

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4434172

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HONGQI LI	09/28/2015
GOWRISANKAR DAMARLA	10/05/2015
ROGER LINDSAY	05/25/2017
ZAILONG BIAN	05/25/2017
JIN LU	05/26/2017
SHYAM RAMALINGAM	09/29/2015
PRASANNA SRINIVASAN	10/26/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	INTEL CORPORATION
<b>Street Address:</b>	2200 MISSION COLLEGE BLVD
<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>	14498673
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	503-730-8937
<b>Email:</b>	annie@compassiplaw.com, bob@compassiplaw.com
<b>Correspondent Name:</b>	VINCENT H. ANDERSON
<b>Address Line 1:</b>	4804 NW BETHANY BLVD, STE. I-2 #237
<b>Address Line 4:</b>	PORTLAND, OREGON 97229
<b>ATTORNEY DOCKET NUMBER:</b>	P70039
<b>NAME OF SUBMITTER:</b>	ANNIE PEARSON
<b>SIGNATURE:</b>	/Annie Pearson/
<b>DATE SIGNED:</b>	05/29/2017

**Total Attachments: 14**

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**ASSIGNMENT**

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

**HONGQI LI; GOWRISANKAR DAMARLA; ROGER LINDSAY; ZAILONG BIAN; JIN LU; SHYAM RAMALINGAM; PRASANNA SRINIVASAN**

hereby sell, assign, and transfer to:

**Intel 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:

**CAPPING POLY CHANNEL PILLARS IN STACKED CIRCUITS**

(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 September 26, 2014 as

US Application Number 14/498,673 and  
COUNTRY or International Office

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 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

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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.

Hongqi Li  
Hongqi Li

09/28/2015  
Date signed

\_\_\_\_\_  
Gowrisankar Damarla

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Roger Lindsay

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Zailong Bian

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Jin Lu

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Shyam Ramalingam

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Prasanna Srinivasan

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Hongqi Li  Gowrisankar Damarla	Date signed  10/5/2015 Date signed
Roger Lindsay	Date signed
Zailong Bian	Date signed
Jin Lu	Date signed
Shyam Ramalingam	Date signed
Prasanna Srinivasan	Date signed

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\_\_\_\_\_  
HONGQI LI

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
GOWRISANKAR DAMARLA

\_\_\_\_\_  
Date signed

  
\_\_\_\_\_  
ROGER LINDSAY

\_\_\_\_\_  
5-25-17  
Date signed

\_\_\_\_\_  
ZAILONG BIAN

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
JIN LU

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
SHYAM RAMALINGAM

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
PRASANNA SRINIVASAN

\_\_\_\_\_  
Date signed



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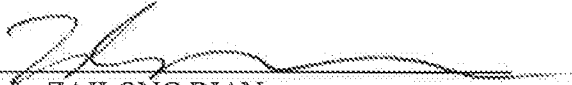
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_____ HONGQI LI	_____ Date signed
_____ GOWRISANKAR DAMARLA	_____ Date signed
_____ ROGER LINDSAY	_____ Date signed
 _____ ZAILONG BIAN	<u>5/25/2017</u> _____ Date signed
_____ JIN LU	_____ Date signed
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\_\_\_\_\_  
ZAILONG BIAN

\_\_\_\_\_  
Date signed

*Jin Lu*  
\_\_\_\_\_  
JIN LU

*5/26/2017*  
\_\_\_\_\_  
Date signed

\_\_\_\_\_  
SHYAM RAMALINGAM

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Date signed

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_____ Roger Lindsay	_____ Date signed
_____ Zailong Bian	_____ Date signed
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 _____ Shyam Ramalingam	_____ SEP 29, 2015 Date signed
_____ Prasanna Srinivasan	_____ Date signed

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