

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
5 June 2008 (05.06.2008)

PCT

(10) International Publication Number  
WO 2008/066605 A3

## (51) International Patent Classification:

G06F 12/00 (2006.01) G06F 11/30 (2006.01)  
G06F 1/26 (2006.01)

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## (21) International Application Number:

PCT/US2007/021692

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## (22) International Filing Date: 9 October 2007 (09.10.2007)

(25) Filing Language: English

(26) Publication Language: English

## (30) Priority Data:

11/604,631 27 November 2006 (27.11.2006) US

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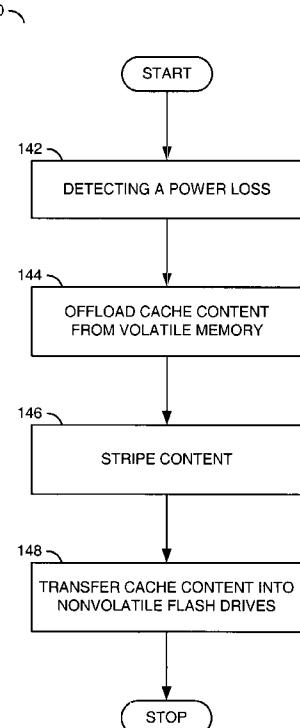
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,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

[Continued on next page]

(54) Title: SYSTEM FOR OPTIMIZING THE PERFORMANCE AND RELIABILITY OF A STORAGE CONTROLLER CACHE OFFLOAD CIRCUIT

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(57) **Abstract:** A method for offloading a cache memory is disclosed (140). The method generally includes the steps of (A) reading all of a plurality of cache lines from the cache memory in response to an assertion of a signal to offload of the cache memor (144), (B) generating a plurality of blocks by dividing the cache lines in accordance with a RAID configuration (146) an (C) writing the blocks among a plurality of nonvolatile memories in the RAID configuration, wherein each of the nonvolatile memories has a write bandwidth less than a read bandwidth of the cache memory (148).

FIG. 3



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, MT, 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*

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

18 September 2008

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/21692

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06F 12/00( 2006 01), I/26( 2006 01), II/30( 2006 01)

USPC: 711/14; 713/300,340

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)

U.S. : 711/14; 713/300, 340

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 practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/0107005 A1 (Philippe Andre et al ) 18 May 2006 , Figures 1 and 3, Paragraphs [0023], [0049], [0056], [0059]-[0060], [0070]-[0071], [0087]-[0088]	1-15, 17-20
Y	US 2006/0265624 A1 (Moshayedi et al.) 23 November 2006, Figure 2 Claim 7	16

Further documents are listed in the continuation of Box C.

See patent family annex

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Date of the actual completion of the international search 05 June 2008 (05 06 2008)	Date of mailing of the international search report 9 3 JUL 2008
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner of Patents P O Box 1450 Alexandria, Virginia 22313-1450 Facsimile No (571) 273-3201	Authorized officer Reginald G. Bragdon Telephone No (571) 270-1038 EBORAH A. THOMAS PARALEGAL SPECIALIST 