

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3648704

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
YOUFENG WU	11/27/2012
JUSTIN E. GOTTSCHLICH	11/28/2012
GILLES A. POKAM	11/27/2012
SHILIANG HU	11/27/2012
CRISTIANO L. PEREIRA	11/27/2012
ALI-REZA ADL-TABATABAI	11/29/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	INTEL CORPORATION
<b>Street Address:</b>	2200 MISSION COLLEGE BOULEVARD
<b>City:</b>	SANTA CLARA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95054
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14836103
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	3125801020
<b>Email:</b>	kjacklin@hfzlaw.com
<b>Correspondent Name:</b>	HANLEY, FLIGHT AND ZIMMERMAN, LLC
<b>Address Line 1:</b>	150 S. WACKER DRIVE
<b>Address Line 2:</b>	SUITE 2200
<b>Address Line 4:</b>	CHICAGO, ILLINOIS 60606
<b>ATTORNEY DOCKET NUMBER:</b>	P41976C
<b>NAME OF SUBMITTER:</b>	KIM A. JACKLIN
<b>SIGNATURE:</b>	/Kim A. Jacklin/
<b>DATE SIGNED:</b>	12/08/2015

**Total Attachments: 4**

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## ASSIGNMENT

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

**Youfeng Wu, Justin E. Gottschlich, Gilles A. Pokam, Shiliang Hu, Ali-Reza Adl-Tabatabai,  
Cristiano L. Pereira**

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 application for the United States patent entitled:

### **METHODS AND SYSTEMS TO IDENTIFY AND REPRODUCE CONCURRENCY VIOLATIONS IN MULTI-THREADED PROGRAMS USING EXPRESSIONS**

(I hereby authorize and request my attorney, associated with Customer Number 75343, to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 27, 2012 as

United States Application Number 13/535,334 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 design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, 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 and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all foreign countries on said inventions and improvements; and in and to all rights of priority resulting from the filing of said United States applications;

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


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.

  
\_\_\_\_\_  
Youfeng Wu

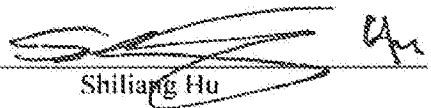
11/27/2012  
(Today's Date)

  
\_\_\_\_\_  
Justin E. Gottschlich

11/28/2012  
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Shiliang Hu

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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.

\_\_\_\_\_  
Youfeng Wu

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(Today's Date)

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Justin E. Gottschlich

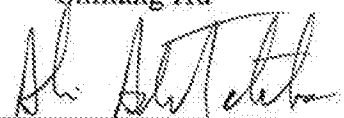
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Cristiano L. Pereira

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