### PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Zvika Greenfield	10/17/2012
Kuljit S. Bains	10/04/2012
Theodore Z. Schoenborn	01/11/2013
Christopher P. Mozak	10/03/2012
John B. Halbert	10/04/2012

#### **RECEIVING PARTY DATA**

Name:	Intel Corporation
Street Address:	2200 Mission College Boulevard
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95052

# PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13539417

### **CORRESPONDENCE DATA**

**Fax Number**: 5034396073

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

Phone: (503) 439-8778

Email: lindsay\_nied@bstz.com

Correspondent Name: Vincent H. Anderson

Address Line 1: 1279 Oakmead Parkway

Address Line 4: Sunnyvale, CALIFORNIA 94085-4040

ATTORNEY DOCKET NUMBER: 42P44810

NAME OF SUBMITTER: Vincent H. Anderson

Total Attachments: 10

PATENT REEL: 029658 FRAME: 0686 H \$40 00 135

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# ASSIGNMENT

For good and valuable consideration, the recaipt and sufficiency of which is hereby acknowledged, we, the below-named inventor(s):

Zvika Greenfield; Kuljit S. Bains; Theodore Z. Schoenborn; Christopher P. Mozak; John B. Halbert

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 United States ("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 or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled

### ROW HAMMER CONDITION MONITORING

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for sa	and the control of th	rage at the grade of the analysis and the same and the same and the same at
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filing date of said patent application when known.)		

enter intra in la companya di un comp	er <u>13/539,417</u>	filed June 30 2012 .
United States Patent Application Numb	er 13/538/41/	BISC BUILD OU ZUIZ
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and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements, and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filling of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or 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 provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or 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 or 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 or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

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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.

Each Inven	tor: Please Sion and Da	te Below:	ga jihiki saamii Tibara Fassa saamisa.
	10/17/2012	-2	
	Date	Name: Zvika Greenfield	
	Date	Name: <b>Kuljit S. Bains</b>	
	Date	Name: Theodore Z. Schoen	
	Date	Name: Christopher P. Moza	<mark>. Salada (1987) teografia da da</mark>
	Date	Name: John B. Halbert	
	Date	A STATE OF THE STA	
	Date	Name:	
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	Date	Name:	den Africa i de formando esta los filosos. Por esta esta Africa forma de form Agrica forma de forma
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		Assignmen Blakely, Sc 1279 Oakn Sunnyvale,	t Document Return Address: kolorf, Taylor & Zarwan LLP lead Parkway CA 94085-4040 (503) 439-8778

42P44810

Page 2 of 2

# **ASSIGNMENT**

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a Corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California 95054 United States ("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 or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled

#### **ROW HAMMER CONDITION MONITORING**

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney of filing date of said patent application when kn	•	e to insert below	the application numb	er and
United States Patent Application Number	13/539.417	filed	June 30, 2012	,

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filled in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filling of said United States application;

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42P44810 Page 1 of 2

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.

#### Each Inventor: Please Sign and Date Below:

Date	Name: Zvika Greenfield
Oct' 4 2012	/Kuljit S. Bains/
Date	Name: Kuljit S. Bains
 Date	Name: Theodore Z. Schoenborn
 Date	Name: <b>Christopher P. Mozak</b>
 Date	Name: <b>John B. Halbert</b>
 Date	Name:

Assignment Document Return Address:

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 1279 Oakmead Parkway Sunnyvale, CA 94085-4040

Sunnyvale, CA 94085-4040 Telephone: (503) 439-8778

42P44810 Page 2 of 2

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said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or filing date of said patent application when kno	0	e to insert belov	v the application numb	er and
United States Patent Application Number	13/539.417	filed	June 30, 2012	

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42P44810 Page 1 of 2

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.

#### Each Inventor: Please Sign and Date Below:

Date	Name: <b>Zvika Greenfield</b>		
 Date	Name: <b>Kuljit S. Bains</b>		
1/11/2013	/Theodore Z. Schoenborn/		
Date	Name: Theodore Z. Schoenborn		
 Date	Name: <b>Christopher P. Mozak</b>		
 Date	Name: <b>John B. Halbert</b>		
 Date	 Name:		
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Assignment Document Return Address:

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 1279 Oakmead Parkway Sunnyvale, CA 94085-4040

Telephone: (503) 439-8778

42P44810 Page 2 of 2

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Zvika Greenfield; Kuljit S. Bains; Theodore Z. Schoenborn; Christopher P. Mozak; John B. Halbert

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filing of said United States application;

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United States Patent Application Number	13/538.417	filedJune 30_	2012
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Date	Name:
Date	Name):
	Name:

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United States Patent Application Number	13/539,417	filedJune 30, 2012	4

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Cate	Name: Kuljit S. Bains	
Date	Name: Theodore Z. Schoenborn	
Date	Name: Christopher P. Mozak	
Date	Name: John B. Halbert	
Date	Name:	
Date	Name:	
Dale	Name:	
Date	Name	
Date	Name:	
Date	Name:	
Date	Name:	

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