

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
9 November 2006 (09.11.2006)

PCT

(10) International Publication Number  
WO 2006/117329 A3

(51) International Patent Classification:  
G06F 3/06 (2006.01) G06F 12/08 (2006.01)

(74) Agent: WILLIAMS, Julian, David; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester Hampshire SO21 2JN (GB).

(21) International Application Number:  
PCT/EP2006/061897

(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, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, 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.

(22) International Filing Date: 27 April 2006 (27.04.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
11/119,968 2 May 2005 (02.05.2005) US

(71) Applicant (for all designated States except US): INTERNATIONAL BUSINESS MACHINES CORPORATION [US/US]; New Orchard Road, Armonk, New York 10504 (US).

(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, LV, 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).

(71) Applicant (for MG only): IBM UNITED KINGDOM LIMITED [GB/GB]; PO Box 41, Portsmouth Hampshire PO6 3AU (GB).

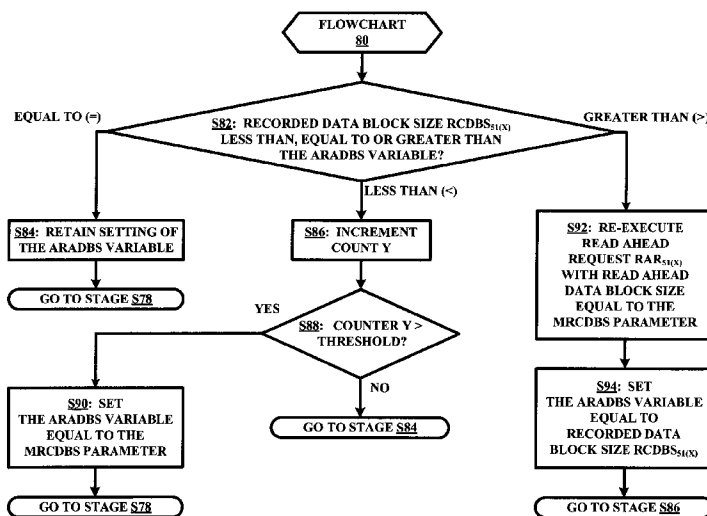
(72) Inventors; and

(75) Inventors/Applicants (for US only): BEESTON, Ralph [US/US]; 7640 South Avenida De Belleza, Tucson, Arizona 85747 (US). SMITH, Cory [US/US]; 9029 E Calle Diego, Tucson, Arizona 85710 (US).

Published:  
— with international search report

[Continued on next page]

(54) Title: ADAPTIVE READ AHEAD METHOD OF DATA RECORDED ON A SEQUENTIAL MEDIA READABLE VIA A VARIABLE DATA BLOCK SIZE STORAGE DEVICE



(57) Abstract: A read request of a sequential media from a host is executed with a read request data block size equal to a maximum recorded data block size parameter of the variable data block size storage device. Subsequently, if warranted, an adaptive read ahead data block size variable is set to equal a recorded data block size of data recorded on the sequential media that is responsive to the execution of the read request, and one or more read ahead requests of the sequential media are executed with a read ahead data block size equal to the adaptive read ahead data block size variable. The adaptive read ahead data block size variable is conditionally adjusted based on the recorded data block size(s) of data recorded on the sequential media that is responsive to the execution (s) of the read ahead request (s).

WO 2006/117329 A3



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*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.*

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

25 January 2007

## INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2006/061897

A. CLASSIFICATION OF SUBJECT MATTER  
 INV. G06F3/06 G06F12/08

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, COMPENDEX, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 955 574 A2 (HEWLETT PACKARD CO [US]) 10 November 1999 (1999-11-10) figures 2-6 paragraph [0007] paragraph [0014] - paragraph [0030]	1-21
A	US 5 608 875 A (MORI YOSHIAKI [JP]) 4 March 1997 (1997-03-04) figures 4,6,7 column 5, line 26 - line 65 column 6, line 29 - column 8, line 19 ----- -/--	1-21

Further documents are listed in the continuation of Box C.

See patent family 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

6 November 2006

Date of mailing of the international search report

20/11/2006

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

ANDLAUER, J

## INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2006/061897

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	"Information technology - SCSI-3 Stream Commands (SSC)"[Online] January 2000 (2000-01), page I-X,1-94, XP002405750 Retrieved from the Internet: URL:http://www.t10.org/ftp/t10/drafts/ssc/ ssc-r22.pdf> [retrieved on 2006-10-23] page 32 - page 34 -----	1-21
A	MARK DALRYMPLE: "STUC on You"[Online] 8 January 2005 (2005-01-08), pages 1-9, XP002405751 Retrieved from the Internet: URL:http://web.archive.org/web/20050207105 642/http://borkware.com/rants/stuc-on-you/ > [retrieved on 2006-10-23] page 7, line 5 - line 22 -----	1-21

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2006/061897

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0955574	A2	10-11-1999	JP	3133991 B2		13-02-2001
			JP	11353122 A		24-12-1999
			US	6112261 A		29-08-2000
<hr/>						
US 5608875	A	04-03-1997	JP	2576775 B2		29-01-1997
			JP	7105084 A		21-04-1995
<hr/>						