

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2829716

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	RELEASE BY SECURED PARTY		
CONVEYING PARTY DATA			
Name			Execution Date
IBM HOLDINGS, INC.			08/10/1993
RECEIVING PARTY DATA			
Name:	CRAY RESEARCH, INC. C/O DAVID E. FRASCH		
Street Address:	770 INDUSTRIAL BOULEVARD		
Internal Address:	RIVERSIDE PROJECT		
City:	CHIPPEWA FALLS		
State/Country:	WISCONSIN		
Postal Code:	54729		
PROPERTY NUMBERS Total: 1			
Property Type	Number		
Patent Number:	6195676		
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ATTORNEY DOCKET NUMBER:	CHAIN OF TITLE - 6195676		
NAME OF SUBMITTER:	ADRIENA M. GARCIA		
SIGNATURE:	/Adriena M. Garcia/		
DATE SIGNED:	04/25/2014		
Total Attachments: 9			
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PATENT RELEASE OF SECURITY AGREEMENT
(U.S. PATENTS AND U.S. PATENT APPLICATIONS)

WHEREAS, Supercomputer Systems Limited Partnership, a Delaware limited partnership ("SSLP"), created a security interest in the United States patents and applications for United States patents listed on Schedule 1 annexed hereto ("Secured Patents"), for the benefit of IBM Holdings, Inc., a Delaware corporation ("IBMH"), pursuant to a U.S. Patent Security Agreement dated as of November 23, 1992; and

WHEREAS, SSLP is the owner of the Secured Patents pursuant to assignment agreements executed by employees of Supercomputer Systems, Inc. ("SSI") and pursuant to such employees' employment agreements with SSI; and

WHEREAS, SSLP and IBM Holdings, Inc. are parties to an agreement dated as of July 30, 1993, with Cray Research, Inc., a Delaware corporation ("Cray"), pursuant to which agreement SSLP assigned to Cray, and IBMH agreed to release its security in, the Secured Patents.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which consideration is hereby acknowledged, IBMH hereby releases its security interest in the Secured Patents for the benefit of Cray and its successors and assigns.

IN WITNESS WHEREOF, IBMH has duly executed this U.S. Patent Release of Security Agreement as of August 10, 1993.

IBM HOLDINGS, INC.

By: John P. Jernigan

Name:

Title:

Acknowledged:

SUPERCOMPUTER SYSTEMS LIMITED PARTNERSHIP

By: Paul H. Smith

Name:

Title:

CRAY RESEARCH, INC.

By: Danny E. Gamm

Name:

Title:

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REEL

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REEL: 032757 FRAME: 0430

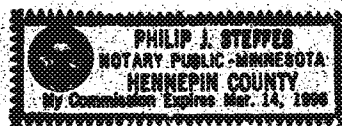
PATENT RELEASE OF SECURITY AGREEMENT
(U.S. PATENTS AND U.S. PATENT APPLICATIONS)

STATE OF Minnesota)
COUNTY OF Hennepin) SS.

On this 10th day of August, 1993, before me personally appeared John P. Cunningham, Paul G. Miller, and David E. Frasch, to me known and known to me to be the persons described in and who executed the foregoing instrument, and they duly acknowledged to me that they executed the same for the uses and purposes therein set forth.

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[SEAL]



Philip J. Stepper
Notary Public

SCHEDULE 1

ISSUED U.S. PATENTS

Patent Number: 5,055,707
Issued: Oct. 8, 1991

Serial Number: 07/568,169

Title: Method and Apparatus for Single Step Clocking on
Signal Paths Longer than a Clock Cycle

Filing Date: Aug. 16, 1990
Inventor: Douglas R. Beard

Patent Number: 5,107,418
Issued: April 21, 1992

Serial Number: 07/571,503

Title: Method for Representing Scalar Data Dependencies for
an Optimizing Compiler

Filing Date: Aug. 23, 1990
Inventors: Timothy J. Cramer, David M. Cox

Patent Number: 5,015,800
Issued: May 14, 1991

Serial Number: 07/454,022

Title: Miniature Controlled Impedance-Transmission Line
Cable and Method of Manufacture

