(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 29 September 2005 (29.09.2005)

PCT

(10) International Publication Number WO 2005/089418 A3

(51) International Patent Classification: G06F 13/12 (2006.01) G06F 13/38 (2006.01)

(21) International Application Number:

PCT/US2005/008865

(22) International Filing Date: 16 March 2005 (16.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/804,608 18 March 2004 (18.03.2004)

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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, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, 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, MC, 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).

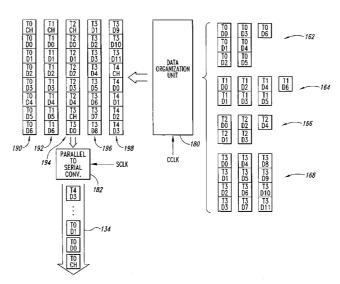
Published:

with international search report

(88) Date of publication of the international search report: 7 December 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR ORGANIZING DATA TRANSFERS WITH MEMORY HUB MEMORY MODULES



(57) Abstract: A memory system includes a memory hub controller coupled to a plurality of memory modules each of which includes a memory hub. The memory hubs each include a transmit interface having a data organization system that organizes a command header and data for each of a plurality of memory transactions into lane groups each of which contain a predetermined number of lanes. Each of the lanes contains either parallel command header bits or parallel data bits. The lane groups are then converted to a serial stream of lanes and transmitted from the memory hubs through a high-speed bus. The lane groups are organized so that they are always filled with lanes containing either a command header or data. As a result, the high-speed bus is never idle during transmission of memory transactions from the memory hub thereby maximizing the memory bandwidth of the memory system.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/08865

A. CLASSIFICATION OF SUBJECT MATTER PC: G06F 13/12(2006.01),13/38(2006.01)					
USPC: 710/71 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.: 710/71					
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)					
	UMENTS CONSIDERED TO BE RELEVANT	······································			
Category *	Citation of document, with indication, where a			Relevant to claim No.	
A	US 2003/0229770 A1 (JEDDELOH) 11 December 2003 (11.12.2003)			1-48	
A	Figures 1-3 US 5,748,629 (CALDARA et al) 5 May 1998 (05.05.1998) Fig. 1; Fig. 6			1-48	
	col. 2, II. 57-67; col. 3, II. 4-10; col. 3, II. 28-33; col. 6, II. 11-17				
A	US 6,778,546 (EPPS et al) 17 August 2004 (17,08,2004), Fig. 2-3; Fig. 11 col. 25, ll. 46-51; col. 6, ll. 1-12; col. 7, ll. 13-20; col. 15, ll. 8-21			5, 7-9, 16, 18-20, 26- 27, 33 and 35-37	
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"P" document published prior to the international filing date but later than the priority date claimed		"&"	document member of the same patent family		
Date of the actual completion of the international search Date			Date of mailing of the international search report		
08 August 2006 (08.08.2006)			6 SEP 2006		
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Facsimile No. (571) 273-3201
Form PCT/ISA/210 (second sheet) (July 1998)