505380743 03/18/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5427536

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AMJAD ABOUD	02/07/2019
GADI HABER	02/11/2019
JARED WARNER STARK IV	02/04/2019

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:	15941945

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 few number, if provided if that is unsuccessful, it will be sent via US Mail.

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

ATTORNEY DOCKET NUMBER:	42AA5732-US
NAME OF SUBMITTER:	THOMAS C. WEBSTER, REG. NO. 46,154
SIGNATURE:	/Thomas C. Webster/
DATE SIGNED:	03/18/2019

Total Attachments: 6

source=AA5732-US_ASSIGN#page1.tif source=AA5732-US_ASSIGN#page2.tif source=AA5732-US_ASSIGN#page3.tif source=AA5732-US_ASSIGN#page4.tif

PATENT 505380743 REEL: 048628 FRAME: 0244

source=AA5732-US_ASSIGN#page5.tif source=AA5732-US_ASSIGN#page6.tif

> PATENT REEL: 048628 FRAME: 0245

ASSIGNMENT

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

Amjad Aboud; Gadi Haber; Jared Warner Stark IV

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 SPECULATIVE CONDITIONAL MOVE OPERATION

(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 Mar	ch 30, 2018	as	
COLINTRY or Internation		ber <u>15/941,945</u>	and

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

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.

		F	ebraay 07,2019
	Amjad Aboud		Date signed
		Angelia de la Esperancia	
	Gadi Haber	- Turkan	Date signed
	n mg september 2000 die 2000 de 2000		
	Jared Warner Stark IV		Date signed

ASSIGNMENT

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

Amjad Aboud; Gadi Haber; Jared Warner Stark IV

hereby sell, assign, and transfer to:

Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Ciara, 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 SPECULATIVE CONDITIONAL MOVE OPERATION

(I hereby authorize and request a designated lines below, the filing	any attorney having appropriate authority from the assignee to it date and application number of said application when known.)	sert on the
which was filed onM	arch 30, 2018 as	
US COUNTRY or Internation	Application Number 15/941,945	and

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

PATENT REEL: 048628 FRAME: 0248

the history thereof; and generally assist said Assignce, 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 Assignce, its successors, assigns, and legal representatives; and

covenant with said Assignce, 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.

Amjad Aboud	Date signed
32	Feb. 11-2019
Gadi Haber	Date signed
Jared Warner Stark IV	Date signed

ASSIGNMENT

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

Amjad Aboud; Gadi Haber; Jared Warner Stark IV

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 SPECULATIVE CONDITIONAL MOVE OPERATION

(I hereby authorize and req	uest any attorney having appr	opriate authority from the a	issignee to insert on the
designated lines below, the	filing date and application nun	aber of said application whe	n known.)

which was filed on	March 30, 201	8		as
US		Application Number	15/941,945	and
COUNTRY or Inte	ernational 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

Page 1 of 2

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

ega for grade a garage of the St

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.

Amjad Aboud	Date signed
Company of the second of the s	The state of the s
	$(\boldsymbol{y}_{i}, \boldsymbol{y}_{i}, y$
Gadi Haber	Date signed
Jul Wind Little	
Jared Warner Stark IV	Date signed

inang merikalah sahija sebagi sali bermagaj perlaasi nobbi menulisi. Selik tibbi

ing the fifty in the property of the property of the contract of the contract of

et al esperante de la companya de l Companya de la compa

Page 2 of 2

that will be a second of the s

and the second of the second o