### 504055514 10/18/2016

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
VEDVYAS SHANBHOGUE	04/08/2016
JASON W. BRANDT	04/29/2016
RAVI L. SAHITA	04/12/2016
BARRY E. HUNTLEY	04/27/2016
BAIJU V. PATEL	05/05/2016
DEEPAK K. GUPTA	04/14/2016

#### **RECEIVING PARTY DATA**

Name:	INTEL CORPORATION	
Street Address:	2200 MISSION COLLEGE BOULEVARD	
City:	SANTA CLARA	
State/Country:	CALIFORNIA	
Postal Code:	95054	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	14975840	

#### **CORRESPONDENCE DATA**

Fax Number:

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.

**Phone:** 408-675-0441

Email:ndwe\_docketing@cardinal-ip.comCorrespondent Name:NDWE LLP/ INTEL C/O CPA GLOBALAddress Line 1:900 2ND AVENUE SOUTH, SUITE 600Address Line 4:MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER: 42P87757

NAME OF SUBMITTER: SCOTT A. SIMMONS, REG. NO. 60,206

SIGNATURE: /Scott A. Simmons/

DATE SIGNED: 10/18/2016

**Total Attachments: 7** 

PATENT REEL: 040047 FRAME: 0513

504055514



PATENT REEL: 040047 FRAME: 0514

# **ASSIGNMENT**

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

Vedvyas Shanbhogue; Jason W. Brandt; Ravi L. Sahita; Barry E. Huntley; Baiju V. Patel; Deepak K. Gupta

hereby sell, assign, and transfer to:

## **Intel Corporation**

a corporation of Delaware, having a principal place of business at 3200 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:

#### HARDWARE APPARATUSES AND METHODS TO SWITCH SHADOW STACK POINTERS

(I hereby authorize and request my attorney, associated with customer number 131413, to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on <u>December 20.3</u>	2015	as	
U.S. COUNTRY or International Office	Application Number	14/975,840	377

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 ouths, 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

PATENT REEL: 040047 FRAME: 0515

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

	4/8/2016
Vedvyas Shanbhogue	Date signed
Jason W. Brandt	Date signed
Ravi L. Sahita	Date signed
Barry E. Huntley	Date signed
Baiju V. Patel	Date signed
Deepak K. Gupta	Date signed

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

Vedvyas Shanbhogue	Date signed
Johan Mada	4-29-204
Jason W. Brandt	Date signed
Ravi L. Sahita	Date signed
Barry E. Huntley	Date signed
Baiju V. Patel	Date signed
Deepak K. Gupta	Date signed

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

Vedvyas Shanbhogue	Date signed
Jason W. Brandt	Date signed
Ravi L. Sahita	4/12/2016
Ravi L. Sahita	Date signed
Barry E. Huntley	Date signed
Baiju V. Patel	Date signed
Deepsk K. Gupta	Date signed

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Vedvyas Shanbhogue	Date signed
Jason W. Brandt	Date signed
Ravi L. Sahita	
Barry E. Huntley	Date signed
Baiju V. Patel	Date signed
Deepak K. Gupta	Date signed

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covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, gram, 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.

Vedvyas Shanbhogue	Date signed
Jason W. Brandt	Date signed
Ravi L. Sahita	Date signed
Barry E. Huntley	Date signed
12 miles (2014)	5/5/20/6
Baiju V. Patel	Date signed
Deepak K. Gupta	

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.

Vedvyas Shanbhogue	Date signed	
Jason W. Brandt	Date signed	
Raví L. Sahita	Date signed	
Barry E. Huntley	Date signed	
Baija V. Patel	Date signed	
	4/4/2016	
Deepak K. Gupta	Date signed	

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