504197069 01/26/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4243745

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
THEODROS YIGZAW	04/13/2016
ASHOK RAJ	04/13/2016
ROBERT SWANSON	01/10/2017
MOHAN J. KUMAR	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:	15087797	

CORRESPONDENCE DATA

Fax Number: (408)720-8383

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: 408 720-8300

Email: janece shannon@bstz.com

BLAKELY SOKOLOFF TAYLOR & ZAFMAN Correspondent Name:

1279 OAKMEAD PARKWAY Address Line 1:

Address Line 4: SUNNYVALE, CALIFORNIA 94085-4040

ATTORNEY DOCKET NUMBER:	42P95451	
NAME OF SUBMITTER:	ROBERT B. O'ROURKE	
SIGNATURE:	/Robert B. O'Rourke/	
DATE SIGNED:	01/26/2017	

Total Attachments: 4

source=P95451_Assignment_Kumar_Ashok_Theo#page1.tif source=P95451 Assignment Kumar Ashok Theo#page2.tif

source=P95451_Assignment_Swanson#page1.tif

PATENT REEL: 041088 FRAME: 0846 source=P95451_Assignment_Swanson#page2.tif

PATENT REEL: 041088 FRAME: 0847

Attorney Docket No.: P95451

ASSIGNMENT

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

Theodros Yigzaw, Ashok Raj, Robert Swanson, Mohan J. Kumar

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:

Handling of Error Prone Cache Line Slots Of Memory Side Cache of Multi-Level System Memory

(I hereby authorize and request my attorney, associated with customer number 45209, to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on _	March 31, 2016		as	
US		Application Number	15/087,797	_ and
COUNTRY or Inter	national 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

the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and 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.

Theodrys Yagain	4/13/2016
Theodrøs Yigzaw	Date signed
	4/13/2016
Ashok Raj	Date signed
Robert Swanson	Date signed
9001	4/14/2016
Mohan J. Kumar	Date signed

Attorney Docket No.: P95451

ASSIGNMENT

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

Theodros Yigzaw, Ashok Raj, Robert Swanson, Mohan J. Kumar

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:

Handling of Error Prone Cache Line Slots Of Memory Side Cache of Multi-Level System Memory

(I hereby authorize and request my attorney, associated with customer number 45209, to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on	March 31, 2	2016	as	
US COUNTRY or Int	ernational Office	Application Number	15/087,797	anc

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

Page 1 of 2

Attorney Docket No.: P95451

the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and 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.

Theodros Yigzaw	Date signed
Ashok Raj	Date signed
Q.a.l.	1/10/17
Robert Swanson	Date signed
Mohan J. Kumar	Date signed