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United States Patent [19]

Lambrecht

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[54]	SYSTEM AND METHOD FOR TRANSFERRING DATA STREAMS
	SIMULTANEOUSLY ON MULTIPLE BUSES IN A COMPUTER SYSTEM

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[73] Assignee: Advanced Micro Devices, Inc.,

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[52] **U.S. Cl.** **395/308**; 395/306; 395/841;

395/847, 841, 855, 858, 309, 281, 822, 840, 162, 163, 200.09, 154, 200.04, 200.12; 370/85.13, 85.9, 85.11; 364/514; 463/43

[56] References Cited

U.S. PATENT DOCUMENTS

4,245,344	1/1981	Richter 371/68.1	
4,991,169	2/1991	Davis et al	
5,072,442	12/1991	Todd 370/265	
5,208,745	5/1993	Quentin et al	
5,245,322	9/1993	Dinwiddie, Jr. et al	
5,274,763	12/1993	Banks.	
5,274,784	12/1993	Arimilli et al 395/306	
5,325,423	6/1994	Lewis .	
5,345,566	9/1994	Tanji et al 395/308	
5,404,463	4/1995	McGarvey 395/308	
5,404,465	4/1995	Novakovich et al 395/308	
5,450,551	9/1995	Amini et al.	
5,487,167	1/1996	Dinallo et al	

5,502,824 5,519,839 5,526,017 5,530,902 5,533,205 5,557,757 5,564,001	5/1996 6/1996 6/1996 7/1996 9/1996	Heil
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OTHER PUBLICATIONS

PCI Local Bus — PCI Multimedia Design Guide — Revision 1.0 — Mar. 29, 1994, 43 pages.

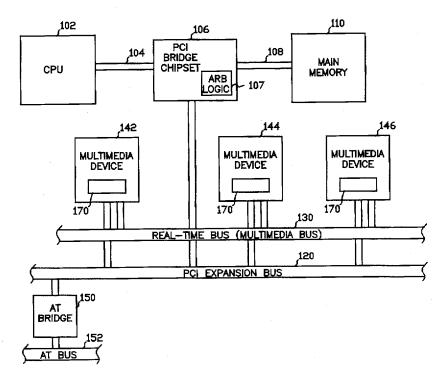
Primary Examiner—Jack B. Harvey Assistant Examiner—Ario Etienne

Attorney, Agent, or Firm—Conley, Rose & Tayon; Jeffrey C. Hood

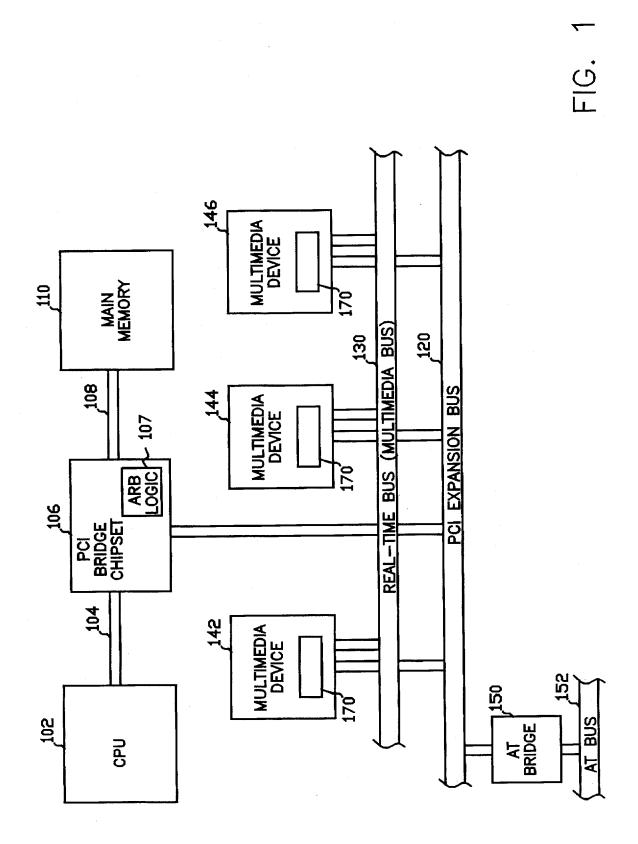
[57] ABSTRACT

A computer system optimized for real-time applications which provides increased performance over current computer architectures. The system includes a standard local system bus, such as the PCI bus, and also includes a dedicated real-time bus or multimedia bus. Thus multimedia devices such as video cards, audio cards, etc., as well as communications devices, transfer real-time data through a separate bus without requiring arbitration for the PCI bus. The computer system of the present invention thus provides much greater performance for real-time applications than prior systems. In various embodiments, multimedia devices transmit addressing and control information for a multimedia bus transfer either over the PCI bus or using a separate serial control channel. The multimedia bus may also comprise separate multimedia channels for different data types. Methods are also disclosed for transferring periodic multimedia data over the multimedia bus.

8 Claims, 25 Drawing Sheets







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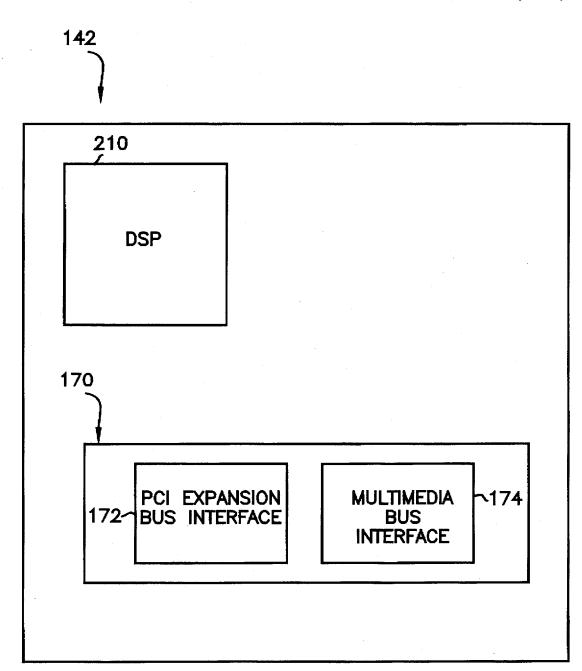


FIG. 2

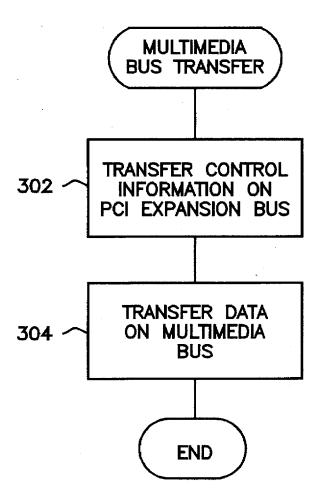


FIG. 3A

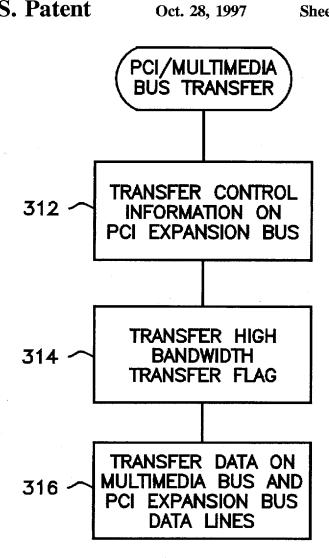


FIG. 3B

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