

Form PTO-1595 (Rev. 09/04)  
OMB No. 0651-0027 (exp. 6/30/2005)

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

### RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)/Execution Date(s):**  
 Wei Fan, Haixun Wang and Philip S. Yu

Execution Date(s) 8/3/2004, 8/3/2004, 8/3/2004

Additional name(s) of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**  
 Name: IBM Corporation  
 Internal Address: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City: Armonk  
 State: NY  
 Country: US Zip: 10504

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance:**

Assignment  Merger  
 Security Agreement  Change of Name  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other Record to correct 2nd Assignor's name

**4. Application or patent number(s):**  This document is being filed together with a new application.

A. Patent Application No.(s)  
10/858,541

B. Patent No.(s)

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Ference & Associates  
 Internal Address: \_\_\_\_\_  
 Street Address: 400 Broad Street  
 City: Pittsburgh  
 State: PA Zip: 15143  
 Phone Number: 412 741 8400  
 Fax Number: 412 741 9292  
 Email Address: \_\_\_\_\_

**6. Total number of applications and patents involved:** 1

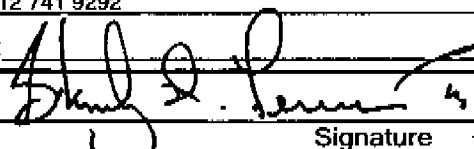
**7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00**

Authorized to be charged by credit card  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment Information**

a. Credit Card Last 4 Numbers 1005  
 Expiration Date 04/06

b. Deposit Account Number \_\_\_\_\_  
 Authorized User Name \_\_\_\_\_

**9. Signature:**   
 Signature

Stanley D. Ference III  
 Name of Person Signing

Date 3 December 2004

Total number of pages including cover sheet, attachments, and documents: 3

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

OP \$40.00 10858541

FORM PTD-1993 (Substitute)

RECORDED COPY COVER SHEET  
PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

To the Honorable Commissioner of Patents: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
Wei Fan, ~~Wai Kun~~ Wang and Phillip S. Yu  
Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies):  
Name: IBM Corporation  
Address: \_\_\_\_\_  
City: Armonk State: NY Zip: 10604

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
Execution Date: 8/3/2004, 8/3/2004, 8/3/2004

Additional name(s) & address(es) attached?  Yes  No

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: \_\_\_\_\_

A. Patent Application No(s):  
10/858,541  
Additional numbers attached?  Yes  No

B. Patent No(s):  
\_\_\_\_\_

5. Name and address of party to whom correspondence concerning document should be mailed:  
Name: Stanley D. Ference III  
FERENCE & ASSOCIATES  
Address: 400 Broad Street  
City: Pittsburgh State: PA Zip: 15143

6. Total number of applications and patents involved: 1  
7. Total fee (37 CFR 3.41): \$ 40.00  
 Enclosed  
 Authorized to be charged to deposit account  
 Charge any deficiency to deposit account  
8. Deposit account number:  
50-0510  
(Attach duplicate copy of this page if paying by deposit account)

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 and correct copy of the original document.  
Stanley D. Ference III Stanley D. Ference III  
Name of Person Signing Signature  
August 6, 2004  
Date

Total number of pages including cover sheet, attachments, and document: 6

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Mail Stop Assignments  
P.O. Box 1450, Alexandria VA 22313-1450

(JOINT FORM)

(IBM Docket) YOR920040138US1  
(590.134)**Assignment**

Whereas, we

INVENTOR AND CITY	(1) Wei Fan County of New York	of New York, and State of New York
INVENTOR AND CITY	(2) Haixun Wang County of Westchester	of Tarrytown, and State of New York
INVENTOR AND CITY	(3) Philip S. Yu County of Westchester	of Chappaqua, and State of New York

have invented certain improvements in

TITLE            SYSTEM AND METHOD FOR SEQUENCE-BASED SUBSPACE  
PATTERN CLUSTERING

and have executed, respectively, a United States patent application therefor on even date herewith.

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 applications 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.

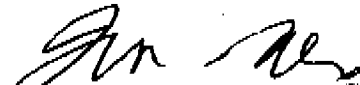
(JOINT FORM)

(IBM Docket) YOR920040138US1  
(590.134)

Signed and sealed

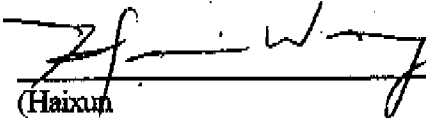
CITY AND  
DATE

(1) at Hawthorne  
on 8/03, 2004

  
\_\_\_\_\_  
(Wei Fan) SIGNATURE  
INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME

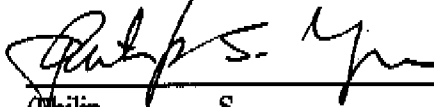
CITY AND  
DATE

(2) at Hawthorne  
on 8/3, 2004

  
\_\_\_\_\_  
(Haixun Wang) SIGNATURE  
INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME

CITY AND  
DATE

(3) at Hawthorne  
on 8/3, 2004

  
\_\_\_\_\_  
(Philip S. Yu) SIGNATURE  
INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME