Fgrm PTO-1595 1-31-92

12-23-2003

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office



. 6.16.03		
To the Honorable Commissioner of Patents and 10263	0180 ginal documents or copy thereof.	
<pre>1. Name of conveying party(ies): Khalil S. Amiri, Sriram Padmanabhan, Sanghyun Park, Renu Tewari</pre>	Name and address of receiving party(ies): Name: International Business Machines	
Additional name(s) of conveying party(ies) attached? 口 Yes 区 No	Corporation Armonk, New York 10504	
3. Nature of conveyance: Assignment		
 Additional numbers attached? □ Yes 図 No		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: <u>1</u>	
Name: Frank Chau, Esq. Street Address: F. CHAU & ASSOCIATES, LLP 1900 Hempstead Turnpike, Suite 501 City: East Meadow State: NY Zip: 11554	 7. Total fee (37 C.F.R. §3.41): \$40.00 ☐ Enclosed ☑ Authorized to be charged to deposit account 8. Deposit account number: 	
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 copy is a true copy of the original document. Eric M. Parham Registration No. 45,747 Name of Person Signing Total number of pages including cover sheet, attachments and documents: 5		

Do not detach this portion Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services Director of the US Patent and Trademark Office P. O. Box 1450

Alexandria, VA 22313-1450

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

> **PATENT** REEL: 014809 FRAME: 0213

		Attorney Docket: YOR920020341US1 (8728-600)	
, .	Form PTO-1595 1-31-92	06-19-2003 J.S. DEPARTMENT OF COMMERCE Patent and Trademark Office	
j	2/02 BM + 2		
	To the Honorable Commissioner of Patents and Trademarks	102478352 jents or copy thereof.	
1	1. Name of conveying party(ias): 6-16-07	10011	
	Khalil S. Amiri, Sriram Padmanabhan, Sanghyun Park, Renu Tewari	Name: <u>International Business Machines</u>	
	Additional name(s) of conveying party(ies) attached? □ Yes 図 No	Corporation Armonk, New York 10504	
		Additional name(s) & address(es) attached:	
1	3. Nature of conveyance:	☐ Yes 図 No	
- 1	☐ Security Agreement ☐ Change of Name		
1	Other	1	
	Execution Date: February 24 and 25, 2003,		
	April 12, 2003, May 27, 2003		
Ì	4. Application number(s) or patent number(s	1.	
	If this document is being filed together with a new application, the execution date of the application is:		
	A. Patent Application No.(s)	B. Patent No.(s)	
	10/328,229		
		1	
	Additional numbers attached? ☐ Yes 図 No		
	 Name and address of party to whom correspondence concerning document should be mailed: 	6. Total number of applications and patents involved: 1	
	Name: Frank Chau, Esq.	7. Total fee (37 C.F.R. §3.41): \$40.00 ☐ Enclosed	
	Street Address: <u>F. CHAU & ASSOCIATES, LLP</u> 1900 Hempstead Turnpike, Suite 501	Authorized to be charged to deposit account	
	City: East Meadow State: NY Zip: 11554	8. Deposit account number: 50-0510/IBM (Yorktown Heights) (Attach duplicate copy of this page if	
06/17/	003 670H11 00000168 500510 10328229	paying by deposit account)	
01 FC:	021 40.00 DA DO NOT US	SE THIS SPACE	
	9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.		
	Eric M. Parham) / \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	Registration No. 45,747 Name of Person Signing Signature	Date 12, 2003	
	Total number of pages including cover sheet, attachments and documents: _5_		
	Do not detach this portion Mail documents to be recorded with required cover sheet information to: Mail Stop Assignment Recordation Services Director of the US Patent and Trademark Office P. O. Box 1450		
	Alexandria, VA 22313-1450 Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.		

PATENT REEL: 014809 FRAME: 0214 (JOINT FORM) (MORE THAN TWO)

Page 1 of 1

Assignment

Whereas, we

Inventor and City

(1) Khalil S. Amiri

County of

of Toronto, Ontario

and State of Canada

and (2) Sriram Padmanabhan County of Westchester

of Briarcliff Manor and State of New York

and (3) Sanghyun Park

County of

of Pohang, Kyoungbuk, and State of Korea

and (4) Renu Tewari

County of Santa Clara

of San Jose and State of California

have invented certain improvements in U.S. Patent Appln. Serial No. 10/328,229 filed on December 23, 2002

A TRANSPARENT EDGE-OF-NETWORK DATA CACHE TITLE

and executed, respectively, a United States patent application therefor on (1) 2003 and (2) 2003 and (3) 200 DATES THAT (1) 2003 and (6) INVENTORS (4) 2003 and (5)

2003.

