PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
Alexei Davydov	01/07/2013	
Jong-Kae Fwu	01/07/2013	
Hooman Shirani-Mehr	01/07/2013	

RECEIVING PARTY DATA

Name:	ln .	
Street Address:	2200 Mission College Blvd.	
City:	Santa Clara	
State/Country:	try: CALIFORNIA	
Postal Code:	95054	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13719343

CORRESPONDENCE DATA

Fax Number:

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

Email: inteldocs@cpaglobal.com

Correspondent Name: CPA GLOBAL

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Address Line 2: Suite 600

Address Line 4: Minneapolis, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	P49238
NAME OF SUBMITTER:	Rachel Guidarelli

Total Attachments: 4

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> PATENT REEL: 029693 FRAME: 0417

OF \$40.00 13/19343

ASSIGNMENT

WHEREAS, We, Hooman Shirani-Mehr, residing at 4873 NW Promenade Ter, Unit 121, Portland, OR 97229, and Alexei Davydov, residing at Lenin Ave, 28/11-40. Nizhov Novgorod, 603132, RUSSIAN FEDERATION and Jong-Kae Fwu, residing at 1519 Diminion Ave., Sunnyvale, CA 94087, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States on December 19, 2012, which application was assigned U.S. patent application serial number 13/719,343, and is entitled METHOD AND APPARATUS FOR FEEDBACK IN 3D MIMO WIRELESS SYSTEMS:

AND WHEREAS, Intel Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 2200 Mission College Blvd., Santa Clara, CA 95054 (hereinafter 'Assignee'), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefore:

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

PATENT REEL: 029693 FRAME: 0418

ATTN: RACHEL GUIDARELLI

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AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

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

IN LESTIMONY WHEREOF, LE	ave nereunto set my nand this/	day ог _ , \с. и	<u>vasoria</u> , 2013.
•	Hooman Sti	Mehr	<i></i>
	Hooman Shirani-Mehr		
IN TESTIMONY WHEREOF, I I	ave hereunto set my hand this	day of	, 2013.
	Alexei Davydov		
	4		
IN TESTIMONY WHEREOF, I l	ave hereunto set my hand this	day of	, 2013.
	Jong-Kae Fwu		

PATENT REEL: 029693 FRAME: 0419 Darket No. 199238 Sensi Number 19779 343 Filing Date December 19, 2077

Page 1 of 1

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

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IN TESTIMONY WHEREOF, I have hereunto set my hand thisday of 2013
Hooman Shirani-Mehr
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of 2013
Jong-Kac Fwa

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AND, for the consideration aforesaid, we do hereby agree that we and our executors and

legal representatives will make, execute and deliver any and all other instruments in writing

including any and all further application papers, affidavits, assignments and other documents,

and will communicate to said Assignee, its successors and representatives all facts known to us

relating to said improvements and the history thereof and will testify in all legal proceedings and

generally do all things which may be necessary or desirable more effectually to secure to and

vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said

improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and

advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore, we covenant and agree with said Assignee, its successors and assigns,

that no assignment, grant, mortgage, license or other agreement affecting the rights and property

herein conveyed has been made to others by us and that full right to convey the same as herein

expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2013.

Hooman Shirani-Mehr

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2013.

Alexei Davydov

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of ______, 2013.

Jone-Kae Fwu

PATENT REEL: 029693 FRAME: 0421

RECORDED: 01/25/2013