

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072813

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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 Alfred Asterjadhi

Done at _____, on _____
LOCATION DATE Simone Merlin

Done at SAN DIEGO, on 10/16/2013
LOCATION DATE 
Santosh Paul Abraham

Done at _____, on _____
LOCATION DATE Maarten Menzo Wentink

Done at _____, on _____
LOCATION DATE Hemanth Sampath

15893578
072913

ASSIGNMENT

WHEREAS, WE,

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Done at _____, on _____
LOCATION DATE Alfred Asterjadhi

Done at _____, on _____
LOCATION DATE Simone Merlin

Done at _____, on _____
LOCATION DATE Santosh Paul Abraham

Done at Naarden, on Oct 14, 2013
LOCATION DATE

Maarten Menzo Wentink

Done at _____, on _____
LOCATION DATE Hemanth Sampath

15693576
072913

ASSIGNMENT

WHEREAS, WE,

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5. **Hemanth Sampath**, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of San Diego, CA,

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 APPARATUS AND METHODS FOR FRAME CONTROL DESIGN (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). 13/957,366 filed August 1, 2013, Qualcomm Reference No. 123608, and all provisional applications relating thereto, together with U.S. Provisional Application Nos. 61/680,198, filed August 6, 2012, Qualcomm Reference No. 123608P1, U.S. Provisional Application No. 61/732,019, filed November 30, 2012, Qualcomm Reference No. 123608P2, U.S. Provisional Application No. 61/759,325, filed January 31, 2013, Qualcomm Reference No. 123608P3, U.S. Provisional Application No. 61/760,604, filed February 4, 2013, Qualcomm Reference No. 123608P4, U.S. Provisional

Application No. 61/763,410, filed February 11, 2013, Qualcomm Reference No. 123608P5, and U.S. Provisional Application No. 61/799,477, filed March 15, 2013, Qualcomm Reference No. 123608P6, (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 _____, on _____
LOCATION DATE

Alfred Asterjadhi

Done at _____, on _____
LOCATION DATE

Simone Merlin

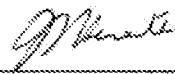
Done at _____, on _____
LOCATION DATE

Santosh Paul Abraham

Done at _____, on _____
LOCATION DATE

Maarten Menzo Wentink

Done at San Diego, on 01/02/14
LOCATION DATE


Hemanth Sampath

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