

(12) **United States Patent**
Prust

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(54) **METHOD AND SYSTEM FOR ACCESSING A REMOTE STORAGE AREA**

(75) **Inventor:** **Mitch Prust**, 16244 Ramsey Blvd. NW., Ramsey, MN (US) 55303

(73) **Assignee:** **Mitch Prust**, Saint Paul, MN (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(58) **Field of Search** 709/206, 201, 709/217-219, 207, 203; 707/1, 10, 201

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,659,746	A	*	8/1997	Bankert et al.	707/205
5,748,896	A		5/1998	Daly et al.	
5,937,160	A	*	8/1999	Davis et al.	709/203
6,018,774	A	*	1/2000	Mayle et al.	709/250
6,044,205	A	*	3/2000	Reed et al.	709/201
6,072,982	A	*	6/2000	Haddad	725/93
6,216,168	B1		4/2001	Dev et al.	
6,256,666	B1	*	7/2001	Singhal	709/217
6,289,382	B1		9/2001	Bowman-Amuah	
6,308,164	B1	*	10/2001	Nummelin et al.	705/9
6,311,213	B2		10/2001	Dawson et al.	
6,327,608	B1	*	12/2001	Dillingham	709/203
6,356,863	B1		3/2002	Sayle	
6,356,941	B1		3/2002	Cohen	
6,363,384	B1		3/2002	Cookmeyer, II et al.	
6,366,987	B1		4/2002	Tzelnic et al.	
6,393,466	B1		5/2002	Hickman et al.	
6,397,261	B1	*	5/2002	Eldridge et al.	709/217
6,424,996	B1	*	7/2002	Killcommons et al.	709/206
6,449,688	B1		9/2002	Peters et al.	
6,453,325	B1		9/2002	Cabrera et al.	
6,466,978	B1		10/2002	Mukherjee et al.	
6,519,612	B1	*	2/2003	Howard et al.	707/200

FOREIGN PATENT DOCUMENTS

EP	0881587	A2	12/1998
EP	0881587	A3	6/2002
WO	94/18634		8/1994
WO	98/24025		6/1998

OTHER PUBLICATIONS

“Client Application for Integrating a Development Environment with a Web Distributed Authoring (WEBDAV) Server”, Research Disclosure, Kenneth mason Publications, Hampshire, GB, NR. 420, Page(s) 578-579, XP000888651, ISSN: 0374-4353, Apr. 1999.

Goals for a configuration management network protocol, Whitehead, E.J., System Configuration Management, 9th International Symposium. SCM-9, Proceedings, Toulouse, France Sep. 5-7, 1999, ISBN: 3-540-66484-X, 18 pages.
WebDAV: A Panacea for Collaborative Authoring?, Sussman, D., Siemens Corporate Research, Apr.-Jun. 1999, pp. 76-79.

(List continued on next page.)

Primary Examiner—David Wiley

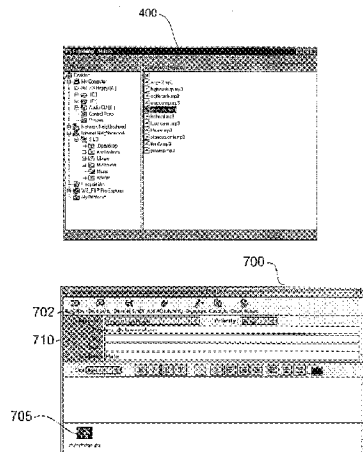
Assistant Examiner—Joseph E. Avellino

(74) *Attorney, Agent, or Firm*—Shumaker & Sieffert, P.A.

(57) **ABSTRACT**

A data storage system is described that provides seamless access to remote data storage areas via a global computer network. The data storage system includes one or more storage servers coupled to one or more storage devices. The storage devices provide a plurality of virtual storage areas, where each virtual storage area is assigned to a user. Access to the virtual storage areas is fully integrated with an operating system executing on a client computer such that the user, or software applications executing on the client computer, can seamlessly access the corresponding virtual storage area using standard file management routines provided by the operating system. In addition, the invention provides a wide range of other remote access methods to the virtual data storage areas including access via electronic mail.