SIGNED THE DECLARATION

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, we 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 we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed (1) at Toronto amici SIGNATURE DATE

on 2/25/

2003, (Khalil S. Amiri) INVENTOR

FIRST NAME MIDDLE INITIAL LAST NAME

Signed and sealed

CITY and (2) at

SIGNATURE

DATE on

2003, (Sriram Padmanabhan) INVENTOR

FIRST NAME MIDDLE INITIAL LAST NAME

Signed and sealed

CITY and (3) at

SIGNATURE

DATE on

2003, (Sanghyun Park) INVENTOR

FIRST NAME MIDDLE INITIAL LAST NAME

Signed and sealed

CITY and (3) at

SIGNATURE

DATE on

2003, (Renu Tewari) INVENTOR

FIRST NAME MIDDLE INITIAL LAST NAME

Assignment

Whereas, we

.Inventor and City

Khalil S. Amiri of Toronto, Ontario (1) County of and State of Canada

and (2) Sriram Padmanabhan of Briarcliff Manor County of Westchester and State of New York

and (3) Sanghyun Park of Pohang, Kyoungbuk, and State of Korea County of

and (4) Renu Tewari of San Jose County of Santa Clara and State of California

have invented certain improvements in U.S. Patent Appln. Serial No. 10/328,229 filed on December 23, 2002

A TRANSPARENT EDGE-OF-NETWORK DATA CACHE TITLE

and executed, respectively, a United States patent application therefor on DATES THAT 2003 and (2) 2003 and (3) 2003 INVENTORS

(4)SIGNED THE

2003 and (5) 2003 and (6) 2003.

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, we 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 we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed

CITY (1) at SIGNATURE

DECLARATION

2003, (Khalil S. Amiri) INVENTOR DATE on

FIRST NAME MIDDLE INITIAL LAST NAME

Signed and sealed CITY and (2) at ifourtherne

SIGNATURE

2003, Sriram Padmanabhan) INVENTOR on 27, May DATE FIRST NAME MIDDLE INITIAL LAST NAME

Signed and sealed

CITY and (3) at

SIGNATURE

DATE (Sanghyun Park) INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME

Signed and sealed

CITY and (3) at

SIGNATURE

DATE (Renu Tewari) INVENTOR on

FIRST NAME MIDDLE INITIAL LAST NAME

Page 1 of 1

Assignment

Whereas, we

·Inventor and City

Khalil S. Amiri County of

of Toronto, Ontario and State of Canada

and (2) Sriram Padmanabhan County of Westchester

of Briarcliff Manor and State of New York

and (3) Sanghyun Park

of Pohang, Kyoungbuk,

County of

and State of Korea

and (4) Renu Tewari

Signed and sealed

of San Jose

and State of California County of Santa Clara

have invented certain improvements in U.S. Patent Appln. Serial No. 10/328,229 filed on December 23, 2002

A TRANSPARENT EDGE-OF-NETWORK DATA CACHE TITLE

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

DATES THAT

2003 and (2)

2003 and (3)

MIDDLE INITIAL

2003 INVENTORS (4)

2003 and (5)

2003 and (6)

2003.

SIGNED THE DECLARATION

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, we 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 we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

CITY (1) at SIGNATURE DATE 2003, Khalil S. Amiri) INVENTOR onFIRST NAME MIDDLE INITIAL LAST NAME Signed and sealed CITY and (2) at SIGNATURE DATE on 2003, (Sriram Padmanabhan) INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME Signed and sealed CITY and (3) at SIGNATURE **2/24/**2003, Sanghyun Park DATE FIRST NAME MIDDLE INITIAL LAST NAME Signed and sealed CITY and (3) at SIGNATURE DATE 2003, (Renu Tewari) INVENTOR

FIRST NAME

PATENT

LAST NAME

REEL: 014809 FRAME: 0217

Assignment

Inventor and City

DECLARATION

Whereas, we

(1) **Khalil S. Amiri** County of

and (2) Sriram Padmanabhan County of Westchester

and (3) **Sanghyun Park** County of

and (4) Renu Tewari
County of Santa Clara

RECORDED: 06/16/2003

of Toronto, Ontario and State of Canada

of Briarcliff Manor and State of New York

of **Pohang**, **Kyoungbuk**, and State of **Korea**

of San Jose and State of California

have invented certain improvements in U.S. Patent Appln. Serial No. 10/328,229 filed on December 23, 2002

TITLE A TRANSPARENT EDGE-OF-NETWORK DATA CACHE

and executed, respectively, a United States patent application therefor on DATES THAT (1) 2003 and (2) 2003 and (3) 2003 INVENTORS (4) 2003 and (5) 2003 and (6) 2003. SIGNED THE

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, we 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 we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed CITY (1) at SIGNATURE (Khalil S. Amiri) INVENTOR DATE 2003, on FIRST NAME MIDDLE INITIAL LAST NAME Signed and sealed CITY and (2) at SIGNATURE DATE 2003. (Sriram Padmanabhan) INVENTOR on FIRST NAME MIDDLE INITIAL LAST NAME Signed and sealed CITY and (3) at SIGNATURE (Sanghyun Park) INVENTOR DATE 2003, FIRST NAME MIDDLE INITIAL LAST NAME Signed and sealed San Jose, CA CITY and (3) at SIGNATURE DATE 2003, (Renu Tewari) INVENTOR on 4/12/

FIRST NAME

MIDDLE INITIAL

PATENT REEL: 014809 FRAME: 0218

LAST NAME