



US005797028A

United States Patent [19] Gulick et al.

[11] Patent Number: **5,797,028**
[45] Date of Patent: **Aug. 18, 1998**

[54] **COMPUTER SYSTEM HAVING AN IMPROVED DIGITAL AND ANALOG CONFIGURATION**

5,210,806 5/1993 Kihara et al. 381/103
5,434,913 7/1995 Tung et al. 379/202
5,592,391 1/1997 Muyschondt et al. 364/489

[75] Inventors: **Dale E. Gulick; Andy Lambrecht; Mike Webb; Larry Hewitt**, all of Austin; **Brian Barnes**, Round Rock, all of Tex.

OTHER PUBLICATIONS

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

[73] Assignee: **Advanced Micro Devices, Inc.**, Sunnyvale, Calif.

Primary Examiner—John E. Harrity
Attorney, Agent, or Firm—Conley, Rose & Tayon; Jeffrey C. Hood

[21] Appl. No.: **526,488**

[57] ABSTRACT

[22] Filed: **Sep. 11, 1995**

A computer system including separate digital and analog system chips which provides increased performance over current computer architectures. The computer system of the present invention includes a digital system chip which performs various digital functions, including multimedia functions and chipset functions, and a separate analog chip which performs analog functions, including digital to analog and analog to digital conversions. Thus the present invention optimizes silicon use and design by splitting up digital and analog functions on separate chips. The system of the present invention also separates digital noise from analog noise, allowing a higher degree of integration while increasing stability.

[51] Int. Cl.⁶ **G06F 15/00**

[52] U.S. Cl. **395/800.32; 364/228.6; 364/DIG. 1**

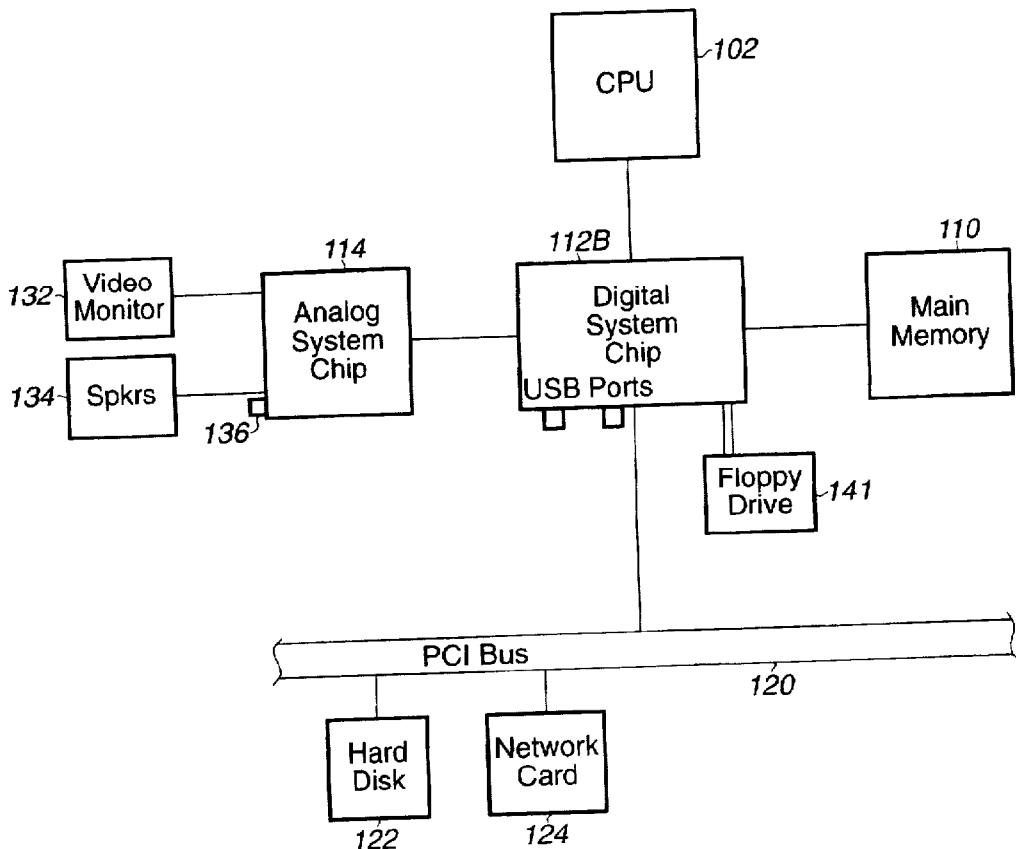
[58] Field of Search **395/800, 800.32, 395/800.35, 800.01; 364/489, 228.6, DIG. 1**

[56] References Cited

U.S. PATENT DOCUMENTS

4,742,544 5/1988 Kupnicki et al. 380/14
5,027,214 6/1991 Fujimori 348/233
5,091,951 2/1992 Ida et al. 381/63
5,111,409 5/1992 Gasper et al. 395/807

32 Claims, 11 Drawing Sheets



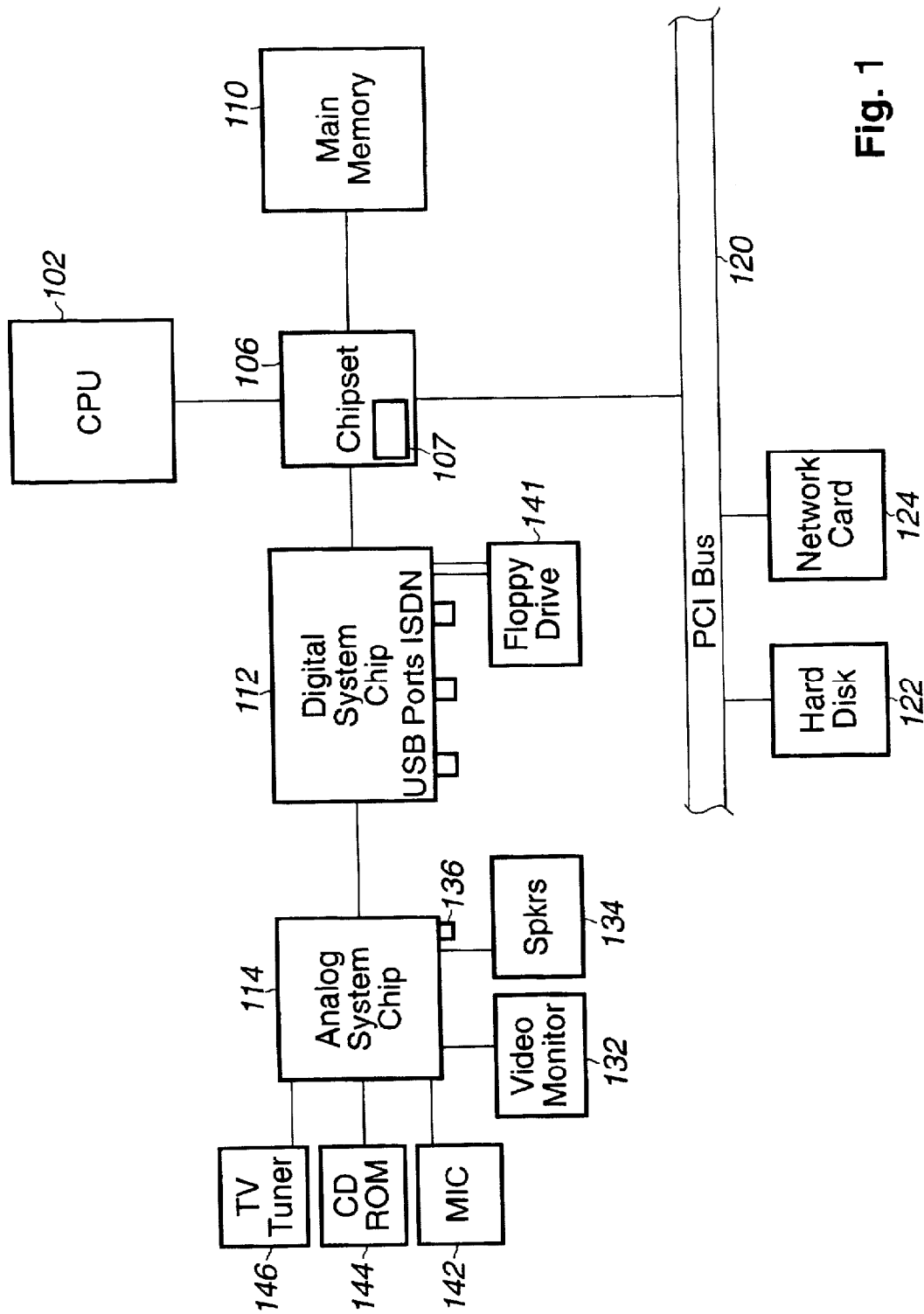


Fig. 1

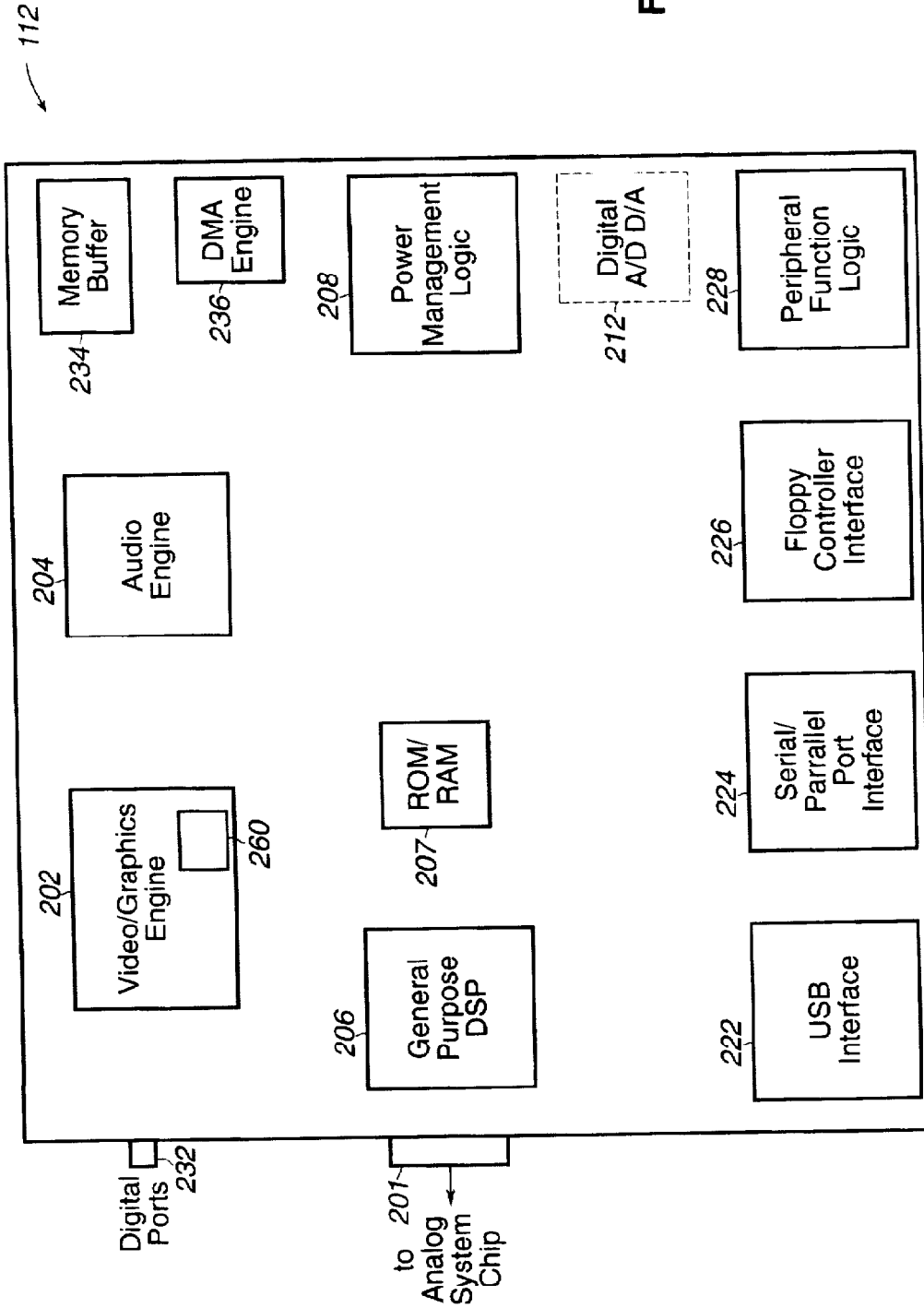


Fig. 2

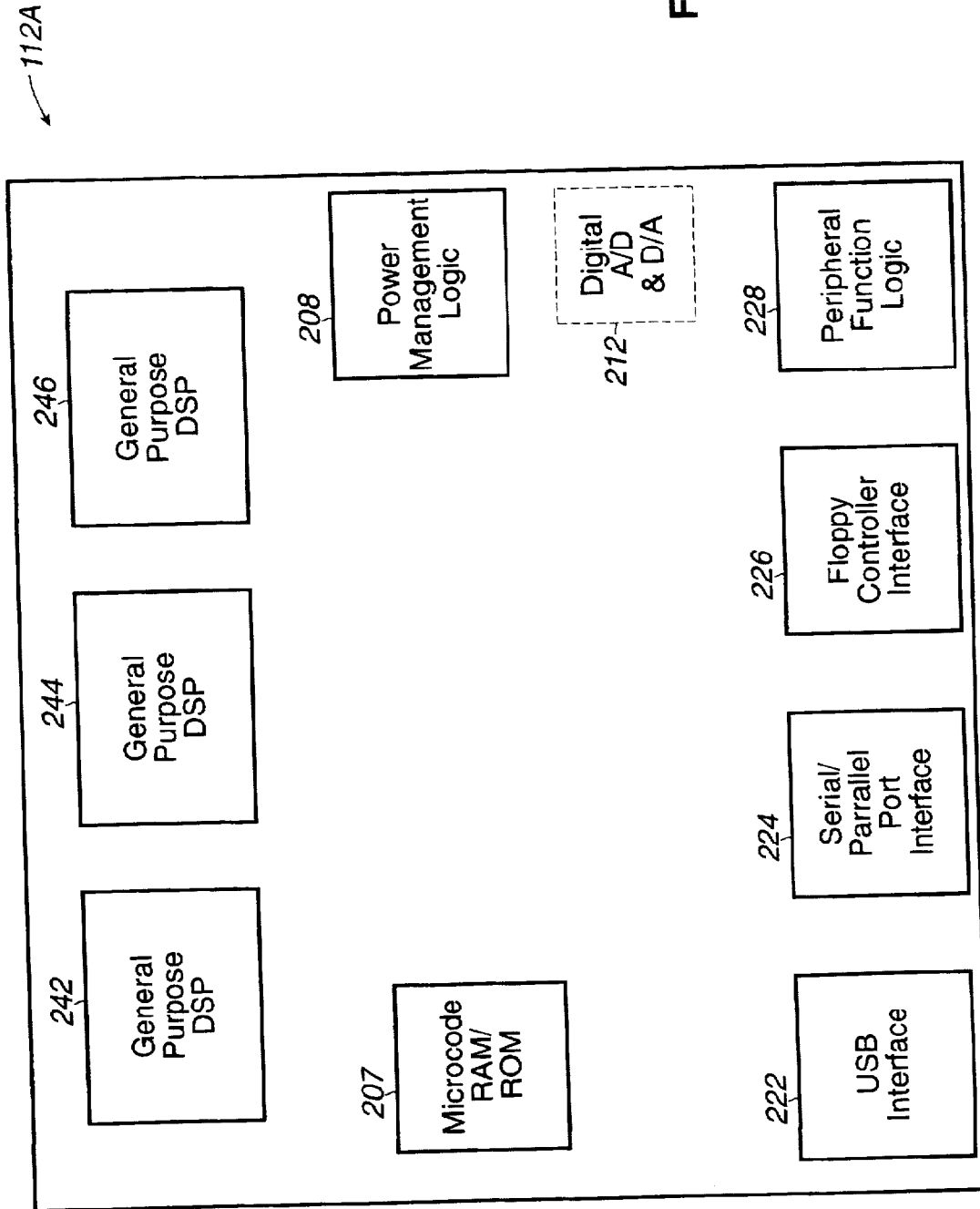