24 Claims, 8 Drawing Sheets



OTHER PUBLICATIONS

World Wide Web Distributed Authoring and Versioning: Web DAV, Whitehead, E.J., WebDAV Information, Feb. 1999, pp. 1-2.

Requirements for Distributed Authoring and Versioning on the World Wide Web, Slein, J.A.; Vitali, F.; Whitehead, Jr., E.J.; Durand, D.G.; Standard View VI. 5, No. 1, Mar. 1997, ISSN: 1067-9936, pp. 17-24.

How to implement Web-based groupware systems based on WebDAV, Dridi, F.; Neumann, G., Enabling Technologies: Infrastructure for Collaborative Enterprises, Jun. 1999, Proceedings IEEE 8th, ISBN: 0-7695-0365-9, pp. 114-119.

Open Door Networks Introduces New Products for Apple-share Servers, pp. 1-2, Sep. 1997.

ShareWay IP 2.0, pp. 1-2, Feb. 1997.

Open Door Network Products Enhance MAC OS 8, p. 1, Aug. 1997.

U.S. patent application entitled, "Method and System for Seamless Access to a Remote Storage Area," Ser. No. 09/501,041, filed Feb. 9, 2000.

U.S. patent application entitled, "Remote Storage Area Having Multiple Access Interfaces," Ser. No. 09/500,868, filed Feb. 9, 2000.

International Search Report from Application No. PCT/US 01/04352 mailed Oct. 9, 2003 (3 pages).

<http://www.webdav.org>—WebDAV Resources, pp. 1-3, printed Jun. 15, 2000.

[@ Backup@](http://www.backup.com), p. 1, printed Jun. 15, 2000.

<http://www.bitlocker.com>—Bitlocker, p. 1, printed Jun. 15, 2000.

<http://www.datahubonline.com>—datahubonline.com, p. 1, printed Jun. 15, 2000.

<http://www.diskonnet.com>—DiskOnNet.com, p. 1, printed Jun. 15, 2000.

<http://www.docspace.com>—Critical Path Inc., p. 1, printed Jun. 15, 2000.

<http://www.driveway.com>—Driveway Corporation, p. 1, printed Jun. 15, 2000.

<http://www.itools.mac.com>—Apple—iTools, p. 1, printed Jun. 15, 2000.

<http://www.filemonkey.com>—File Monkey Software Development Services, p. 1, printed Jun. 15, 2000.

<http://www.freedrive.com>—FreeDrive, Inc, p. 1, printed Jun. 15, 2000.

<http://www.xinet.com>—Xinet, Inc., p. 1, printed Jun. 15, 2000.

