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United States Patent [19]

Gulick et al.

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[45] Date of Patent: **Aug. 18, 1998**

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

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

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[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**

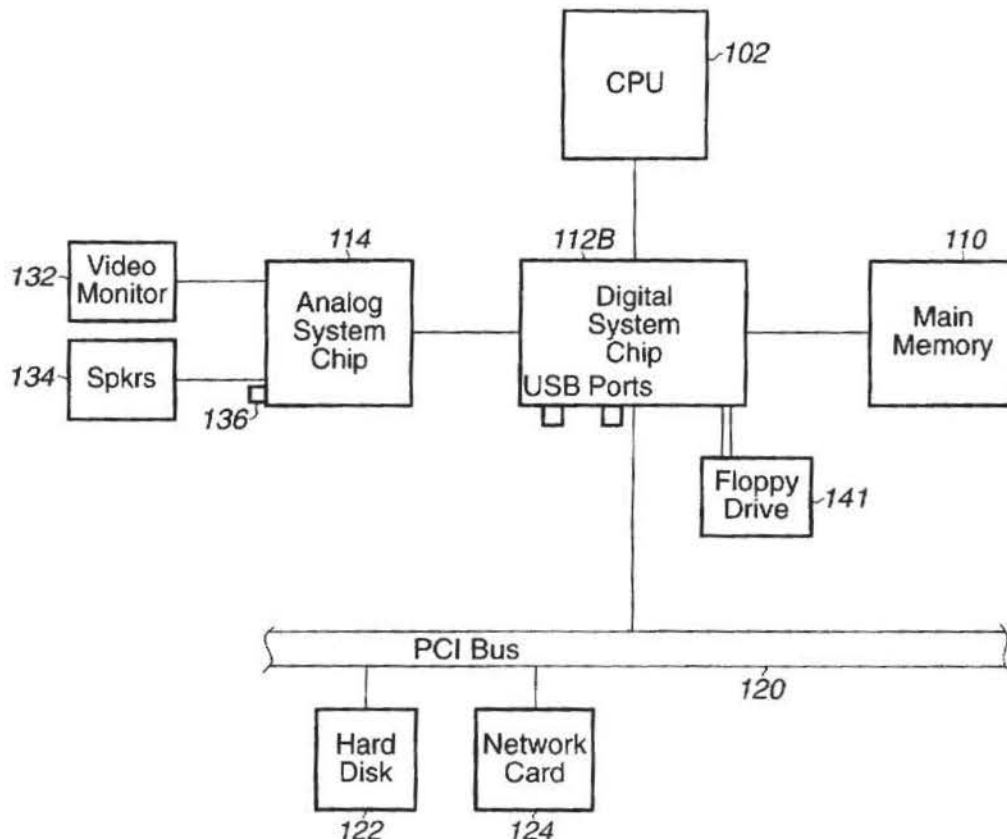
[58] Field of Search 395/800, 800.32, 395/800.35, 800.01; 364/489, 228.6, DIG. 1

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32 Claims, 11 Drawing Sheets



