

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
CRAY INC.	05/02/2012
RECEIVING PARTY DATA	
Name:	Intel Corporation
Street Address:	2200 Mission College Boulevard
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95052
PROPERTY NUMBERS Total: 2	
Property Type	Number
Patent Number:	5623698
Application Number:	12174226
CORRESPONDENCE DATA	
Fax Number:	4087208383
Phone:	(408)720-8300
Email:	chris_moolekamp@bstz.com
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
Correspondent Name:	Blakely, Sokoloff, Taylor, & Zafman LLP
Address Line 1:	1279 Oakmead Parkway
Address Line 4:	Sunnyvale, CALIFORNIA 94085
ATTORNEY DOCKET NUMBER:	42G01148
NAME OF SUBMITTER:	Michael J. Mallie Reg No. 36,591
Total Attachments: 8 source=Patent Assignment Agreement (Execution Version) (Stillwater)#page1.tif source=Patent Assignment Agreement (Execution Version) (Stillwater)#page2.tif	

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**PATENT ASSIGNMENT AGREEMENT**

This Patent Assignment Agreement (this “**Assignment**”), dated as of May 2, 2012, is made by and among Cray Inc., a Washington corporation and Cray Canada Corporation, an amalgamated corporation formed under the laws of the Province of British Columbia (collectively, the “**Assignor**”) and Intel Corporation, a Delaware corporation (“**Assignee**”).

**WHEREAS**, Assignee and Assignor have entered into that certain Asset Purchase Agreement, dated as of April 24, 2012 (the “**Asset Purchase Agreement**”), pursuant to which Assignor has agreed to sell and assign, and Assignee has agreed to buy and acquire the Purchased Assets (as defined in the Asset Purchase Agreement).

**WHEREAS**, pursuant to the Asset Purchase Agreement, Assignor desires to assign to Assignee, and Assignee desires to accept, all right, title and interest in and to all patents and patent applications that are part of the Purchased Assets.

**NOW, THEREFORE**, in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees as follows:

1. Assignment. Effective as of the date hereof, Assignor hereby irrevocably sells, assigns, transfers and conveys to Assignee, and Assignee hereby accepts, for itself and its successors and assigns, all of Assignor’s right, title, and interest in and to the following, to have and to hold the same for the full term or terms of the following: (a)(i) all issued patents and patent applications of Assignor that are part of the Purchased Assets and identified on **Schedule A** hereto, (ii) any patent applications and/or patents which may claim priority to the items in (i) (including but not limited to continuations, continuations-in-part, provisionals, divisionals, substitutes, reissues, reexaminations or extensions thereof, together with all priority rights and foreign counterpart applications under any existing or future international patent conventions, agreements or treaties), and (iii) any patent that may be granted on any patent application in (i) or (ii) (collectively, “**Assigned Patents**”); and (b) the right to sue for all past, present or future infringement of the Assigned Patents, to seek equitable relief, and to settle, collect and retain proceeds from any such actions, and any current or future right to receive royalties based on any of the foregoing.

2. Further Assurances. Assignor hereby authorizes the Commissioner of Patents and Trademarks of the United States, and the corresponding entities or agencies in any country foreign to the United States, to record Assignee as the assignee and owner of record of the Assigned Patents issued in the United States or issued or registered in any corresponding jurisdiction outside of the United States. Assignee and its attorneys of record (now and in the future) shall have the right, for each of the Assigned Patents, to insert in this Assignment any further identification information that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office, and any foreign patent office, for recordation of this document with respect to the Assigned Patents. Assignor agrees, at the request of Assignee, to take or cause to be taken all such other actions, including the execution of any and all other instruments in writing, further applications, papers, affidavits, powers of attorney, assignments and other documents, which may be reasonably required or necessary to

more effectively secure to, record in the name of, protect and vest in, Assignee and its successors and assigns, the entire right, title and interest in and to the Assigned Patents.

