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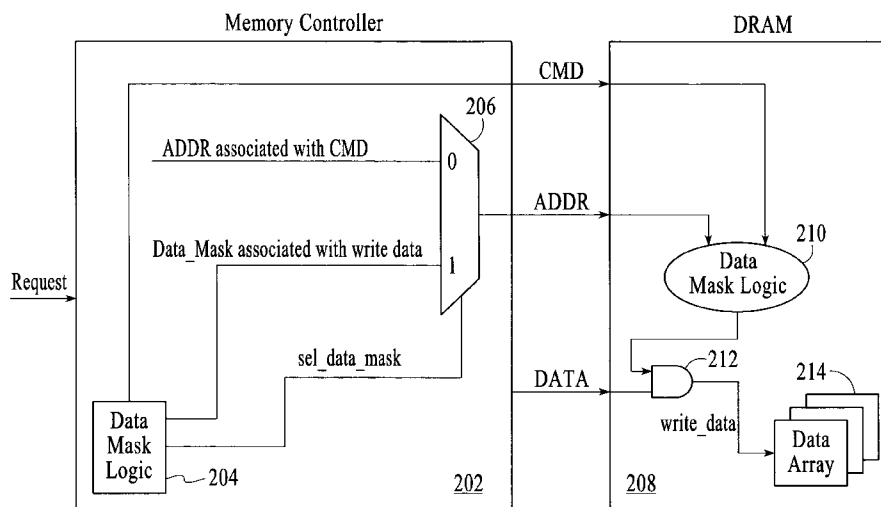
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(54) Title: WRITE DATA MASK METHOD AND SYSTEM



(57) Abstract: In various embodiments, dedicated mask pins are eliminated by sending a data mask on address lines of the interface. A memory controller receives a request for a memory write operation from a memory client and determines the granularity of the write data from a write data mask sent by the client. Granularity, as used herein, indicates a quantity of write data to which each bit of the received write data mask applies. In an embodiment, the memory controller generates a particular write command and a particular write data mask based on the granularity of the write data. The write command generated is typically the most efficient of several write commands available, but embodiments are not so limited. The write command is transmitted on command lines of the interface, and the write data mask is transmitted on address lines of the interface.

WO 2008/024336 A3

**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. G06F13/16 G11C7/10 G11C7/22

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 G11C

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 5 224 214 A (ROSICH MITCHELL N [US]) 29 June 1993 (1993-06-29) abstract  column 4, line 4 - column 6, line 49 figures 2,4	1,2, 19-32,35 3,4,7,8, 33,34
X	US 6 535 965 B1 (IKEDA HITOSHI [JP] ET AL) 18 March 2003 (2003-03-18) abstract column 1, line 40 - column 2, line 29 column 3, line 66 - column 5, line 17	1
Y	US 5 703 810 A (NAGY MICHAEL [US]) 30 December 1997 (1997-12-30) abstract column 1, line 39 - column 2, line 14 column 3, line 14 - line 30	3,4,7,8, 33,34

Further documents are listed in the continuation of Box C.

See patent family annex.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5224214	A	29-06-1993	NONE
US 6535965	B1	18-03-2003	JP 2001035153 A 09-02-2001
US 5703810	A	30-12-1997	NONE