(19) World Intellectual Property Organization

International Bureau







(10) International Publication Number WO 2009/158183 A3

(51) International Patent Classification: G06F 12/08 (2006.01) G06F 13/16 (2006.01)

(21) International Application Number:

PCT/US2009/046731

(22) International Filing Date:

9 June 2009 (09.06.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/215,093

25 June 2008 (25.06.2008)

US

- (71) Applicant (for all designated States except US): INTEL CORPORATION [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): TETRICK, R., Scott [US/US]; 2986 Nw 127th Avenue, Portland, OR 97229 (US). JUENEMANN, Dale [US/US]; 36060 Nw Three Cedars Lane, North Plains, OR 97133 (US). HOWES, Jordan [US/US]; 801 D St., Apt 10, Davis, CA 95616 (US). MATTHEWS, Jeanna [US/US]; P.o. Box 6356, Massena, NY 13662 (US). WELLS, Steven [US/US]; 4236 Weathervane Court, El Dorado Hills, CA 95762 (US). HINTON, Glenn [US/US]; 6130 Nw 185th Ave., Portland, OR 97229 (US). PINTO, Oscar [IN/US]; 6194 Nw Snowlily Dr., Portland, OR 97229 (US).
- Agent: VINCENT, Lester, J.; Blakely Sokoloff Taylor & Zafman, 1279 Oakmead Parkway, Sunnyvale, CA 94085 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- **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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, 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 (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

25 February 2010

(54) Title: APPARATUS AND METHOD FOR CACHE UTILIZATION

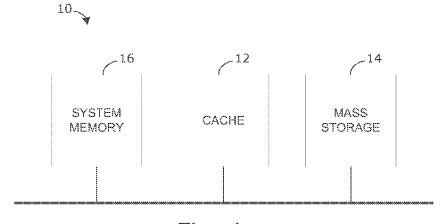


Fig. 1

(57) Abstract: In some embodiments, an electronic system may include a cache located between a mass storage and a system memory, and code stored on the electronic system to prevent storage of stream data in the cache and to send the stream data directly between the system memory and the mass storage based on a comparison of first metadata of a first request for first information and pre-boot stream information stored in a previous boot context. Other embodiments are disclosed and claimed.





International application No. **PCT/US2009/046731**

A. CLASSIFICATION OF SUBJECT MATTER

G06F 12/08(2006.01)i, G06F 13/16(2006.01)i

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 12/08; G06F 11/00; G06F 13/00; G06F 7/00; G06F 9/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models since 1975.

Japanese utility models and applications for utility models since 1975.

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: "cache", "stream", "boot"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	US 7360015 B2 (MATTHEWS, J. N. et al.) 15 April 2008 See Abstract; Claims 1-12; and Figures 1, 2.	1-20
A	US 2004-0255106 A1 (ROTHMAN, M. A. et al.) 16 December 2004 See Abstract; Claims 1, 14, 15; and Figures 1-3.	1-20
A	US 2002-0099971 A1 (MERKIN, C. M. et al.) 25 July 2002 See Abstract; Claims 1-8; and Figures 1-3.	1-20
A	US 2004-0267708 A1 (ROTHMAN, M. A. et al.) 30 December 2004 See Abstract; Claims 1, 2; and Figures 1-3.	1-20

	Further documents are	listed in the	e continuation of Box	хC.
--	-----------------------	---------------	-----------------------	-----

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 application or patent 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 citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- "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 mailing of the international search report

Date of the actual completion of the international search

30 DECEMBER 2009 (30.12.2009)

0.4 * 4.3 * 4.4 * 6

04 JANUARY 2010 (04.01.2010)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

LEE, Sang Hun

Telephone No. 82-42-481-5914



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2009/046731

Information on patent family members			PCT/US2009/046731	
Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 7360015 B2	15.04.2008	US 2005-0251630 A1	10.11.2005	
JS 2004-0255106 A1	16.12.2004	None		
US 2002-0099971 A1	25.07.2002	US 6826710 B2	30.11.2004	
JS 2004-0267708 A1	30.12.2004	None		