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(54) Title: DYNAMIC MEMORY CACHE SIZE ADJUSTMENT IN A MEMORY DEVICE

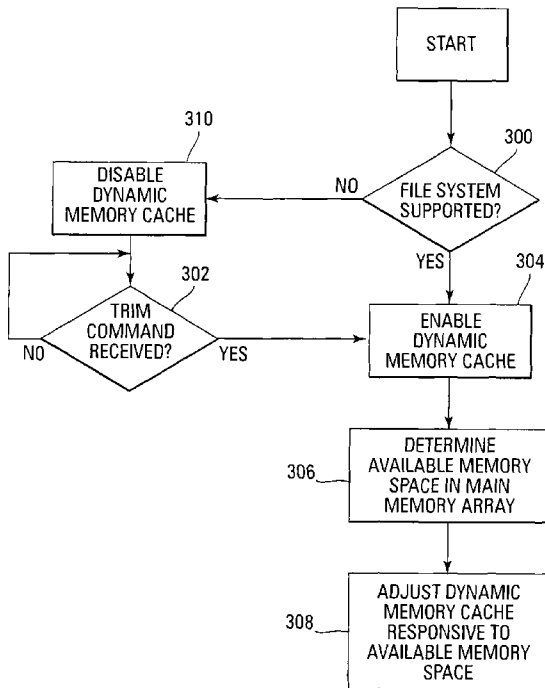


FIG. 3

(57) Abstract: Methods for dynamic memory cache size adjustment, enabling dynamic memory cache size adjustment, memory devices, and memory systems are disclosed. One such method for dynamic memory cache size adjustment determines available memory space in a memory array and adjusts a size of a memory cache in the memory array responsive to the available memory space.





UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2012/036923****A. CLASSIFICATION OF SUBJECT MATTER****G06F 12/08(2006.01)i, G11C 16/06(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 12/02; G06F 12/16; G11C 11/34; G11C 16/02; G06F 12/00

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  
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords: flash memory, SLC, MLC, dynamic, cache

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010-0122016 A1 (MAROTTA GIULIO et al.) 13 May 2010 See abstract, paragraphs [0019],[0020],[0031],[0032],[0061], claims 1,2 and figures 1,3,4.	1,3-10,14,15,17-19
A		2,11-13,16
A	JP 2009-217630 A (TOSHIBA CORP) 24 September 2009 See abstract, paragraphs [0014]-[0016],[0022],[0023],[0064]-[0066], claim 1 and figures 1,2.	1-19
A	US 2010-0042773 A1 (YEH CHIH-KANG) 18 February 2010 See abstract, paragraph [0030], claim 8 and figures 1,4.	1-19
A	US 2007-0285980 A1 (TAKAHIRO SHIMIZU et al.) 13 December 2007 See abstract, paragraph [0071], claim 1 and figures 1,5.	1-19

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

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"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

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"&amp;" document member of the same patent family

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2012/036923**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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