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1. Name(s) of conveying party/parties:
   - Owen T. Anderson
   - Craig F. Everhart
   - Boaz Shmueli

2. Name and address of receiving party:
   - International Business Machines Corporation
   - New Orchard Road
   - Armonk, New York 10504

Additional Names Attached? Yes X No

3. Nature of Conveyance:
   - X Assignment
   - Security Agreement
   - Change of Name
   - Other:

Execution Date(s): November 9, 2001

4. Application number(s) or patent number(s):
   - A. Patent Application No(s)
   - B. Patent No(s)

Additional Numbers Attached? Yes X No

5. Name and Address of party to whom correspondence concerning the document should be sent:
   - Name: Jeanine S. Ray-Yarletts
   - Internal Address: IBM Corporation, T81/503
   - Street Address: PO Box 12195
   - City/State/Zip: Res. Tri. Park, NC 27709

6. Total Number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) .....$ 40
   - Enclosed
   - Charge to deposit account X

8. Deposit account Number: 09-0461

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   Jeanine S. Ray-Yarletts
   Name of Person Signing
   Signature
   Date: January 11, 2002

Total Number of pages including cover sheet, attachments and document 5

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PATENT
REEL: 012502 FRAME: 0950
ASSIGNMENT

Whereas, we

-1 Owen T. Anderson

of: Chapel Hill, North Carolina

and (2) Craig F. Everhart

of: Pittsburgh, Pennsylvania 15206

and (3) Boaz Shmueli

of: Pittsburgh, Pennsylvania 15206

have invented certain improvements in

Method, Apparatus, and Program for Separate
Representations of File System Locations from Referring
File Systems

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

-1 Nov. 9, 2001

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,
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.

SIGNED AND SEALED
(1) at: Chapel Hill, NC 27516
   on: 9-Nov-2001
   
   Owen T. Anderson

   and (2) at:
   on:
   
   Craig F. Everhart

   and (3) at:
   on:
   
   Boaz Shmueli
ASSIGNMENT

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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.

SIGNED AND SEALED
(1) at:
    on:

and (2) at: Pittsburgh, PA, USA
    on: 9 Nov. 2001

and (3) at: Pittsburgh, PA
    on: 11/9/2001

Owen T. Anderson

Craig F. Everhart

Boaz Shmueli