504239942 02/22/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4286619

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BLAISE FANNING	02/29/2012
SHEKOUFEH QAWAMI	02/24/2012
RAYMOND S. TETRICK	03/02/2012
FRANK T. HADY	03/01/2012

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15214005

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: 503-551-9442

Email: ted@compassiplaw.com, bob@compassiplaw.com

Correspondent Name: TED A. CRAWFORD

Address Line 1: 4804 NW BETHANY BLVD, STE. I-2 #237

Address Line 4: PORTLAND, OREGON 97229

ATTORNEY DOCKET NUMBER:	P37102USC2
NAME OF SUBMITTER:	ROBERT CALDWELL
SIGNATURE:	/Robert Caldwell/
DATE SIGNED:	02/22/2017

Total Attachments: 8

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PATENT 504239942 REEL: 041344 FRAME: 0801

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> PATENT REEL: 041344 FRAME: 0802

<u>ASSIGNMENT</u>

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

BLAISE FANNING; SHEKOUFEH QAWAMI; RAYMOND S. TETRICK; FRANK T. HADY

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, 95052 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all Inventions and improvements that are disclosed in the International application entitled:

MULTI-LEVEL MEMORY WITH DIRECT ACCESS

(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	D	ecember 29, 2011		_88	
International Applic	ation Number	PCT/US201	<u>1/067824</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 International application and all related applications (e.g. national phase applications, divisional applications, continuation applications, reexaminations, reissues, and the like) that have been or shall be filled in the United States and/or all foreign countries on said inventions and improvements, as well as in and to all rights of priority resulting from the filing of said International application;

agree that said Assignce 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 Assignce, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, 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

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PATENT REEL: 081345 FRAME: 0865

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.

Blaise Fanning	<i>⊋~⊋9−</i> /2 (Today's Date)
Shekoufeh Qawami	(Today's Date)
Raymond S. Tetrick	(Today's Date)
Frank T. Hady	(Today's Date)

ASSIGNMENT

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

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International Application Nur	nber PCT/US2011/067824 and

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and in and to said International application and all related applications (e.g. national phase applications, divisional applications, continuation applications, reexaminations, reissues, and the like) that have been or shall be filed in the United States and/or all foreign countries on said inventions and improvements, as well as in and to all rights of priority resulting from the filing of said International application;

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 design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, 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

Page Lof 2

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Blaise Fanning	(Today's Date)
Mauremi Shekoufeh Qawami	2/24/2 (Today's Date)
Raymond S. Tetrick	(Today's Date)
Frank T. Hady	(Today's Date)

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International Application Numbe	r <u>PCT/US2011/067824</u>	_and

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and in and to said International application and all related applications (e.g. national phase applications, divisional applications, continuation applications, reexaminations, reissues, and the like) that have been or shall be filed in the United States and/or all foreign countries on said inventions and improvements, as well as in and to all rights of priority resulting from the filing of said International application;

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 design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, 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

Page 1 of 2

PATENT REEL: 0**8**1**3**4**5** FRAME: 08**09**

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Shekoufeh Qawami

Today's Date)

Shekoufeh Qawami

Today's Date)

Tayung Attach
Raymond S. Tetrick

Today's Date)

Frank T. Hady

(Today's Date)

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International Application Nu	mber PCT/US2011/067824	_and

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Blaise Fanning (Today's Date)

Shekoufeh Qawami (Today's Date)

Raymond S. Tetrick (Today's Datc)

Frank T. Hady (Today's D.