* cited by examiner

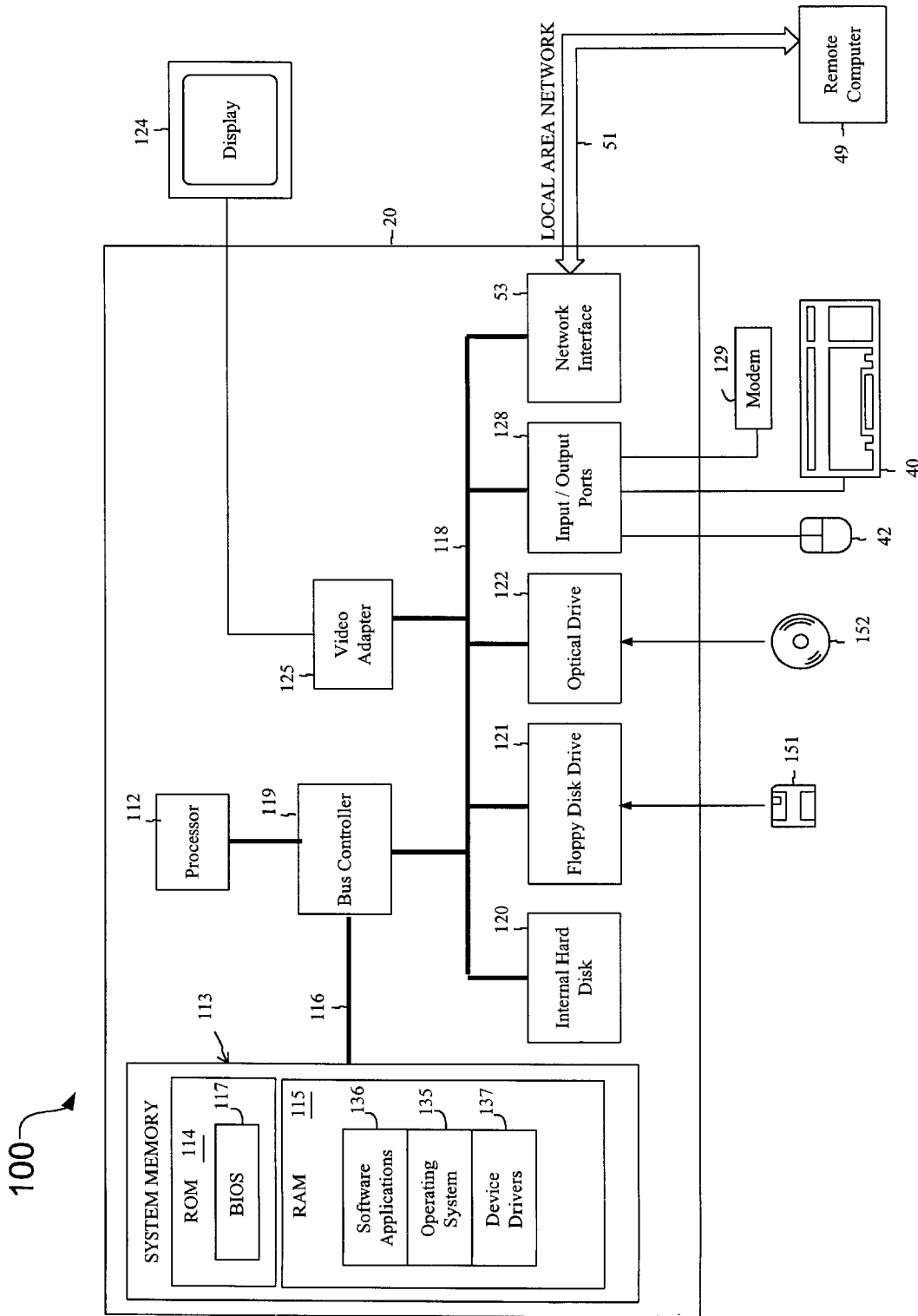


FIG. 1

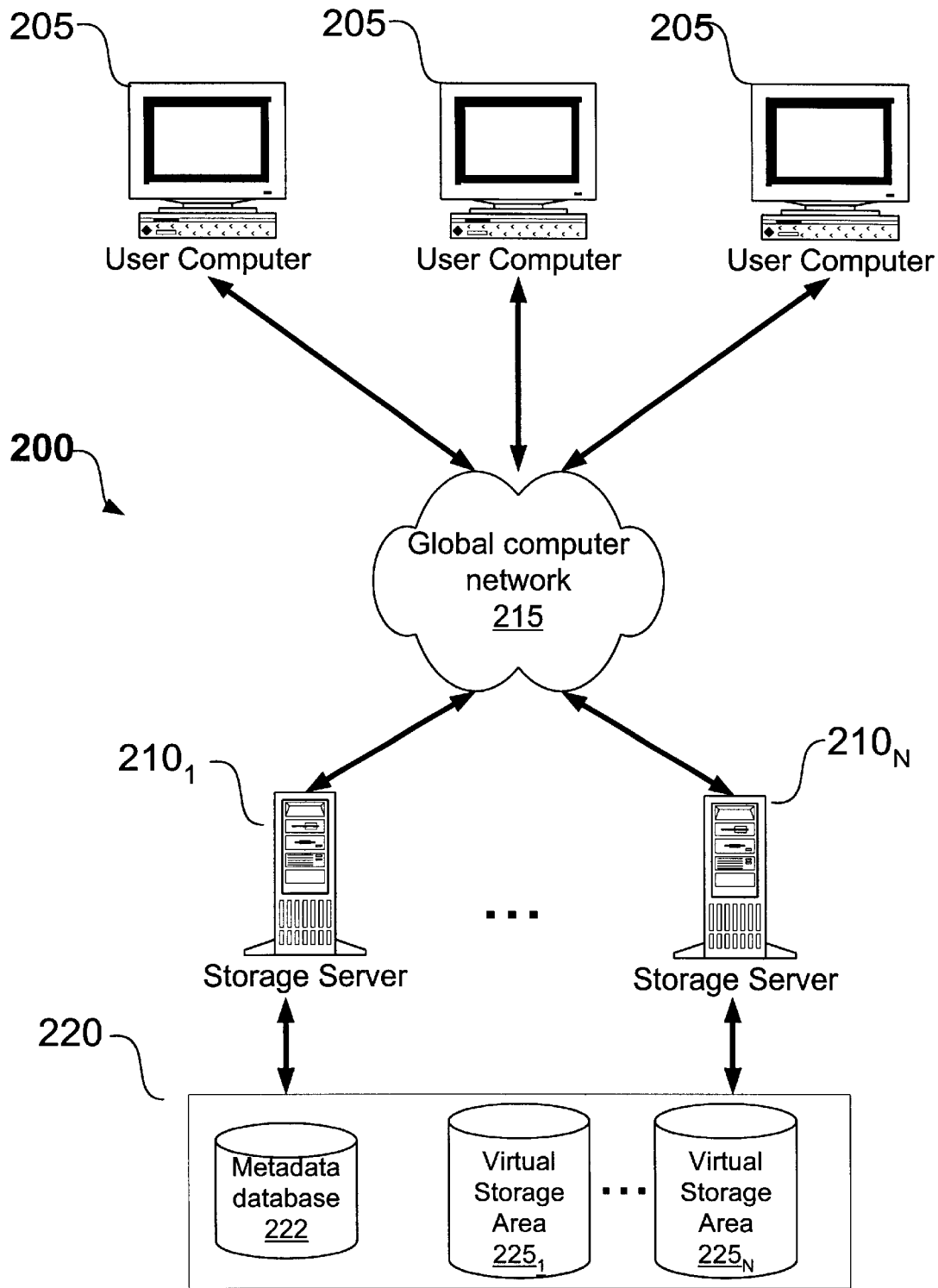


