

<b>PATENT ASSIGNMENT COVER SHEET</b>
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
OZGUR OYMAN	05/30/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	INTEL IP CORPORATION
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<b>City:</b>	SANTA CLARA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95054
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15725205
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	P56653USC
<b>NAME OF SUBMITTER:</b>	ALEX W. HAYMOND
<b>SIGNATURE:</b>	/Alex W. Haymond/
<b>DATE SIGNED:</b>	01/04/2018
<b>Total Attachments: 3</b>	
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## ASSIGNMENT

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

**Alexander Sirotkin; Geng Wu; Achim Luft, Alexandre S Stojanovski; Pingping Zong; Youn Hyoung Heo; Yujian Zhang; Muthaiah Venkatachalam; Xiaogang Chen; Yuan Zhu; Seunghee Han; Shafi Bashar; Jong-Kae Fwu; Hong He; Alexei Davydov; Ana Lucia Pinheiro; Candy Yiu; Mo-Han Fong; Danny Moses; Alexey Khoryaev; Andrey Chervyakov; Mikhail Shilov; Andreas Schmidt; Apostolos Papathanassiou; Ozgur Oyman; Sangeetha Bangolae; Marta Martinez Tarradell; Puneet Jain; Shu-ping Yeh; Nageen Himayat; and Shilpa Talwar**

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 foreign countries, in and to any and all inventions and improvements that are disclosed in the International application entitled:

### ***ADVANCED WIRELESS COMMUNICATION SYSTEMS AND TECHNIQUES***

(I hereby authorize and request my attorney, associated with Customer Number XXXXX, to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on January 17, 2013 as

International Application Number 61/753,914 and

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

and in and to said International application and all related applications (e.g. national phase applications, divisional applications, continuation applications, reexaminations, reissues, and the like) that have been or shall be filed in the United States and/or all foreign countries on said inventions and improvements, as well as in and to all rights of priority resulting from the filing of said International application;

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 design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and all other patent applications on any and all said inventions and improvements; execute 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.

\_\_\_\_\_  
Alexander Sirotkin (Today's Date)

\_\_\_\_\_  
Geng Wu (Today's Date)

\_\_\_\_\_  
Achim Luft (Today's Date)

  
\_\_\_\_\_  
Alexandre S Stojanovski 06 JUN 2013  
(Today's Date)


\_\_\_\_\_  
Pingping Zong (Today's Date)

\_\_\_\_\_  
Youn Hyoung Heo (Today's Date)

\_\_\_\_\_  
Yujian Zhang (Today's Date)

\_\_\_\_\_  
Muthaiah Venkatachalam (Today's Date)

\_\_\_\_\_  
Xiaogang Chen (Today's Date)

Mikhail Shilov	(Today's Date)
Andreas Schmidt	(Today's Date)
Apostolos Papathanassiou	(Today's Date)
 Ozgur Oyman	5/30/2013 (Today's Date)
Sangeetha Bangolae	(Today's Date)
Marta Martinez Ferradell	(Today's Date)
Puneet Jain	(Today's Date)
Shu-ping Yeh	(Today's Date)
Nageen Himayat	(Today's Date)
Shilpa Talwar	(Today's Date)