



To the Honorable Commissioner: **102572742** original documents or copy thereof.

1. Name of conveying party(ies): Execution Date **9.29.03**

1) Robert Francis Bartfai	1) September 25, 2003
2) William Frank Micka	2) September 26, 2003
3) Thomas Charles Jarvis	3) September 25, 2003
4) Olympia Gluck	4) September 29, 2003
5) Michael E. Factor	5) September 29, 2003
6) Irit Dolev	6) September 29, 2003
7) Warren K. Stanley	7) September 25, 2003
8) Martin Jacob Tross	8) September 29, 2003
9) Sam Clark Werner	9) September 25, 2003
10) Aviad Zlotnick, and	10) September 29, 2003
11) Gail Andrea Spear	11) September 25, 2003

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

2. Name and address of receiving party(ies):
International Business Machines Corporation
Armonk, New York 10504

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

22141 U.S. PTO
10/675317
09/29/03

3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name
 Other

4. Application number(s) or patent number(s): **10675317**

If this document is being filed together with a new application, the execution date of the application is: September 29, 2003

A. Patent Application No.(s): B. Patent No.(s):

Additional numbers attached? Yes No

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

Janaki K. Davda
KONRAD RAYNES VICTOR & MANN LLP
315 S. Beverly Drive, Suite 210
Beverly Hills, CA 90212

10/09/2003 ECOOPER 00000111 090466 10675317
01 FC:8021 40.00 BA

6. Total number of applications and patents involved: [1]

7. Total fee (37 CFR 3.41).....\$ 40

Enclosed
 Authorized to be charged to deposit account

8. Deposit account number: **09-0466**
(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 is true and correct and any attached copy is a true copy of the original document.

Janaki K. Davda Janaki K. Davda September 29, 2003
Name of Person Signing Signature Date

Total number of pages including cover sheet, attachments and document: [7]

OMB No. 0651-0011 (exp. 4/94)

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.

Docket: TUC920030119US1
0022.0058

ASSIGNMENT

Whereas, we

**INVENTOR
AND CITY**

- (1) Robert Francis Bartfai
County of Pima
- (2) William Frank Micka
County of Pima
- (3) Thomas Charles Jarvis
County of Pima
- (4) Olympia Gluck
County of
- (5) Michael E. Factor
County of
- (6) Irit Dolev
County of
- (7) Warren K. Stanley
County of Pima
- (8) Martin Jacob Tross
County of
- (9) Sam Clark Werner
County of Pima
- (10) Aviad Zlotnick
County of
- (11) Gail Andrea Spear
County of Pima

- of Tucson
and State of Arizona
- of Tucson
and State of Arizona
- of Tucson
and State of Arizona
- of Haifa
and Country of ISRAEL
- of Haifa
and Country of ISRAEL
- of Haifa
and Country of Israel
- of Tucson
and State of Arizona
- of Haifa
and Country of Israel
- of Tucson
and State of Arizona
- of D.N.G.T.
and Country of ISRAEL
- of Tucson
and State of Arizona

have invented certain improvement in

TITLE METHOD, SYSTEM, AND PROGRAM FOR ASYNCHRONOUS COPY

Docket: TUC920030119US1

0022.0058

DATES THAT INVENTORS SIGNED THE DECLARATION

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

- (1) 09/25/, 2003, (2) 9/20/03, 2003, (3) SEPT 25, 2003, (4) _____, 2003,
- (5) _____, 2003, (6) _____, 2003, (7) Sept 25, 2003, (8) _____, 2003,
- (9) Sept. 25, 2003, (10) _____, 2003, and (11) Sept 25, 2003

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM CORPORATION), 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 therefore;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign, and transfer to IBM CORPORATION, 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 CORPORATION, its successors and assigns; and I hereby agree that IBM CORPORATION 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 CORPORATION.