FIG. 2

300

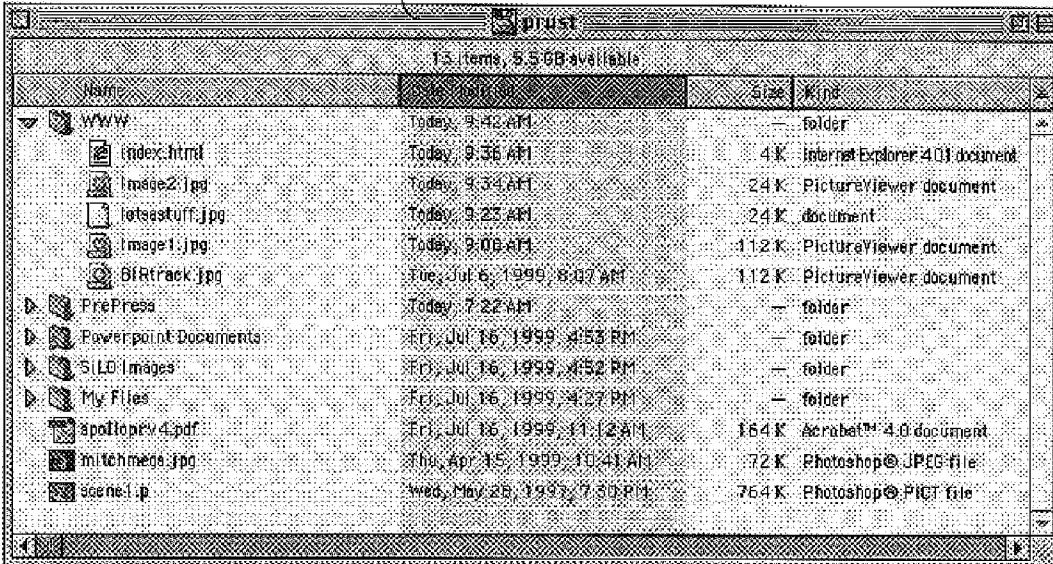


FIG. 3

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