sha	1				Docket No. <u>BEA92</u>	0050001US1
Fc+m PTO -1595 (Modified (Rev. 6-93) OMB 0651-0011 (cxp. 4/94)		05-27-2 1030106 1030106		HEET	U.S. Department Patent and Trac PATEN	demark Office
		PATENT	IS UNLY	· · · · · · · · · · · · · · · · · · ·		
					riginal document(s) or cop	y(ies)vi 4
1. Name of conveying party	r(ies):	2.	Nature of Convey	ance:		13-
Pau', E. McKenney Maged M. Michael			Assignment		Security Agreement	
Maged W. Michael			License		Change of Name	
			Merger		Other	
		Ex	ecution Date: 5-	18-2005 for	both inventors	ST.
3. Name and address of reconnent internation Name: Internation Address:	eiving party(ies): nal Business Machines Co	orporation			· ·	- 4 <sub>2</sub>
City: <u>Armonk</u> Country: <u>USA</u>	State: <u>N</u> ZIP: <u>10</u> .					ел дана 1971 — 1 1 - 1 1 - 1
4. Application number(s) or	r registration number(s):					
If this document is being file Patent Application No.	ed together with a new app	-	cution date of the a Patent No.(s)	application i	s: 5-18-2005 for both inver	ntors
5. Name and address of par document should be mailed: Name: <u>Michael E</u> Registration No.: <u>39,662</u>	Dryja	ce concerning	6. Total number	of applicati	ons and patents involved:	_1
Address:704 228thCity:SammamiCountry:USA	Ave NE #694           ish         State: W           ZIP: 98		7. Total fee (37	CFR 3.41):	\$ <u>40.00</u>	
Telephone: <u>425-427-5</u>	5094		□ Enclosed			
Fax: <u>425-563-2</u>	<u>2098</u>		Authorization	n ALREADY	r provided to charge depos	it account
CUSTOMER N	IUMBER 494	<u>74</u>	8. Deposit accord	unt number:	<u>501336</u>	
		<u>74</u>	8. Deposit accor	unt number:	<u>501336</u>	
5/26/2005 ECOOPER 00000136		<u>74</u>	8. Deposit acco	unt number:	<u>501336</u>	
5/26/2005 ECOOPER 00000136			8. Deposit accor	unt number:	<u>501336</u>	
95/26/2005 ECDOPER 00000136         01 FC:8021         40.00 DA         9. Statement and Signature	501336 11134484	DO NOT USE	THIS SPACE		ached copy is a true copy o	of the
<ul> <li>5/26/2005 ECOOPER 00000136</li> <li>1 FC: 8021 40.00 DA</li> <li>9. Statement and Signature To the best of my knowled</li> </ul>	501336 11134484	DO NOT USE	THIS SPACE			of the

**REEL: 016595 FRAME: 0699** 

## ASSIGNMENT OF PATENT APPLICATION

Whereas, we,

Paul E. McKenney County of Washington,

Maged M. Michael County of Fairfield, City of Beaverton, and State of Oregon

City of Danbury, and State of Connecticut

cach have invented certain improvements in

Hybrid multi-threaded access to data structures using hazard pointers for reads and locks for updates

and have executed, respectively, a United States patent application therefor on

\_\_\_\_\_5/18/05\_\_\_\_\_

And 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 to issue any Letters Patent granted upon the invention 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.

Signed at Beaverton, Oregon, this 18th day of MAY, 2005.	
DAPMAL	
Tank ? Manua	
Paul E. McKenney	
$\mathcal{T}$	

Signed at Beaverton, Oregon, this \_\_\_\_ day of \_\_\_\_\_.

Maged M. Michael

Signed at Beaverton, Oregon, this \_\_\_\_ day of \_\_\_\_\_.

.

Assignment

Page 2 of 2

## **ASSIGNMENT OF PATENT APPLICATION**

Whereas, we,

Paul E. McKenney County of Washington, City of Beaverton, and State of Oregon

Maged M. Michael County of Fairfield, City of Danbury, and State of Connecticut

each have invented certain improvements in

Hybrid multi-threaded access to data structures using hazard pointers for reads and locks for updates

and have executed, respectively, a United States patent application therefor on

And 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 to issue any Letters Patent granted upon the invention 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.

Signed at Beaverton, Oregon, this \_\_\_\_ day of \_\_\_\_, \_\_\_\_.

Paul E. McKenney

Signed at Yorktown, New York, this 18 day of May 2005

Maged M Michael

Maged M. Michael

Assignment

Page 2 of 2

\*\* TOTAL PAGE.05 \*\*

PATENT REEL: 016595 FRAME: 0703

**RECORDED: 05/20/2005**