Fig. 3

114

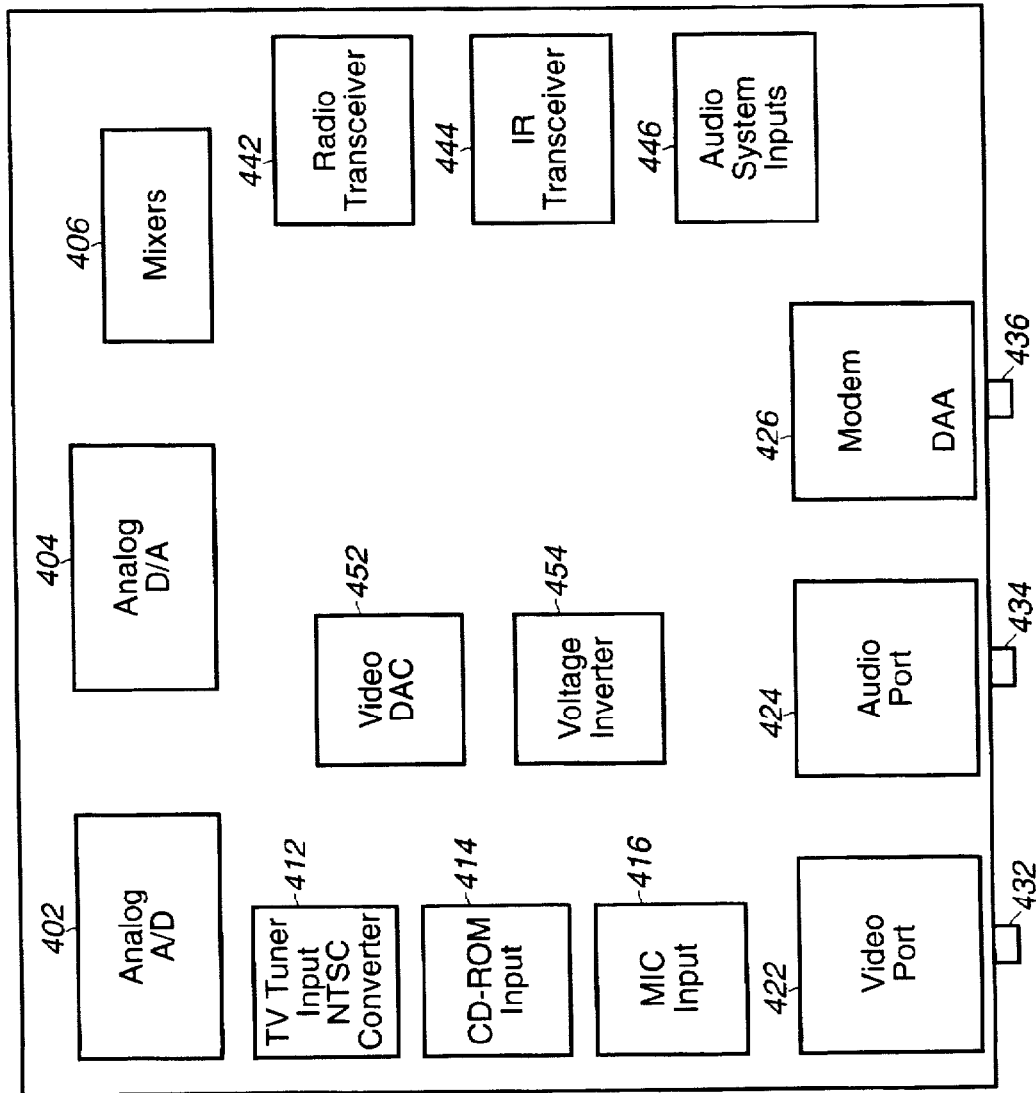


Fig. 4

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.