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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2018/031766**A. CLASSIFICATION OF SUBJECT MATTER****G11C 11/419(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)

G11C 11/419; G01R 31/08; G06F 13/00; G06F 13/40; G11C 16/04; G11C 8/00

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) & Keywords: bank, memory cell, internal bus, external bus interface, bank-to-bank (BBT) transfer bus, controller, address comparator, command

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004-0027857 A1 (TSUKASA OOISHI) 12 February 2004 See paragraphs [0084]-[0104], [0224], [0238], [0244], [0264]; and figures 5, 7, 20, 23.	1-19
Y	US 2010-0287326 A1 (SHU-HSUAN CHOU et al.) 11 November 2010 See paragraphs [0019]-[0035]; and figures 2A, 4A, 6A-6F, 9.	1-19
A	US 6658509 B1 (RANDY M. BONELLA et al.) 02 December 2003 See column 4, lines 35-67; and figures 4-5.	1-19
A	US 2005-0047255 A1 (BYUNG-IL PARK et al.) 03 March 2005 See paragraphs [0039]-[0067]; and figures 4-7.	1-19
A	US 2003-0002378 A1 (TOSHIYA UCHIDA et al.) 02 January 2003 See paragraphs [0172]-[0178]; claim 10; and figure 13.	1-19



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 application or patent but published on or after the international filing date

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"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

09 November 2018 (09.11.2018)

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2018/031766

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004-0027857 A1	12/02/2004	JP 2004-071066 A JP 4225749 B2 US 6922359 B2	04/03/2004 18/02/2009 26/07/2005
US 2010-0287326 A1	11/11/2010	US 7987313 B2	26/07/2011
US 6658509 B1	02/12/2003	None	
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