503470818 09/09/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT3517443

CONVEYING PARTY DATA

Name	Execution Date
ELDAD PERAHIA	08/07/2015
THOMAS J KENNEY	06/29/2015
ROBERT J STACEY	08/10/2015
SHAHRNAZ AZIZI	07/16/2015

RECEIVING PARTY DATA

Name:	INTEL IP CORPORATION
Street Address:	2200 MISSION COLLEGE BLVD.
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14747191

CORRESPONDENCE DATA

Fax Number:

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: 612-373-6900 **Email:** request@slwip.com

Correspondent Name: SCHWEGMAN, LUNDBERG & WOESSNER/INTEL

Address Line 1: C/O CPA GLOBAL Address Line 2: PO BOX 52050

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	4884.255US1
NAME OF SUBMITTER:	NANCY CUNDALL
SIGNATURE:	/ Nancy Cundall /
DATE SIGNED:	09/09/2015

Total Attachments: 9

source=4884255US1Assignment#page1.tif source=4884255US1Assignment#page2.tif

PATENT 503470818 REEL: 036517 FRAME: 0815

source=4884255US1Assignment#page3.tif	
source=4884255US1Assignment#page4.tif	
source=4884255US1Assignment#page5.tif	
source=4884255US1Assignment#page6.tif	
source=4884255US1Assignment#page7.tif	
source=4884255US1Assignment#page8.tif	
source=4884255US1Assignment#page9.tif	

RECORDATION FORM COVER SHEET PATENTS ONLY

Patent and Trademark Office Atty Ref/Docket No.: 4884.255US1 To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Intel IP Corporation Eldad Perahia, Thomas J. Kenney, Robert J. Stacey, Street Address: 2200 Mission College Boulevard Shahrnaz Azizi Additional name(s) of conveying party(ies) attached? City: Santa Clara State: CA Zip: 95054 Country: United States of America []Yes [X]No Additional name(s) & address(es) attached? []Yes [X]No 3. Nature of conveyance: [] Merger [X] Assignment [] Security Agreement [] Change of Name [] Other Execution Date: August 7, 2015, June 29, 2015, August 10, 2015, July 16, 2015 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: B. Patent No.(s) A. Patent Application No.(s) Serial No. 14/747,191 Additional numbers attached? []Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ <u>0.00</u> Name: Gregory R. Grace [[Enclosed [Authorized to be charged to deposit account Address: 504238 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 8. Please charge any additional fees or credit any over Minneapolis, MN 55402--0938 payments to our Deposit Account No.: 504238 DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. /Gregory R. Grace/ 9/9/2015 Gregory R. Grace/Reg. No. 59,733 Name of Person Signing Signature Date Total number of pages including cover sheet: 9

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

<Shahrnaz Azizi, Robert J. Stacey, Thomas J. Kenney, Eldad Perahia>

hereby sell, assign, and transfer to:

Intel IP Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR SIGNALING HIGH EFFICIENCY PACKET FORMATS USING A LEGACY PORTION OF THE PREAMBLE IN WIRELESS LOCAL-AREA NETWORKS

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 23, 2015 as

United States of America Application Number 14/747,191

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute

Page 1 of 2

all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Eldad Perahia	Date Signed
Thomas J. Kenney	Date Signed
Robert J. Stacey	Date Signed
Shahrnaz Azizi	Date Signed

<u>ASSIGNMENT</u>

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

<Shahrnaz Azizi, Robert J. Stacey, Thomas J. Kenney, Eldad Perahia>

hereby sell, assign, and transfer to:

Intel IP Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR SIGNALING HIGH EFFICIENCY PACKET FORMATS USING A LEGACY PORTION OF THE PREAMBLE IN WIRELESS LOCAL-AREA NETWORKS

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 23, 2015 as

United States of America Application Number 14/747,191

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below.

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute

Page 1 of 2

all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Eldad Perahia	Date Signed
Thomas J Kolmey	<u> </u>
Robert J. Stacey	Date Signed
Shahmaz Azizi	Date Signed

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

<Shahrnaz Azizi, Robert J. Stacey, Thomas J. Kenney, Eldad Perahia>

hereby sell, assign, and transfer to:

Intel IP Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR SIGNALING
HIGH EFFICIENCY PACKET FORMATS USING A LEGACY PORTION OF THE
PREAMBLE IN WIRELESS LOCAL-AREA NETWORKS

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 23, 2015 as

United States of America Application Number 14/747.191

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute

Page 1 of Z

all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Eldad Perahia	Date Signed
Thomas J. Kenney	Date Signed
Robert J. Stacey	
Shahmaz Azizi	Date Signed

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

<Shahrnaz Azizi, Robert J. Stacey, Thomas J. Kenney, Eldad Perahia>

hereby sell, assign, and transfer to:

Intel IP Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR SIGNALING HIGH EFFICIENCY PACKET FORMATS USING A LEGACY PORTION OF THE PREAMBLE IN WIRELESS LOCAL-AREA NETWORKS

(I hereby authorize and request any attorney having appropriate authority from the assigner to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 23, 2015 as

United States of America Application Number 14/747,191

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute

Page 1 of 2

all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Eldad Perahia	Date Signed
Thomas J. Kenney	Date Signed
Robert J. Stacey	Date Signed
Shahraz Azizi	7 <u>/ L6/ J5</u> Date Signed

Page 2 of 2