PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Maarten Menzo Wentink	12/21/2012
Simone Merlin	01/12/2013
Alfred Asterjadhi	12/24/2012
Zhi Quan	12/20/2012
Santosh Paul Abraham	12/20/2012
Amin Jafarian	01/24/2013

RECEIVING PARTY DATA

Name:	Qualcomm Incorporated	
Street Address:	5775 Morehouse Drive	
City:	San Diego	
State/Country:	CALIFORNIA	
Postal Code:	92121	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13672545

CORRESPONDENCE DATA

502223723

Fax Number: 8586582502

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

858-658-4351 Phone:

Email: us-docketing@qualcomm.com Correspondent Name: QUALCOMM INCORPORATED

Address Line 1: 5775 MOREHOUSE DR.

Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER: 120795

NAME OF SUBMITTER: Shae Penturf

PATENT

REEL: 029774 FRAME: 0473

Total Attachments: 18 source=120795_Signed_Assignments_2013-1-28__#page1.tif source=120795_Signed_Assignments_2013-1-28_#page2.tif source=120795_Signed_Assignments_2013-1-28__#page3.tif source=120795_Signed_Assignments_2013-1-28__#page4.tif source=120795_Signed_Assignments_2013-1-28_ #page5.tif source=120795 Signed Assignments 2013-1-28 #page6.tif source=120795_Signed_Assignments_2013-1-28__#page7.tif source=120795_Signed_Assignments_2013-1-28__#page8.tif source=120795_Signed_Assignments_2013-1-28__#page9.tif source=120795 Signed Assignments 2013-1-28 #page10.tif source=120795_Signed_Assignments_2013-1-28__#page11.tif source=120795_Signed_Assignments_2013-1-28__#page12.tif source=120795 Signed Assignments 2013-1-28 #page13.tif source=120795_Signed_Assignments_2013-1-28__#page14.tif source=120795_Signed_Assignments_2013-1-28__#page15.tif source=120795_Signed_Assignments_2013-1-28__#page16.tif source=120795_Signed_Assignments_2013-1-28__#page17.tif source=120795_Signed_Assignments_2013-1-28__#page18.tif

WHEREAS, WE,

- 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 Breukelen, The Netherlands,
- 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. Alfred Asterjadhi, a citizen of Albania, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of Utrecht, The Netherlands,
- 4. Zhi Quan, a citizen of China, having a mailing address located at 6582 Willowview Ct. Livermore, CA 94551 and a resident of Livermore, CA,
- 5. Santosh Paul Abraham, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of San Diego, CA,
- 6. Amin Jafarian, a citizen of Iran, 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 SYSTEM AND METHOD OF COMMUNICATION USING DISTRIBUTED CHANNEL ACCESS PARAMETERS (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). 13/672,545 filed November 8, 2012, Qualcomm Reference No. 120795, and all provisional application patents. Out the with U.S. Provisional Application No(s). 61/584,698, REEL: 029774 FRAME: Out the with U.S. Provisional Application No(s).

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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _	Bruhlen	, on	21-12-12 Date	
	LOCATION		DATE	Maarten Menzo Wentink
Done at _		on		Simone Merlin
	LOCATION		DATE	Simone Merlin
Done at _		_, on		Alfred Asterjadhi
	LOCATION		DATE	Alfred Asterjadhi
Done at_		, on		Zhi Quan
	LOCATION		DATE	Zhi Quan
Done at		on		Santosh Paul Abraham
	LOCATION		DATE	Santosh Paul Abraham
Done at		, on		Amín Jafarian
	LOCATION		DATE	Amín Jafarían

UALCOMM Ref. No. 120795 Page 1 of 3

ASSIGNMENT

WHEREAS, WE.

- 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 Breukelen, The Netherlands,
- 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. Alfred Asterjadhi, a citizen of Albania, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of Utrecht, The Netherlands.
- 4. Zhi Quan, a citizen of China, having a mailing address located at 6582 Willowview Ct. Livermore, CA 94551 and a resident of Livermore, CA,
- 5. Santosh Paul Abraham, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of San Diego, CA,
- 6. Amin Jafarian, a citizen of Iran, 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 SYSTEM AND METHOD OF COMMUNICATION USING DISTRIBUTED CHANNEL ACCESS PARAMETERS (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). 13/672,545 filed November 8, 2012, Qualcomm Reference No. 120795, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/584,698, filed January 9, 2012, Qualcomm

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;

QUALCOMM Ref. No. 120795 Page 3 of 3

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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	4.0	n	
·	LOCATION	DATE	Maarten Menzo Wentink
Done at	San Diego, CA , o	n	Simore Kerlin
Í	LOCATION	DATE	Simone Merlin
Name at	ä	·	
rvone ar	LOCATION	DATE	Alfred Asterjadhi
Done at	, 0	1	Zhi Quan
	LOCATION	DATE	Zhi Quan
Done at	, O & TO & C	DATE	
	LACATION	DATE	Santosh Paul Abraham
Dona et			
reminant	LOCATION	DATE	Amin Jafarian