Signed and sealed

CITY DATE (1) at Tucson Az on 09/25, 2003,

Robert Francis Bartfal SIGNATURE INVENTOR
Robert Francis Bartfal

CITY DATE (2) at Tucson, Az on 9/26, 2003,

William F. Micka SIGNATURE INVENTOR
William Frank Micka

CITY DATE (3) at TUCSON AZ on SEPT. 25, 2003,

Thomas Charles Jarvis SIGNATURE INVENTOR
Thomas Charles Jarvis

CITY DATE (4) at _____ on _____, 2003,

Olympia Gluck SIGNATURE INVENTOR

CITY DATE (5) at _____ on _____, 2003,

Michael E. Factor SIGNATURE INVENTOR

CITY DATE (6) at _____ on _____, 2003,

Irit Dolev SIGNATURE INVENTOR

CITY DATE (7) at Tucson, Az on Sept 25, 2003,

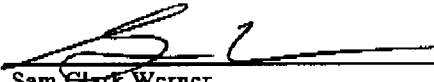
Warren K. Stanley SIGNATURE INVENTOR
Warren K. Stanley

Docket: TUC920030119US1
0022.0058

CITY (8) at _____
DATE on _____, 2003,

Martin Jacob Tross SIGNATURE
INVENTOR

CITY (9) at Tucson, AZ
DATE on Sept. 25, 2003,



Sam Stark Werner SIGNATURE
INVENTOR

CITY (10) at _____
DATE on _____, 2003,

Aviad Zlotnick SIGNATURE
INVENTOR

CITY (11) at Tucson, AZ
DATE on Sept 25, 2003,



Gail Andrea Spear SIGNATURE
INVENTOR

Docket: TUC920030119US1
0022.0058

ASSIGNMENT

Whereas, we

**INVENTOR
AND CITY**

- (1) Robert Francis Bartfai
County of Pima
- (2) William Frank Micka
County of Pima
- (3) Thomas Charles Jarvis
County of Pima
- (4) Olympia Gluck
County of
- (5) Michael E. Factor
County of
- (6) Irit Dolev
County of
- (7) Warren K. Stanley
County of Pima
- (8) Martin Jacob Tross
County of
- (9) Sam Clark Werner
County of Pima
- (10) Aviad Zlotnick
County of
- (11) Gail Andrea Spear
County of Pima

- of Tucson
and State of Arizona
- of Tucson
and State of Arizona
- of Tucson
and State of Arizona
- of Haifa
and Country of ISRAEL
- of Haifa
and Country of ISRAEL
- of Haifa
and Country of Israel
- of Tucson
and State of Arizona
- of Haifa
and Country of Israel
- of Tucson
and State of Arizona
- of D.N.G.T.
and Country of ISRAEL
- of Tucson
and State of Arizona

have invented certain improvement in

TITLE METHOD, SYSTEM, AND PROGRAM FOR ASYNCHRONOUS COPY

Docket: TUC920030119US1

0022.0058

DATES THAT INVENTORS SIGNED THE DECLARATION

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

- (1) _____, 2003, (2) _____, 2003, (3) _____, 2003, (4) 09/29, 2003,
- (5) Sep 29, 2003, (6) Sep 29, 2003, (7) _____, 2003, (8) 29 SEP, 2003,
- (9) _____, 2003, (10) sep 29, 2003, and (11) _____, 2003

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM CORPORATION), 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 CORPORATION, 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 CORPORATION, its successors and assigns; and I hereby agree that IBM CORPORATION 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 CORPORATION.

Signed and sealed

CITY DATE (1) at _____ on _____, 2003, Robert Francis Bartfai SIGNATURE INVENTOR

CITY DATE (2) at _____ on _____, 2003, William Frank Micka SIGNATURE INVENTOR

CITY DATE (3) at _____ on _____, 2003, Thomas Charles Jarvis SIGNATURE INVENTOR

CITY DATE (4) at * HAIFA, ISRAEL on * 3/09/29, 2003, Olympia Gluck SIGNATURE INVENTOR

CITY DATE (5) at * Ha Fa, Israel on * Sep 29 '03, 2003, Michael E. Factor SIGNATURE INVENTOR

CITY DATE (6) at * HAIFA, ISRAEL on * Sep. 29, 2003, Irit Dolev SIGNATURE INVENTOR

CITY DATE (7) at _____ on _____, 2003, Warren K. Stanley SIGNATURE INVENTOR

Docket: TUC920030119US1

0022.0058

CITY DATE (8) at Huila Israel
on SEP 29, 2003.

Martin Jacob Tross
Martin Jacob Tross SIGNATURE INVENTOR

CITY DATE (9) at _____
on _____, 2003,

Sam Clark Werner SIGNATURE INVENTOR

CITY DATE (10) at * Haifa, Israel
on * Sep 29, 2003.

Aviad Zlotnik
Aviad Zlotnik SIGNATURE INVENTOR

CITY DATE (11) at _____
on _____, 2003,

Gail Andrea Spear SIGNATURE INVENTOR