PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
Mark Helm	02/04/2013
Jung Sheng Hoei	02/04/2013
Dzung Nguyen	02/04/2013
Aaron Yip	02/04/2013

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
PCT Number:	US2012030632

CORRESPONDENCE DATA

Fax Number: 6123328352

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Email: rbailey@cpaglobal.com Cool Patent, P.C. Correspondent Name: Address Line 1: c/o CPA Global Address Line 2: PO Box 52050

Address Line 4: Minneapolis, MINNESOTA 55402

	PATENT	
Signature: /Kenneth J. Cool - Reg. No. 40,570/		
NAME OF SUBMITTER:	Kenneth J. Cool	
ATTORNEY DOCKET NUMBER:	P43596PCT	

REEL: 031146 FRAME: 0106

PATENT

502484606

Date:	09/05/2013
Total Attachments: 2 source=P43596PCT_Assignment#page1.tif source=P43596PCT_Assignment#page2.tif	

PATENT REEL: 031146 FRAME: 0107

Attorney Docket No.: P43596PCT

ASSIGNMENT

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

MARK HELM; JUNG SHENG HOEI; DZUNG NGUYEN; AARON YIP

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:

THREE DIMENSIONAL MEMORY CONTROL CIRCUITRY

(I hereby authorize and request my attorney, associated with Customer Number 67861, to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on	March 20, 2012	_as
International Application Number _	PCT/US2012/030632	and
		1 7 73 10 43 - 24 4 4 4 4

Manah 26 2012

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 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

Attorney Docket No.: P43596PCT

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.

DZUNG NGUYEN

Z/4/13 (Today's Date)

 $\frac{\partial /4//3}{\text{(Today's Date)}}$

 $\frac{2/4//3}{\text{(Today's Date)}}$

 $\frac{2/4/13}{\text{(Today's Date)}}$