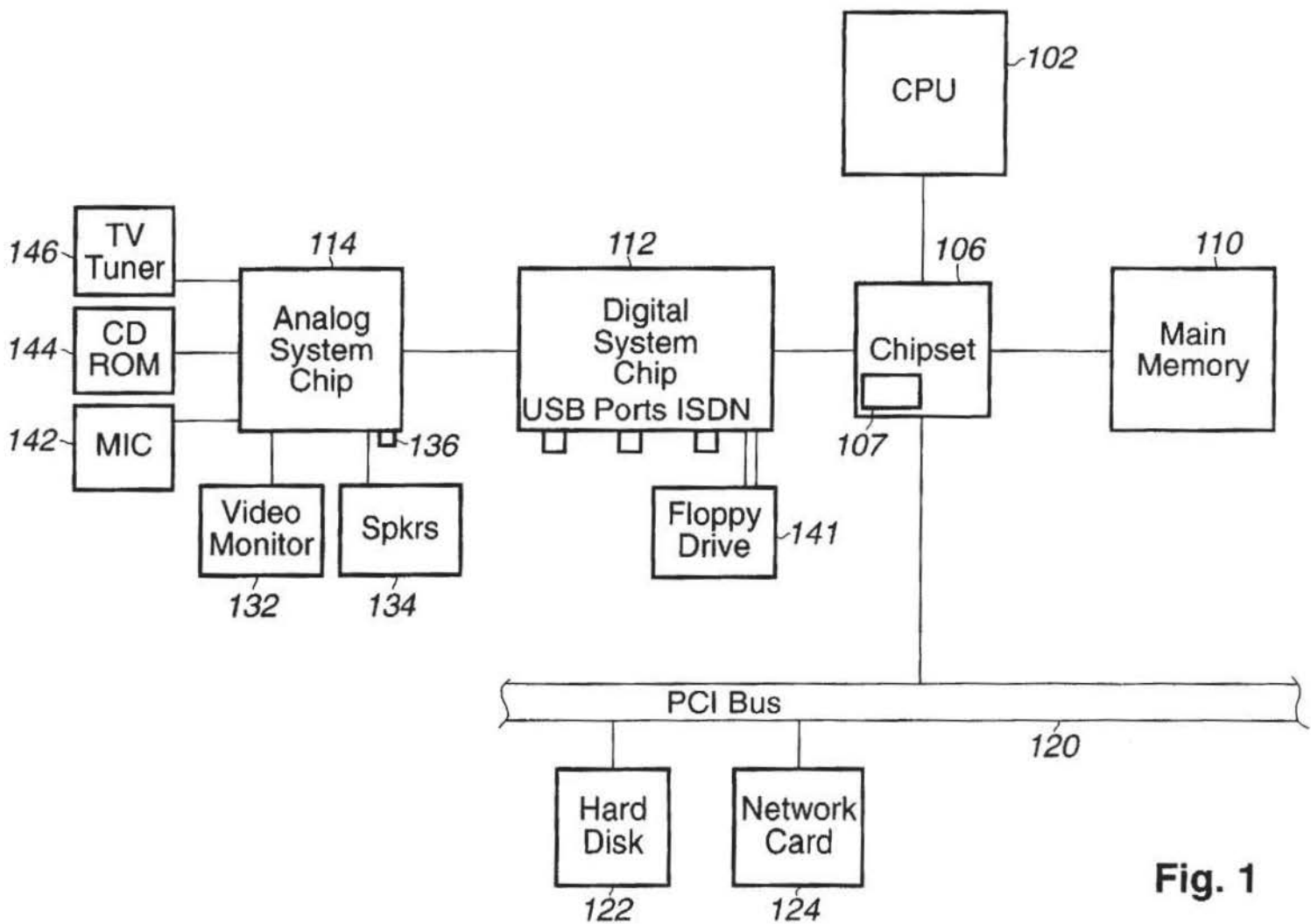


Fig. 1

