

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Boyan Boyanov</td> <td>01/07/2013</td> </tr> <tr> <td>Kanwal Jit Singh</td> <td>12/18/2012</td> </tr> <tr> <td>James Clarke</td> <td>12/18/2012</td> </tr> <tr> <td>Alan Myers</td> <td>12/19/2012</td> </tr> </tbody> </table>		Name	Execution Date	Boyan Boyanov	01/07/2013	Kanwal Jit Singh	12/18/2012	James Clarke	12/18/2012	Alan Myers	12/19/2012
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<table border="1"> <tr> <td>Name:</td> <td>Intel Corporation</td> </tr> <tr> <td>Street Address:</td> <td>2200 Mission College Blvd.</td> </tr> <tr> <td>City:</td> <td>Santa Clara</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>95054</td> </tr> </table>		Name:	Intel Corporation	Street Address:	2200 Mission College Blvd.	City:	Santa Clara	State/Country:	CALIFORNIA	Postal Code:	95054
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CORRESPONDENCE DATA											
<p>Fax Number: 6126773572  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 603-623-4059        Email: klodermeier@cpaglobal.com</p> <p>Correspondent Name: Finch &amp; Maloney PLLC        Address Line 1: c/o CPA Global        Address Line 2: P.O. Box 52050        Address Line 4: Minneapolis, MINNESOTA 55402</p>											
ATTORNEY DOCKET NUMBER:	P48748										
NAME OF SUBMITTER:	Neil F. Maloney, Reg. No. 42,833										
Total Attachments: 6											

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### ASSIGNMENT

WHEREAS, We, Boyan Boyanov, residing at 15760 NW Rondos Drive, Portland, OR 97229; Kanwal Singh, residing at 6897 NE Vinings Way, Apt. 124, Hillsboro, OR 97124; James Clarke, residing at 5676 NW 204th Pl., Portland, OR 97229; and Alan Myers, residing at 80 SW 150th Ave., Beaverton, OR 97006, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States entitled SEMICONDUCTOR INTERCONNECT STRUCTURES;

WHEREAS, We hereby authorize and request our attorneys, associated with Customer Number 99256, to insert here in parentheses (SER. No. 13/693,598; Filing Date: December 4, 2012) the filing date and application number of said application when known;

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.

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 7 day of January, 2012<sup>13</sup>.

  
\_\_\_\_\_  
Boyan Boyanov

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

\_\_\_\_\_  
Kanwal Singh

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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

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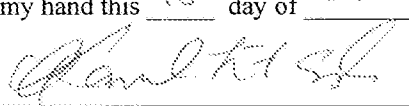
AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said 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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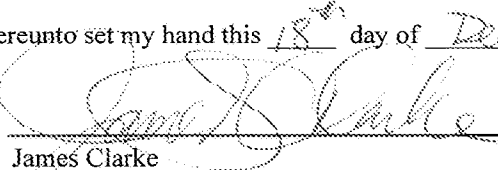
IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of \_\_\_\_\_, 2012.

\_\_\_\_\_  
Boyan Boyanov

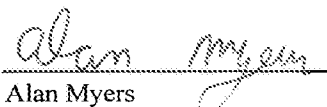
IN TESTIMONY WHEREOF, I have hereunto set my hand this 18<sup>TH</sup> day of DECEMBER, 2012.

  
\_\_\_\_\_  
Kanwaljit Singh

IN TESTIMONY WHEREOF, I have hereunto set my hand this 18<sup>th</sup> day of December, 2012.

  
James Clarke

IN TESTIMONY WHEREOF, I have hereunto set my hand this 19<sup>th</sup> day of December, 2012.

  
Alan Myers