QUALCOMM Ref. No. 120795

Page 1 of 3

ASSIGNMENT

WHEREAS, WE,

- 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 Breukelen, The Netherlands.
- 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. Alfred Asterjadhi, a citizen of Albania, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of Utrecht, The Netherlands,
- 4. Zhi Quan, a citizen of China, having a mailing address located at 6582 Willowview Ct. Livermore, CA 94551 and a resident of Livermore, CA,
- 5. Santosh Paul Abraham, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of San Diego, CA,
- Amin Jafarian, a citizen of Iran, 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 SYSTEM AND METHOD OF COMMUNICATION USING DISTRIBUTED CHANNEL ACCESS PARAMETERS (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). 13/672,545 filed November 8, 2012, Qualcomm Reference No. 120795, and all provisional applications APEINT thereto, together with U.S. Provisional Application No(s). 61/584,698, REEL: 1029774 FRAME: 0481

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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on		
***	LOCATION		DATE	Maarten Menzo Wentink
Done at _	LOCATION	, on		
	LOCATION		DATE	Simone Merlin
Done at $\not L$	/786/47 M LOCATION	<u>(</u> , on <u>42</u>	/2 <i>4/201</i> 2 Date	Alfred Asterjadhi
Done at_	LOCATION	, on	DATE	Zhi Quan
Done at	LOCATION	, on		
	LOCATION		DATE	Santosh Paul Abraham
Done at _	X aNAS A PINS SAS S	, on	································.	
	LOCATION		DATE	Amin Jafarian

WHEREAS, WE,

- 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 Breukelen, The Netherlands.
- 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. Alfred Asterjadhi, a citizen of Albania, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of Utrecht, The Netherlands,
- 4. Zhi Quan, a citizen of China, having a mailing address located at 6582 Willowview Ct. Livermore, CA 94551 and a resident of Livermore, CA,
- 5. Santosh Paul Abraham, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of San Diego, CA.
- Amin Jafarian, a citizen of Iran, 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 SYSTEM AND METHOD OF COMMUNICATION USING DISTRIBUTED CHANNEL ACCESS PARAMETERS (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). 13/672,545 filed November 8, 2012, Qualcomm Reference No. 120795, and all provisional applications Application No(s). 61/584,698, FIEEL: 1029774 PRAME: 0482

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;

PATENT QUALCOMM Ref. No. 120795 Page 3 of 3

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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on		
•	LOCATION	man, im	DATE	Msarten Menzo Wentink
Done at	1 (A) (A 71(A))	, on	** 4.*****	Simone Merlin
	LOCATION		DATE	Simone Merlin
Done at	1.00.149031	, on		Alfred Asterjadhi
	LOCATION		DATE	Alfred Asterjadhi
Done at	LOCATION	on	1 <u>2 / 25/12</u> DATE	Zhi Quan
Done at _	LOCATION	, on	DATE	Santosh Paul Abraham
Done at		, on	DATE	
	LOCATION		DATE	Amin Jafarian

WHEREAS, WE,

- 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 Breukelen, The Netherlands,
- 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. Alfred Asterjadhi, a citizen of Albania, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of Utrecht, The Netherlands,
- 4. Zhi Quan, a citizen of China, having a mailing address located at 6582 Willowview Ct. Livermore, CA 94551 and a resident of Livermore, CA,
- 5. Santosh Paul Abraham, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of San Diego, CA,
- Amin Jafarian, a citizen of Iran, 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 SYSTEM AND METHOD OF COMMUNICATION USING DISTRIBUTED CHANNEL ACCESS PARAMETERS (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). 13/672,545 filed November 8, 2012, Qualcomm Reference No. 120795, and all provisional applications pratient thereto, together with U.S. Provisional Application No(s). 61/584,698, REEL 1929774 FRAME: 0487

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;

QUALCOMM Ref. No. 120795

Page 3 of 3

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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		. on	
	LOCATION	DATE	Maarten Menzo Wentink
Done at _		, on	Simone Merlin
	LOCATION	DATE	Simone Merlin
Done at _		, on	
	LOCATION	DATE	Alfred Asterjadhi
Done at _	LOCATION	, on DATE	Zhi Quan
			d d./
Done at <u>s</u>	LOCATION	on 12/20/2012	Santosh Paul Abraham
Done at		က်က	
ect has been letter	LOCATION	, on	Amin Jafarian

WHEREAS, WE,

- 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 Breukelen, The Netherlands,
- 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. Alfred Asterjadhi, a citizen of Albania, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of Utrecht, The Netherlands,
- 4. Zhi Quan, a citizen of China, having a mailing address located at 6582 Willowview Ct. Livermore, CA 94551 and a resident of Livermore, CA.
- 5. Santosh Paul Abraham, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive San Diego, CA 92121 and a resident of San Diego, CA,
- 6. Amin Jafarian, a citizen of Iran, 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 SYSTEM AND METHOD OF COMMUNICATION USING DISTRIBUTED CHANNEL ACCESS PARAMETERS (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). 13/672,545 filed November 8, 2012, Qualcomm Reference No. 120795, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/584,698, filed January 9, 2012, Qualcomm

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;

PATENT QUALCOMM Ref. No. 120795 Page 3 of 3

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNRE, 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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		· on	
in their and we	LOCATION	, onDATE	Maarten Menzo Wentink
Done at _	LOCATION	on DATE	Simone Merlin
			•
Done at_	LOCATION	, on	Alfred Asterjadhi
Done at _	LOCATION	, on	Zhi Quan
			,
Done at	LOCATION	, on	Santosh Paul Abraham
Done at S	Dudanny San D	780 <u>0124 13</u> DATE	Lalu-
	LOCATION	DATE	Amin Jafarian

PATENT

REEL: 029774 FRAME: 0492

RECORDED: 02/07/2013