504685807 12/13/2017

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4732529

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the INADVERTENT TYPOGRAPHICAL ERROR MADE IN EXECUTION DATE OF THE FOURTH CONVEYING PARTY previously recorded on Reel 043209 Frame 0807. Assignor(s) hereby confirms the ASSIGNMENT.

#### **CONVEYING PARTY DATA**

Name	Execution Date
SHUNYU ZHU	05/27/2015
XIANGBIN WU	05/27/2015
ZHIYUAN ZHANG	05/27/2015
XINXIN ZHANG	05/27/2015
QIANYING ZHU	05/27/2015

#### **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:	15549146

#### CORRESPONDENCE DATA

**Fax Number:** (919)999-2798

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: (919) 636-4767
Email: intel@kdbfirm.com

Correspondent Name: KACVINSKY DAISAK BLUNI PLLC

Address Line 1: 430 DAVIS DRIVE

Address Line 2: SUITE 150

Address Line 4: MORRISVILLE, NORTH CAROLINA 27560

ATTORNEY DOCKET NUMBER: P74850US/1020P74850US

NAME OF SUBMITTER: VICKI K. VANN

SIGNATURE: /vicki k. vann/

DATE SIGNED: 12/13/2017

504685807 PATENT REEL: 044861 FRAME: 0576

## **Total Attachments: 3**

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PATENT REEL: 044861 FRAME: 0577

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4537334

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
SHUNYU ZHU	05/27/2015
XIANGBIN WU	05/27/2015
ZHIYUAN ZHANG	05/27/2015
XINXIN ZHANG	05/27/2017
QIANYING ZHU	05/27/2015

#### **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
Ар	plication Number:	15549146

### **CORRESPONDENCE DATA**

**Fax Number:** (919)999-2798

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: 919-636-4767
Email: intel@kdbfirm.com

Correspondent Name: KACVINSKY DAISAK BLUNI PLLC ATTENTION: T

Address Line 1: 430 DAVIS DRIVE

Address Line 2: SUITE 150

Address Line 4: MORRISVILLE, NORTH CAROLINA 27560

DATE SIGNED:	08/04/2017
SIGNATURE:	/vicki k. vann/
NAME OF SUBMITTER:	VICKI K. VANN
ATTORNEY DOCKET NUMBER: P74850US/1020P74850US	

Total Attachments: 2

PATENT REEL: 044861 FRAME: 0578

**Attorney Docket No.: P74850PCT** 

# **ASSIGNMENT**

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

SHUNYU ZHU; XIANGBIN WU; ZHIYUAN ZHANG; XINXIN ZHANG; QIANYING ZHU 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:

#### TECHNIQUES FOR STORING OR ACCESSING A KEY-VALUE ITEM

designated lines below, the filing date and application number of said application when known.)			
which was filed on Mar	ch 05, 2015	as	
International COUNTRY or Internation	11	PCT/CN2015/073682	and

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the

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

# Attorney Docket No.: P74850PCT

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

coverant 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.

AN ?	3015- 05×37
Ź SŚTUNYU ZHU ,	Date signed
<u> </u>	2.11.05-2)
XIANGBIN WU	Date signed
XX212	201515,27
ZHIYUAN ZHANG	Date signed
後激%	2015.5.27
XÎNXIN ZHANG	Date signed /
<b>米喬科</b>	2015. C.27
' QIANYING ZHU	Date signed