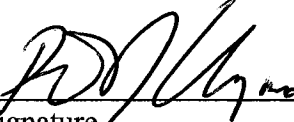
3. Preference for United States Industry. With respect to inventions claimed in the Assigned Patents that are identified in **Schedule A** as government-funded (the “**Subject Inventions**”), Assignee agrees that: (a) any product embodying the Subject Invention or produced through the use of the Subject Invention will be manufactured substantially in the United States; and (b) neither Assignee nor any subsequent assignee will grant to any person the exclusive right to use or sell any Subject Invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the Subject Invention will be manufactured substantially in the United States.

4. Other Acknowledgements. Assignee acknowledges that: (a) the assignment of the Licensed Patents hereunder is subject to that certain License Agreement L075119 dated December 29, 2006 between Cray Inc. and International Business Machines Corporation, as amended by the Amendment dated December 23, 2011; and (b) U.S. Patent No. 5,623,698 is assigned hereunder subject to a covenant not to sue as set forth in that certain Technology Agreement between Tera Computer Company and Silicon Graphics, Inc., dated March 31, 2000, as amended by Amendment No. 1 dated June 13, 2002, Amendment No. 2 dated March 30, 2007 and Amendment No. 3 dated March 28, 2008. Assignee agrees to cooperate with Assignor as reasonably requested by Assignor in order to comply with applicable governmental statutes, regulations and contract requirements regarding reporting on the utilization of Subject Inventions, notification regarding transfers of Subject Inventions to foreign firms or institutions, and any exercise by the government of its so-called march-in rights with respect to such Subject Inventions.

IN WITNESS WHEREOF, Assignor has caused this Patent Assignment Agreement to be duly signed on its behalf.

**For Assignor by:**

CRAY INC.

  
\_\_\_\_\_  
Signature

Peter J. Ungaro  
\_\_\_\_\_  
Name

May 2, 2012

\_\_\_\_\_  
Date

CRAY CANADA CORPORATION

  
\_\_\_\_\_  
Signature

Peter J. Ungaro  
\_\_\_\_\_  
Name

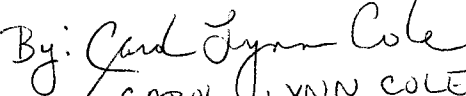
May 2, 2012

\_\_\_\_\_  
Date

**Notary Seal:**

State of Washington  
King County  
City of Seattle




By:   
CAROL LYNN COLE  
Exp. 11/20/15

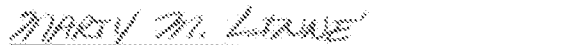
*[Signature Page to Patent Assignment Agreement among Intel Corporation, Cray Inc. and Cray Canada Corporation]*

Acknowledged and agreed to by Assignee.

For Assignee by:

INTEL CORPORATION

  
\_\_\_\_\_  
Signature

  
\_\_\_\_\_  
Name

May 2, 2012

\_\_\_\_\_  
Date

*[Signature Page to Patent Assignment Agreement among Intel Corporation, Cray Inc. and Cray Canada Corporation]*

## **Schedule A**

### **Listed Assigned Patents**

<b>Title</b>	<b>Country</b>	<b>Filing Date</b>	<b>Serial Number</b>	<b>Issue Date</b>	<b>Patent Number</b>	<b>Notes</b>
Systems and Methods for Routing Packets in Multiprocessor Computer Systems	US	8/18/2003	10/643,575	5/27/2008	7,379,424	
Reduced Arbitration Routing	US	10/31/2007	11/932,413	12/14/2010	7,852,836	
Architecture of Routing Tables	US	10/31/2007	11/932,457	N/A	N/A	
Inter-ASIC Data Transport Using Link Control Block Manager	US	7/19/2007	11/780,258	11/1/2011	8,051,338	Government-funded pursuant to contract MDA904-02-3-0052 (Maryland Procurement Office)
Extended Fast Memory Access (eFMA) in a Multiprocessor Computer System	US	6/12/2009	12/483,936	N/A	N/A	
Reliable Message Transport Network	EPO	6/6/2008	08251973.7	N/A	N/A	
Reliable Message Transport Network	US	6/7/2007	11/759,748	N/A	N/A	
One-Way Message Notification with Out-of-Order Message Delivery	EPO	6/6/2008	08251977.8	N/A	N/A	
One-Way Message Notification with Out-of-Order Message Delivery	US	6/7/2007	11/759,757	N/A	N/A	
Multiple Overlapping Block Transfers	US	7/16/2008	12/174,226	N/A	N/A	
Multiple Overlapping Block Transfers	US	4/16/2012	13/448,126	N/A	N/A	