Filing Date: Dec. 20, 1989
Inventors: Gregory P. Vaupotic, Doris A. Beck, Sokha Chy

Patent Number: 5,041,903
Issued: Aug. 20, 1991

Serial Number: 07/535,837

Title: Vertical Semiconductor Interconnection Method and
Structure

Filing Date: Jun. 11, 1990
Inventors: Michael A. Millerick, Gregory W. Pautsch

Patent Number: 5,142,100
Issued: Aug. 25, 1992

Serial Number: 07/694,467

Title: Transmission Line with Fluid Permeable Jacket

Filing Date: May 1, 1991
Inventors: Gregory P. Vaupotic

Patent Number: 5,159,678
Issued: Oct. 27, 1992

Serial Number: 07/572,045

Title: Method for Efficient Non-Virtual Main Memory
Management

Filing Date: Aug. 23, 1990
Inventors: Diane M. Wengelski, Gregory G. Gaertner

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Patent Number: 5,197,130

Issued: March 23, 1993

Serial Number: 07/459,083

Title: Cluster Architecture for a Highly Parallel
Scalar/Vector Multiprocessor System

Filing Date: Dec. 29, 1989

Inventors: Steve S. Chen, Frederick J. Simmons, George A.
Spix, Jimmie R. Wilson, Edward C. Miller, Roger E. Eckert,
Douglas R. Beard

Patent Number: 5,208,914

Issued: May 4, 1993

Serial Number: 07/535,786

Title: Method and Apparatus for Non-Sequential Resource
Access

Filing Date: June 11, 1990

Inventors: Jimmie R. Wilson, Douglas R. Beard, Steve S.
Chen, Roger E. Eckert, Richard E. Hessel, Andrew E. Phelps,
Alexander A. Silbey, Brian D. Vanderwarn

Patent Number: 5,175,862

Issued: Dec. 29, 1992

Serial Number: 07/536,197

Title: Method and Apparatus for a Special Purpose Arithmetic
Boolean Unit

Filing Date: June 11, 1990

Inventors: Andrew E. Phelps, Douglas R. Beard, Michael A.
Woodsmensee

Patent Number: 5,179,702

Issued: Jan. 12, 1993

Serial Number: 07/537,466

Title: System and Method for Controlling a Highly Parallel
Multiprocessor Using an Anarchy Based Scheduler for Parallel
Execution Thread Scheduling

Filing Date: June 11, 1990

Inventors: George A. Spix, Diane M. Wengelski, Stuart W.
Hawkinson, Mark D. Johnson, Jeremiah D. Burke, Keith J.
Thompson, Gregory G. Gaertner, Giacomo G. Brussino, Richard
E. Hessel, David M. Barkai, Steve S. Chen, Steven G. Oslon,
Robert E. Strout, II, Jon A. Masamitsu, David M. Cox, Linda
J. O'Gara, Kelly T. O'Hair, David A. Seberger, James C.
Rasbold, Timothy J. Cramer, Don A. Van Dyke, Ashok
Chandramouli

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Patent Number: 5,168,547

Issued: Dec. 1, 1992

Serial Number: 07/536,182

Title: Distributed Architecture for Input/Output for a Multiprocessor System

Filing Date: June 11, 1990

Inventors: Edward C. Miller, Steve S. Chen, Frederick J. Simmons, George A. Spix, Leonard S. Veil, Mark J. Vogel, John M. Wastlick

Patent Number: 5,165,038

Issued: Nov. 17, 1992

Serial Number: 07/536,198

Title: Global Registers for a Multiprocessor System

Filing Date: June 11, 1990

Inventors: Douglas R. Beard, George A. Spix, Edward C. Miller, Robert E. Strout, II, Anthony R. Schooler, Alexander A. Silbey, Brian D. Vanderwarn, Jimmie R. Wilson, Richard E. Hessel, Andrew E. Phelps

