04/15/2019 505428293

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5475093

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VENKATESWARA MADDURI	07/27/2018
ELMOUSTAPHA OULD-AHMED-VALL	08/03/2018
JESUS CORBAL	08/07/2018
MARK CHARNEY	12/18/2018
ROBERT VALENTINE	07/29/2018
BINWEI YANG	12/13/2018

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:	15721466

CORRESPONDENCE DATA

Fax Number: (408)675-0442

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: carla@ndwe.com **Correspondent Name:** NDWE LLP/INTEL

Address Line 1: 99 ALMADEN BOULEVARD, SUITE 710

Address Line 4: SAN JOSE, CALIFORNIA 95113

NAME OF SUBMITTER: THOMAS C. WEBSTER, REG. NO. 46,154 SIGNATURE: /Thomas C. Webster/ DATE SIGNED: 04/15/2019	ATTORNEY DOCKET NUMBER:	42AA4649-US	
	NAME OF SUBMITTER:	THOMAS C. WEBSTER, REG. NO. 46,154	
DATE SIGNED: 04/15/2019	SIGNATURE:	/Thomas C. Webster/	
1	DATE SIGNED:	04/15/2019	

Total Attachments: 7

PATENT REEL: 048888 FRAME: 0550

source=AA4649-US_Assignment_by_all#page1.tif
source=AA4649-US_Assignment_by_all#page2.tif
source=AA4649-US_Assignment_by_all#page3.tif
source=AA4649-US_Assignment_by_all#page4.tif
source=AA4649-US_Assignment_by_all#page5.tif
source=AA4649-US_Assignment_by_all#page6.tif
source=AA4649-US_Assignment_by_all#page7.tif

PATENT REEL: 048888 FRAME: 0551

ASSIGNMENT

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

VENKATESWARA MADDURI; ELMOUSTAPHA OULD-AHMED-VALL; JESUS CORBAL; MARK CHARNEY; ROBERT VALENTINE; BINWEI YANG

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:

APPARATUS AND METHOD FOR SHIFTING QUADWORDS AND EXTRACTING PACKED WORDS

(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 29.	2017		, as	
US COUNTRY or Inte	rnational Office	Application Number	15/721,466		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,

Page 1 of 2

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

M. Venkateswaw Ros	7/27/2018
VENKATESWARA MADDURI	Date signed
ELMOUSTAPHA OULD-AHMED-VALL	Date signed
JESUS CORBAL	Date signed
MARK CHARNEY	Date signed
ROBERT VALENTINE	Date signed
BINWEI YANG	Date signed

assigns, and logal 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

VENKATESWARA MADDURI	Date signed
<u>Q</u> 2~	08/03/2018
ELMOUSTAPHA OULD-AHMED-VALL	Date signed
JESUS CORBAL	Date signed
MARK CHARNEY	Date signed
ROBERT VALENTINE	Date signed
BINWEI YANG	Date signed

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

VENKATESWARA MADDURI	Date signed
ELMOUSTAPHA OULD-AHMED-VALL	Date signed
	08/07/24
JESUS CORBAL	Date signed
MARK CHARNEY	Date signed
ROBERT VALENTINE	Date signed
BINWEI YANG	Date signed

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

VENKATESWARA MADDURI	Date signed
ELMOUSTAPHA OULD-AHMED-VALL	Date signed
JESUS CORBAL	Date signed
Mark for Charge	2018-12-18
MARK CHARNEY	Date signed
ROBERT VALENTINE	Date signed
BINWEI YANG	Date signed

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.

VENKATESWARA MADDURI	Date signed
ELMOUSTAPHA OULD-AHMED-VALL	Date signed
JESUS CORBAL	Date signed
MARK CHARNEY	Date signed
130+00082	July 29 3018
ROBERT VÄLENTINE	Date signed
DENIGH VANC	

Page 2 of 2

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.

VENKATESWARA MADDURI	Date signed
ELMOUSTAPHA OULD-AHMED-VALL	Dutanimas
ELWOUSTAPHA OULD-AHMED-VALL	Date signed
JESUS CORBAL	Date signed
MARK CHARNEY	Date signed
ROBERT VALENTINE	Date signed
Binne Tara	12/13/2019
BINWEI YANG	Date signed

Page 2 of 2