

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number  
**WO 2005/091762 A3**

(51) International Patent Classification<sup>7</sup>: **G06F 13/00**

(21) International Application Number:  
PCT/US2005/002342

(22) International Filing Date: 24 January 2005 (24.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/791,312 1 March 2004 (01.03.2004) US

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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).

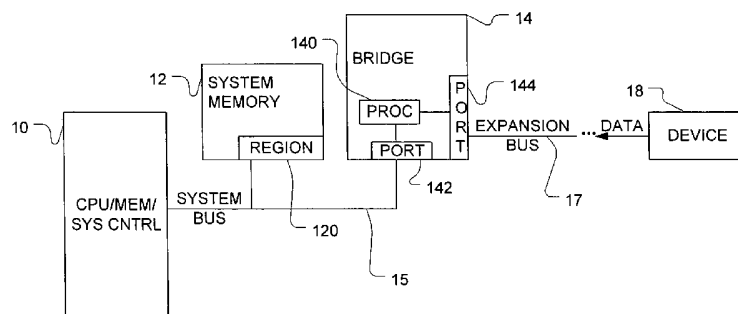
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
20 April 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: INTELLIGENT PCI BRIDGING CONSISTING OF PREFETCHING ALL DATA PRIOR TO SENDING DATA TO REQUESTING DEVICE



(57) Abstract: A bridging device has at least two ports. The first port allows the device to communicate with devices on an expansion bus and at least one other port to allow the bridge to communicate with a system memory on a system bus or other devices on another expansion bus. The device is capable of identifying at least two regions in memory, a descriptor region and a data region. A descriptor provides information about segments of data in the data region. The bridge may detect descriptors read from the memory, extract information related to data associated with those descriptors and use this information to perform prefetching of data from the system memory.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/02342

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 13/00

US CL : 710/300,307,315,313

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. : 710/300,307,315,313

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)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,E	US 6,973,528 B2 (Bronson et al.) 06 December 2005, see entire document.	1-20
Y	US 6,463,483 B1 (Imperiali) 08 October 2002, see entire document.	1-20
Y,P	US 6,766,511 B1 (Berry et al.) 20 July 2004, see entire document.	2,10,13,17
Y	US 5,815,662 A (Ong) 29 September 1998, see entire document.	15
A	US 5,649,161 A (Andrade et al.) 15 July 1997.	1-28
A	US 5,737,765 A (Shigeeda) 07 April 1998.	1-28

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

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"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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Date of the actual completion of the international search

10 February 2006 (10.02.2006)

Date of mailing of the international search report

22 FEB 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/02342

Continuation of Item 4 of the first sheet:

INTELLIGENT PCI BRIDGING CONSISTING OF PREFETCHING ALL DATA PRIOR TO SENDING DATA TO REQUESTING  
DEVICE

Continuation of B. FIELDS SEARCHED Item 3:

USPAT;US-PGPUB;USOCR;EPO;JPO;DERWENT;IBM\_TDB

peripheral,component,interconnect,descriptor,determin\$3,table,hash,data,size,address,length,decoder,circuit