[Schedule A to Patent Assignment Agreement]

sf-3138268

**PATENT**  
**REEL: 028824 FRAME: 0071**

Title	Country	Filing Date	Serial Number	Issue Date	Patent Number	Notes
Flexible Routing Tables for High-Radix Router	US	4/21/2008	12/107,016	11/30/2010	7,843,929	Government-funded pursuant to contract MDA904-02-3-0052 (Maryland Procurement Office)
Flexible Routing Tables for a High-Radix Router	US	11/9/2010	12/942,483	N/A	N/A	Government-funded pursuant to contract MDA904-02-3-0052 (Maryland Procurement Office)
Load Balancing for Communications within a Multiprocessor Computer System	US	4/21/2008	12/107,019	1/4/2011	7,864,792	Government-funded pursuant to contract MDA904-02-3-0052 (Maryland Procurement Office)
Speculative Forwarding in a High-Radix Router	US	4/21/2008	12/107,036	11/9/2010	7,830,905	Government-funded pursuant to contract MDA904-02-3-0052 (Maryland Procurement Office)
High-Radix Interprocessor Communications System and Method	US	1/12/2009	12/352,443	N/A	N/A	Government-funded pursuant to contract MDA904-02-3-0052 (Maryland Procurement Office)  Joint ownership: Stanford Univ.
Flattened Butterfly Processor Interconnect Network	US	8/20/2008	12/195,190	N/A	N/A	Joint ownership: Stanford Univ.
Dragonfly Processor Interconnect Network	US	8/20/2008	12/195,198	N/A	N/A	Joint ownership: Stanford Univ.



Title	Country	Filing Date	Serial Number	Issue Date	Patent Number	Notes
Progressive Adaptive Routing in a Dragonfly Processor Interconnect Network	EPO	11/4/2011	11187952.4	N/A	N/A	
Progressive Adaptive Routing Mechanisms for a Dragonfly Network	Japan	11/2/2011	2011-241240	N/A	N/A	
Progressive Adaptive Routing Mechanisms for a Dragonfly Network	US	11/7/2011	13/290,507	N/A	N/A	
Table-Driven Routing in a Dragonfly Processor Interconnect Network	EPO	11/4/2011	11187953.2	N/A	N/A	
Table-Driven Routing in a Dragonfly Processor Interconnect Network	Japan	11/2/2011	2011-241239	N/A	N/A	
Table Driven Network Routing Mechanism for a Dragonfly Network	US	11/7/2011	13/290,567	N/A	N/A	
Network Topology Having Nodes Interconnected by Extended Diagonal Links	US	8/8/2003	10/636,740	11/17/2009	7,620,736	
Network Topology Having Nodes Interconnected by Extended Diagonal Links	UK	8/6/2004	0417549.3	4/4/2006	GB2405298	
Shared Memory and High Performance Communication Using Interconnect Tunneling	US	2/11/2004	10/775,101	10/20/2009	7,606,933	
Shared Memory and High Performance Communication Using Interconnect Tunneling	UK	2/10/2005	0502831.1	12/27/2007	GB2411088	
Directly Connected Low Latency Network and Interface	UK	12/10/2004	0427107.8	3/28/2007	GB2409073	
Low Latency Communication via Memory Windows	US	9/28/2004	10/950,515	3/23/2010	7,685,319	
Low Latency Communication via Memory Windows	UK	9/28/2005	0519715.7	10/15/2008	GB2418753	

Title	Country	Filing Date	Serial Number	Issue Date	Patent Number	Notes
Low Latency Communication via Memory Windows	US	2/28/2004	12/699,007	N/A	N/A	
Low Latency Communication via Memory Windows	US	4/19/2012	13450945	N/A	N/A	
Event notifications relating to system failures in scalable systems	US	4/30/1993	55814	4/22/1997	5,623,698	