PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Seunghee Han | 02/05/2013 |
| Alexei Davydov | 02/05/2013 |
| Jong-Kae Fwu | 02/05/2013 |
| Kamran Etemad | 02/05/2013 |

RECEIVING PARTY DATA

| Name: | Intel 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: | 13688794 |

CORRESPONDENCE DATA

Fax Number: 6123328352

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

Email: risrivastava@cpaglobal.com

Correspondent Name: Thorpe, North & Western, LLP

Address Line 1: c/o CPA Global
Address Line 2: PO Box 52050

Address Line 4: Minneapolis, MINNESOTA 55402

| ATTORNEY DOCKET NUMBER: | P49413 |
|-------------------------|-----------------|
| NAME OF SUBMITTER: | Alycia Morell |
| Signature: | /Alycia Morell/ |
| | PATENT |

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| Date: | 05/31/2013 |
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| Total Attachments: 6 source=P49413_Assignment#page1.tif source=P49413_Assignment#page2.tif source=P49413_Assignment#page3.tif source=P49413_Assignment#page4.tif source=P49413_Assignment#page5.tif source=P49413_Assignment#page6.tif | |

ASSIGNMENT

WHEREAS, We, Seunghee Han, residing at 203-901, Hogye2ndHyundaiHometown, Hogye3dong, Dongangu, Anyangshi, Kyoungkido, 11 431-764 Korea, and Alexei Davydov, residing at Lenin ave. 28/11-40, Nizhny Novgorod, 603132 Russia, and Jong-Kae Fwu, residing at 1519 Dominion Ave., Sunnyvale, CA 94087 US, and Kamran Etemad, residing at 10629 Beechknoll Lane, Potomac, MD 20854 US, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States on November 29, 2012, which application was assigned U.S. patent application serial number 13/688,794, and is entitled PERIODIC CHANNEL STATE INFORMATION REPORTING FOR COORDINATED MULTIPOINT (CoMP) SYSTEMS;

AND WHEREAS, <u>Intel Corporation</u>, a corporation organized and existing under and by virtue of the laws of <u>the State of Delaware</u>, and having an office and place of business at <u>2200 Mission College Blvd.</u>, <u>Santa Clara, CA 95054</u> (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.

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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.

Seunghee Han

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.

Jong-Kae Fwu

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IN TESTIMONY WHEREOF, I have hereunto set my hand this ___5th__ day of _Febrauary, 2013.

Kamran Etemad

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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.

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| IN TESTIMONY WHEREOF, I ha | ve hereunto set my hand this | day of | , 2013. |
|----------------------------|------------------------------|-----------|-------------------|
| | Seunghee Han | | |
| IN TÉSTIMONÝ WHEREOF, I ha | ve hereunto set my hand this | day of 66 | <u>~~~~</u> 2013. |
| IN TESTIMONY WHEREOF, I ba | ve hereunto set my hand this | day of | , 2613 |
| | Jong-Kaé Fwu | | |

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

Seunghee Han

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

Alexei Davydoy

IN TESTIMONY WHEREOF, I have hereunto set my hand this

day of ********* /1. 2013

Jong-Kae Fwu

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| | Seunghee Han | | |
|--------------------|--------------------------------------|--------|---------|
| IN TESTIMONY WHERE | OF, I have hereunto set my hand this | day of | , 2013. |
| | Alexei Davydov | | |
| IN TESTIMONY WHERE | OF, I have hereunto set my hand this | day of | , 2013 |
| | Jong-Kae Fwu | | |

PATENT REEL: 030520 FRAME: 0298

RECORDED: 05/31/2013