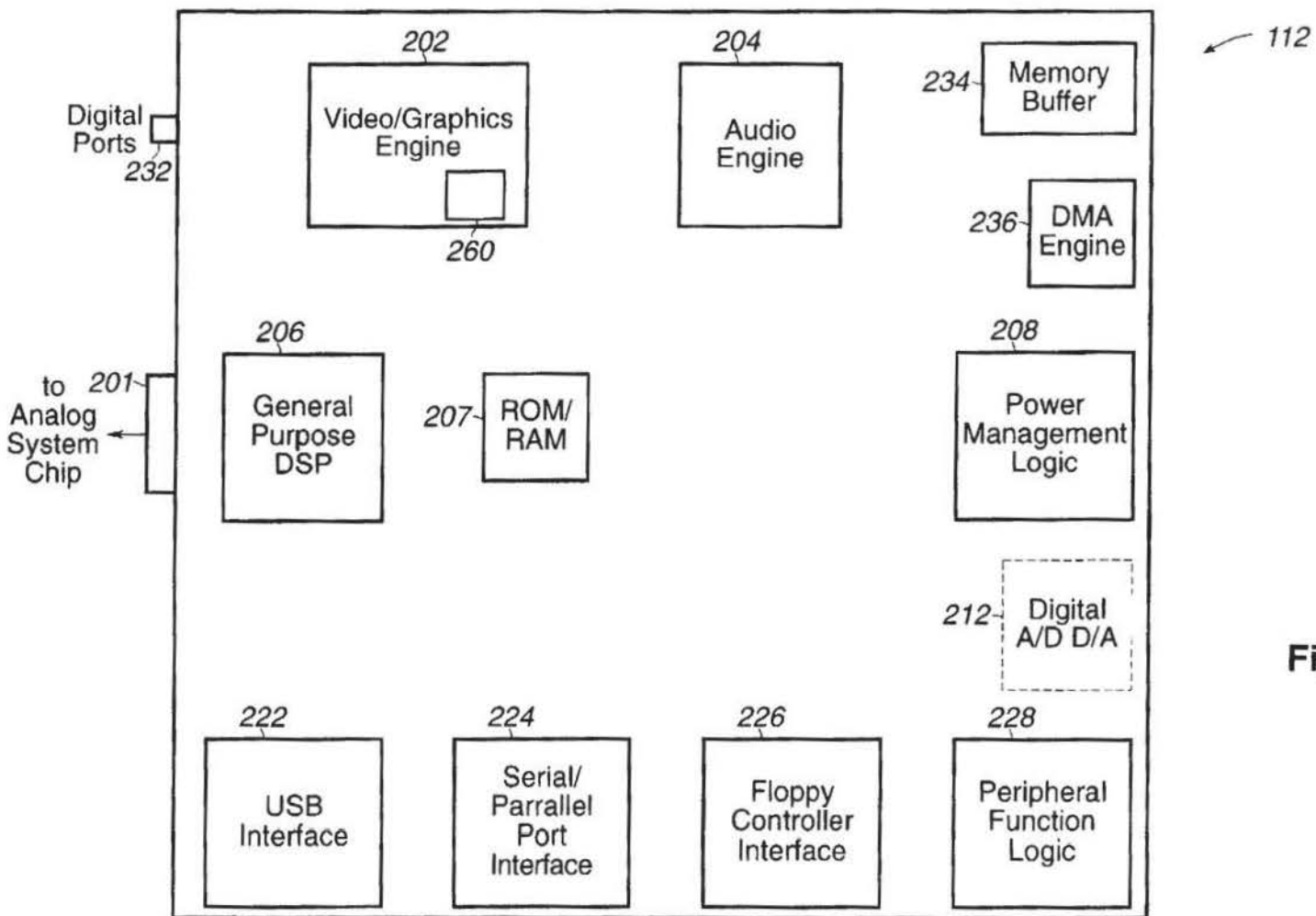
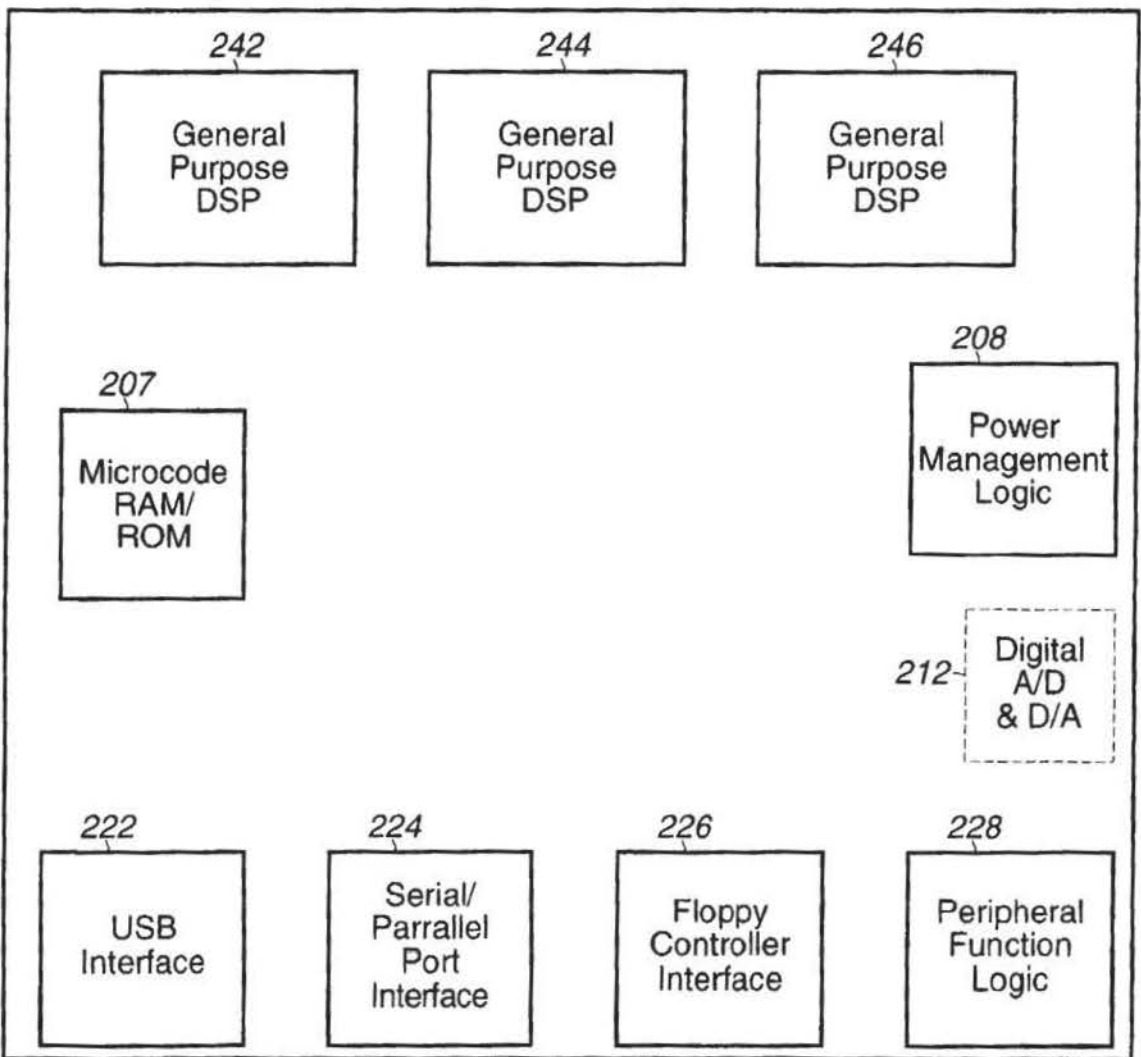