Patent Number: 5,168,570

Issued: Dec. 1, 1992

Serial Number: 07/536,417

Title: Method and Apparatus for a Multiple Request Toggling Priority System

Filing Date: June 11, 1990

Inventors: Roger E. Eckert, Andrew E. Phelps

Patent Number: 5,175,856

Issued: Dec. 29, 1992

Serial Number: 07/572,043

Title: Computer with Integrated Hierarchical Representation (IHR) of Program Wherein IHR File is Available for Debugging and Optimizing during Target Execution

Filing Date: Aug. 23, 1990

Inventors: Don A. Van Dyke, Timothy J. Cramer, James C. Rasbold, Kelly T. O'Hair, David M. Cox, David A. Seberger, Linda J. O'Gara, Jon A. Masamitsu, Robert E. Strout, II, Ashok Chandramouli

Patent Number: 5,193,192

Issued: March 9, 1993

Serial Number: 07/571,502

Title: Vectorized LR Parsing of Computer Programs

Filing Date: Aug. 23, 1990

Inventors: David A. Seberger

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Patent Number: 5,202,988

Issued: April 13, 1993

Serial Number: 07/571,951

Title: Method of Efficient Communication between
Coproductors of Unequal Speed

Filing Date: Aug. 23, 1990

Inventors: George A. Spix, Gregory G. Gaertner, Diane M.
Wengelski, Keith J. Thompson

Patent Number: 5,187,789

Issued: Feb. 16, 1993

Serial Number: 07/640,909

Title: Graphical Display of Compiler-Generated Intermediate
Database Representation

Filing Date: Jan. 11, 1991

Inventors: Kelly T. O'Hair

PENDING U.S. PATENT APPLICATIONS

Serial Number: 07/536,395

Title: Packaging Architecture for a Highly Parallel
Multiprocessor System

Filing Date: June 11, 1990

Inventors: Frederick J. Simmons, Steve S. Chen, Greg A.
Pautsch, Michael H. Rabska, Dennis F. Girling, Douglas C.
Paffel, Dan L. Massopust, Lisa Heid, Felix Lesmerises,
Christopher J. Sperry, Edward C. Priest

Serial Number: 07/536,409

Title: Cluster Architecture for a Highly Parallel/Vector
Multiprocessor System

Filing Date: June 11, 1990

Inventors: Douglas R. Beard, Andrew E. Phelps, Michael A.
Woodmansee, Richard G. Blewett, Jeffrey A. Lohman, Alexander
A. Silbey, George A. Spix, Frederick J. Simmons, Don A. Van
Dyke

Serial Number: 07/536,217

Title: Method and Apparatus for a Load and Flag Instruction

Filing Date: June 11, 1990

Inventors: Roger E. Eckert, Richard E. Hessel, Andrew E.
Phelps, George A. Spix, Jimmie R. Wilson

Serial Number: 07/535,901

Title: Control and Maintenance Architecture for a Highly
Parallel Multiprocessor System

Filing Date: June 11, 1990

Inventors: George A. Spix, Glen L. Collier, G. Joseph
Throop, David L. Clounch, Cris J. Rhea, Douglas R. Beard

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Serial Number: 07/536,192

Title: Dedicated Centralized Signaling Mechanism for
Selectively Signaling Devices in a Multiprocessor System
Filing Date: June 11, 1990
Inventors: Edward C. Miller, George A. Spix, Anthony R.
Schooler, Douglas R. Beard, Alexander A. Silbey, Andrew E.
Phelps

Serial Number: 07/535,881

Title: Integrated Development and Maintenance Software
System
Filing Date: June 11, 1990
Inventors: R. Stanley Bailes

Serial Number: 07/536,199

Abandoned in favor of file wrapper continuation Patent Number
5,193,187 (issued March 9, 1993), Serial Number 07/898,387 (filed
June 10, 1992)

