

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 December 2005 (01.12.2005)

PCT

(10) International Publication Number
WO 2005/114371 A3

- (51) International Patent Classification:
G06F 3/06 (2006.01)
- (21) International Application Number:
PCT/EP2005/052191
- (22) International Filing Date: 12 May 2005 (12.05.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/845,699 14 May 2004 (14.05.2004) US
- (71) Applicant (for all designated States except US): **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, New York 10504 (US).
- (71) Applicant (for MG only): **IBM UNITED KINGDOM LIMITED** [GB/GB]; PO Box 41 North Harbour, Portsmouth Hampshire PO6 3AU (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KISHI, Gregory, Tad** [US/US]; 861 West Annandale Way, Oro Valley, Arizona 85737 (US). **PEAKE, Jonathan, Wayne** [US/US]; 3778 North Sabino Ridge Place, Tucson, Arizona 85750 (US).

(74) Agent: **WALDNER, Philip**; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester Hampshire SO21 2JN (GB).

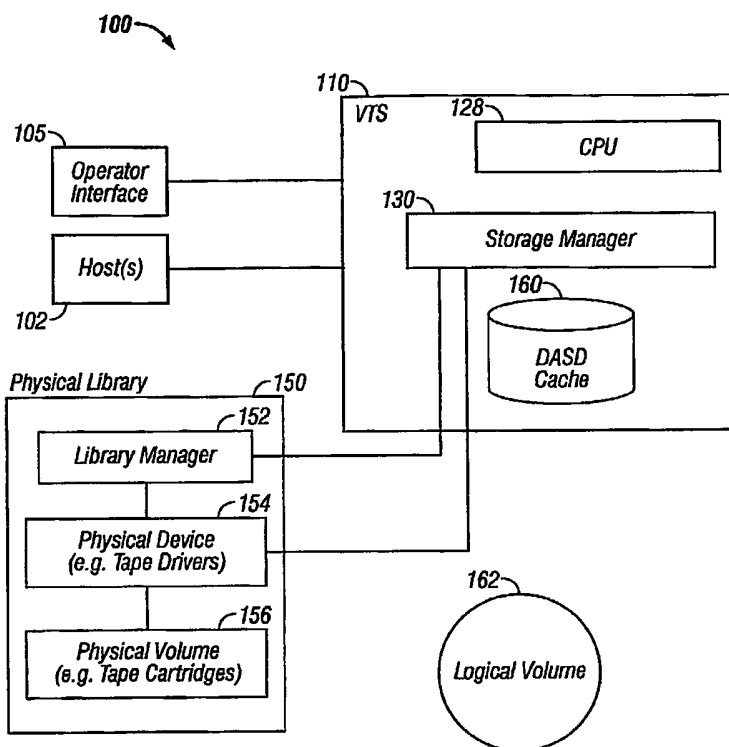
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: DYNAMIC LOADING OF VIRTUAL VOLUME DATA IN A VIRTUAL TAPE SERVER



(57) Abstract: Disclosed are a system, a method, and article of manufacture to provide for obtaining data storage device specific information from a data storage device using standard read/write commands. This method uses a host application to write a unique sequence of records to a logical volume of the data storage device. The data storage device detects the unique sequence of records for the logical volume and writes device specific information to the logical volume allowing the host application the ability to read the data storage device specific information using a read command for the logical volume.

WO 2005/114371 A3



(88) Date of publication of the international search report:

11 May 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/052191

A. CLASSIFICATION OF SUBJECT MATTER G06F3/06		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) G06F		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 058 455 A (ISLAM ET AL) 2 May 2000 (2000-05-02)	1-3,5, 7-12, 14-17
A	column 1, line 14 - line 18 column 4, line 13 - line 46 column 5, line 11 - line 47 column 5, line 64 - column 6, line 7 column 7, line 7 - line 38; figure 1; table 1 column 9, line 1 - line 49; figures 1,3	4,6,13
A	WO 03/014909 A (INTERNATIONAL BUSINESS MACHINES CORPORATION; IBM UNITED KINGDOM LIMITE) 20 February 2003 (2003-02-20) abstract; figure 2	4,6,11, 13
<input type="checkbox"/> Further documents are listed in the continuation of box C.		
<input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family	
Date of the actual completion of the international search 22 December 2005	Date of mailing of the international search report 12/01/2006	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Limacher, R	

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/052191

Patent document cited in search report	A	Publication date		Patent family member(s)	Publication date
US 6058455	A	02-05-2000	US	6282670 B1	28-08-2001
			US	6282619 B1	28-08-2001
WO 03014909	A	20-02-2003	CA	2451048 A1	20-02-2003
			CN	1539100 A	20-10-2004
			EP	1415221 A2	06-05-2004
			JP	2004538569 T	24-12-2004
			TW	591489 B	11-06-2004
			US	2003037184 A1	20-02-2003