

01-06-1999

In place of Form PTO-1595



Docket No. RP9-98-071

100936373

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

88-12-21-98
mcd

1. Name of conveying party(ies):

Barbara Ballard
Simon Chu
Gayle Steinbuglar

2. Name and address of receiving party(ies):

International Business
Machines Corporation
New Orchard Road
Armonk, New York 10504

jc551 U.S. PTO
09/21/98
12/21/98

3. Nature of conveyance:

X Assignment

Execution Date: 12/18/98; 12/16/98; 12/15/98

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 12/18/98; 12/16/98; 12/15/98

A. Patent Application No.(s)

B. Patent No.(s)

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

Andrew J. Dillon
Felsman, Bradley, Gunter & Dillon, LLP
Suite 350, Lakewood on the Park
7600B North Capital of Texas Highway
Austin, TX 78731
(512) 343-6116

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$ 40.00

X Authorized to be charged to deposit account

8. IBM Corporation Deposit account number:

50-0563

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.

Julianne M. Kohrs
Name of Person Signing

Julianne Kohrs
for Felsman, Bradley,
Gunter & Dillon, LLP

12-21-98
Date

Total number of pages including cover sheet: 3

A S S I G N M E N T

Whereas, I,

(1) Barbara Ballard
County of Wake

of Raleigh,
and State of North Carolina,

have invented certain improvements in

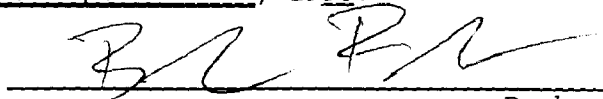
METHOD AND SYSTEM FOR MANAGING A DATA STORAGE SYSTEM

and executed, respectively, a United States patent application therefor on
(Dates Inventors Signed Declaration) (1) 12/18, 1998.

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 invention 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.

(1) Signed at RTP, NC on 12/18, 1998.



Barbara Ballard

A S S I G N M E N T

Whereas, we,

(1) Simon Chu of Chapel Hill,
 County of Orange and State of North Carolina,

and
 (2) Gayle Steinbugler of Raleigh,
 County of Wake and State of North Carolina,

have invented certain improvements in

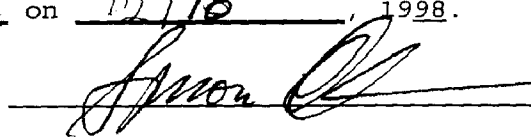
METHOD AND SYSTEM FOR MANAGING A DATA STORAGE SYSTEM

and executed, respectively, a United States patent application therefor on
 (Dates Inventors Signed Declaration) (1) 12/16, 1998, and
 (2) 12/15, 1998.

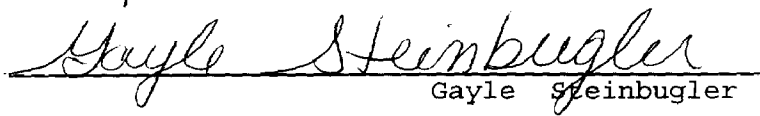
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 New York, having a place of business at Armonk, New York 10504, (hereinafter
 called IBM), desires to acquire the entire right, title and interest in the
 said application and invention, and to any United States and foreign patents
 to be obtained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

(1) Signed at RTP NC on 12/15, 1998.


 Simon Chu

and (2) Signed at RTP, NC on 12/15, 1998.


 Gayle Steinbugler