Title: Fast Interrupt Mechanism for a Multiprocessor System
Filing Date: June 11, 1990
Inventors: Robert E. Strout, II, Edward C. Miller, George A.
Spix, Anthony R. Schooler, Alexander A. Silbey, Andrew E.
Phelps, Brian D. Vanderwarn, Gregory G. Gaertner

Serial Number: 07/571,500

Abandoned in favor of file wrapper continuation Patent Number
5,202,975 (issued April 13, 1993), Serial Number 07/896,895
(filed June 10, 1992)

Title: Method for Optimizing Instruction Scheduling for a
Processor Having Multiple Functional Resources
Filing Date: Aug. 23, 1990
Inventors: James C. Rasbold, Don A. Van Dyke

Serial Number: 07/802,206

Title: Method and Apparatus for Insitu Formation of Fine
Pitch Solder Bumps Using a Differentially Etched Hardmask
Stencil
Filing Date: Dec. 4, 1991
Inventors: John J. Budnaitis, Steven C. Nelson

Serial Number: 07/868,531

Title: Multilayer Interconnect System for an Area Array
Interconnection Using Solid State Diffusion
Filing Date: April 14, 1992
Inventors: David B. Noddin, Robin E. Gorrell, William G.
Petefish, Kevin L. Stumpe, Boydd Piper, Deepak N. Swamy,
Jimmy Leong, Michael R. Leaf

Serial Number: 07/705,023, divisional patent 5,041,903

Title: Vertical Semiconductor Interconnection Method and
Structure
Filing Date: May 22, 1991
Inventors: Michael A. Millerick

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Serial Number: 07/536,270

Title: Clock Distribution Apparatus and Processes
Particularly Useful in Multiprocessor Systems

Filing Date: June 8, 1990

Inventors: Edward C. Priest, Steven C. Barber, Ken Shintaku,
David A. Hanson, Dan L. Massopust

Serial Number: 07/571,955

Title: Dual Level Scheduling of Processes to Multiple
Parallel Regions of a Multithreaded Program on a Tightly
Coupled Multiprocessor Computer System

Filing Date: Aug. 23, 1990

Inventors: Robert E. Strout, George A. Spix, Jon A.
Masamitsu, David M. Cox, Gregory G. Gaertner, Diane M.
Wengelski, Keith J. Thompson

Serial Number: 07/571,952

Title: Scheduling Method for a Multiprocessor Operating
System

Filing Date: Aug. 23, 1990

Inventors: Gregory G. Gaertner, George A. Spix, Diane M.
Wengelski, Keith J. Thompson

Serial Number: 07/571,954

Title: Parsing Program Data Streams Having a Plurality of
Program Syntax

Filing Date: Aug. 23, 1990

Inventors: Ashok Chandramouli, Robert E. Strout, Jon A.
Masamitsu

Serial Number: 07/537,953

Title: Method of Implementing Kernel Functions Using Minimal
Context Processes

Filing Date: Aug. 23, 1990

Inventors: Gregory G. Gaertner, Diane M. Wengelski, Keith J.
Thompson

Serial Number: 07/803,926

Title: Clock Pulse Measuring and Deskewing System and
Process

Filing Date: Dec. 9, 1991

Inventors: Mark R. Sikkink, Kenneth A. Van Goor, Gregory R.
Edlund, Arthur H. Orth

Serial Number: 07/911,649

Title: Method and Apparatus for Separate Memory Hazard Mark
and Wait Instructions for Processors Having Multiple Memory
Ports

Filing Date: July, 10, 1992

Inventors: Andrew E. Phelps, Roger E. Eckert, Richard E.
Hessel

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Serial Number: 07/912,964

Title: Method and Apparatus for a Unified Parallel
Processing Architecture

Filing Date: July 10, 1992

Inventors: Steve S. Chen, Douglas R. Beard, George A. Spix,
Edward C. Priest, John M. Wastlick, James M. Van Dyke

Serial Number: 07/950,628

Title: Clock Start Up Stabilization for Computer Systems

Filing Date: Sept. 24, 1992

Inventors: David A. Hanson, Edward C. Priest

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