Form **PTO-1595** U.S. DEPARTMENT OF COMMERCE (Rev. 03/01) U.S. Patent and Trademark Office OMB No. 0651-0027 (exp. 5/31/2002) 102650107 Tab settings ⇒ ⇒ ⇒ To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies) Name of conveying party(ies): **KENNETH R. FERNANDEZ** Name: International Business Machines Corporation **CLAUDIO FLEINER** ROBERT B. GARNER HARALD HUELS Internal Address: _____ MANERED RIES WINFRIED W. WILKE Additional name(s) of conveying party(ies) attached? Yes 🗸 No 3. Nature of conveyance: Assignment Merger **New Orchard Road** Street Address: ☐ Change of Name Security Agreement Other_____ City: Armonk State: NY Zip: 10504 Execution Date: 1/5/04, 1/9/04, 1/9/04, 1/6/04, 1/8/04, 1/9/04 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: 1/9/04 A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? 📮 Yes 🗸 No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name:_IBM Corporation 7. Total fee (37 CFR 3.41).....\$ 40 Enclosed Internal Address:___ Authorized to be charged to deposit account Intellectual Property Law (C4TA/J2B) 8. Deposit account number: Street Address: 650 Harry Road 09-0441 (Attach duplicate copy of this page if paying by deposit account) City: San Jose State: CA Zip: 95120-6099 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached pygets is a true copy of the original document. Mark C. McCabe 1/9/04

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Mail documents to be recorded with required cover sheet information to:

Name of Person Signing

Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231



Date

REEL: 014888 FRAME: 0916



ASSIGNMENT

Whereas, we,

(1) Kenneth R. Fernandez

City of

Morgan Hill

County of

Santa Clara

State of

California

(3) Robert Barton Garner

City of

San Jose

County of

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(5) Manfred Ries

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Country of Germany

(2)

Claudio Matthais Fleiner

City of

San Jose

County of

Santa Clara

State of

California

(4) Harald Huels

City of

Bodenheim

Country of

Federal Republic of

Germany

(6) Winfried Wolfgang Wilcke

City of

Los Altos Hills

County of

Santa Clara

State of

California

have invented certain improvements in (Title of Invention):

A SYSTEM AND METHOD FOR PROVIDING COOLING IN A THREE-DIMENSIONAL INFRASTRUCTURE FOR MASSIVELY SCALABLE COMPUTERS

and executed a Declaration and Power of Attorney for a United States patent application therefor on

(1) Jan 5-

004

(2) Jan 9 2004

(3) JAN 9, 2004

(4)

(5)

(6) Jan 9 2004

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504 (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents and Trademarks to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Execution by Inventors

- (1) Inventor: Kenneth Richard Fernandez City/State: Son 2056, CA.
 - Signature Greek Armen Grate Jan 5-2004
- (2) Inventor: Claudio Matthias Fleiner City/State: San Jose (A)
 Signature Value Valu
- (3) Inventor: Robert Barton Garner City/State: SAN JOSE | CA
- (4) Inventor: Harald Huels City/Country:

 Signature _____ Date _____
- (5) Inventor: Manfred Ries City/Country:

 Signature _____ Date _____
- Win Fried Www)

 (6) Inventor: Winfied Wolfgang Wilcke City/State
- (6) Inventor: Winfied Wolfgang Wilcke City/State: Scar Jose, CA
 Signature Winfied W. W. W. Date Jon 9 2004

ASSIGNMENT

Whereas, we.

(1) Kenneth R. Fernandez

City of Morgan Hill County of Santa Clara

State of California

(3) Robert Barton Garner

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(5) Manfred Ries

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(1)		(2)	
(3)		(4)	January 6, 2004
(5)	January 8, 2004	(6)	

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504 (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents and Trademarks to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

PATENT REEL: 014888 FRAME: 0919

Execution by Inventors

RECORDED: 01/09/2004

(1)	Inventor:	Kenneth Richard Fernandez	City/State:
	Signature _		Date
(2)	Inventor:	Claudio Matthias Fleiner	City/State:
	Signature _		Date
(3)	Inventor:	Robert Barton Garner	City/State:
	Signature _		Date
(4)	Inventor: Signature	Harald Huels City	Country: 55294 Bookenheim/ Federal Republic of Garmany Date 01/06/2004
(5)		Manfred Ries city/	Country: 55129 Mains Date 0-1/08/2004
6)	Inventor:	Winfied Wolfgang Wilcke	City/State:
	Signature		Date

PATENT REEL: 014888 FRAME: 0920