Fig. 2



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Fig. 3

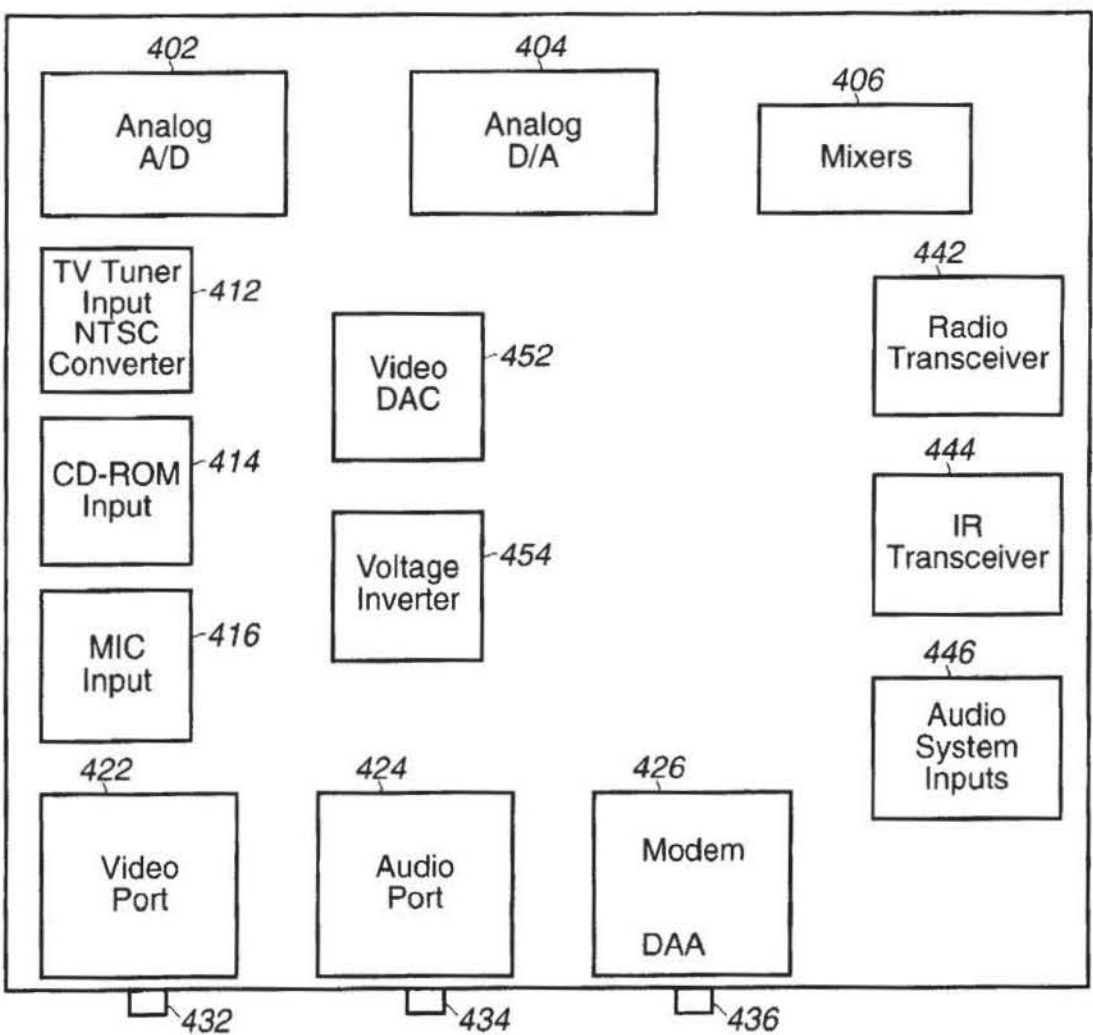


Fig. 4

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