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# United States Patent [19]

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Diaz et al.

[45] Date of Patent: **Sep. 22, 1998**

- [54] VIDEO AND/OR AUDIO DECOMPRESSION AND/OR COMPRESSION DEVICE THAT SHARES A MEMORY INTERFACE
- [75] Inventors: **Raul Zegers Diaz**, Palo Alto; **Jefferson Eugene Owen**, Fremont, both of Calif.
- [73] Assignee: **STMicroelectronics, Inc.**, Carrollton, Tex.
- [21] Appl. No.: **702,911**
- [22] Filed: **Aug. 26, 1996**
- [51] Int. Cl.<sup>6</sup> ..... **G06F 17/00**
- [52] U.S. Cl. .... **395/200.77**
- [58] Field of Search ..... 395/200.77, 200.82, 395/507, 890, 729; 348/402, 407, 10

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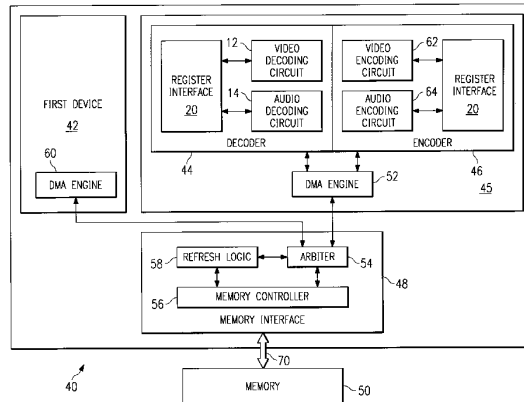
Primary Examiner—Ellis B. Ramirez

Attorney, Agent, or Firm—David V. Carlson; Theodore E. Galanthay; Lisa K. Jorgenson

### [57] ABSTRACT

An electronic system that contains a first device that requires a memory interface and video and/or audio decompression and/or compression device that shares a memory interface and memory with the first device while still permitting the video and/or audio decompression and/or compression device to operate in real time is disclosed.

**33 Claims, 5 Drawing Sheets**



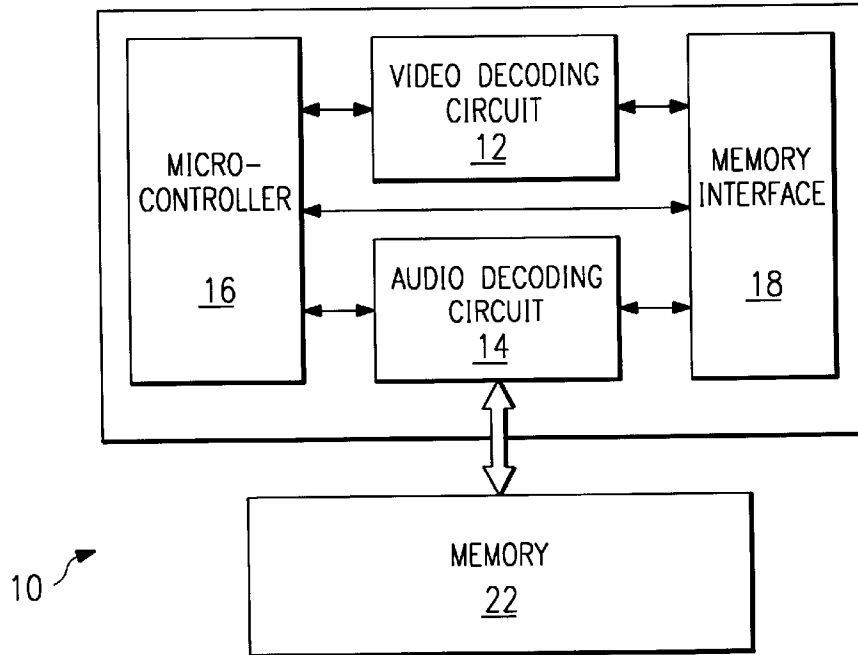


FIG. 1a  
(PRIOR ART)

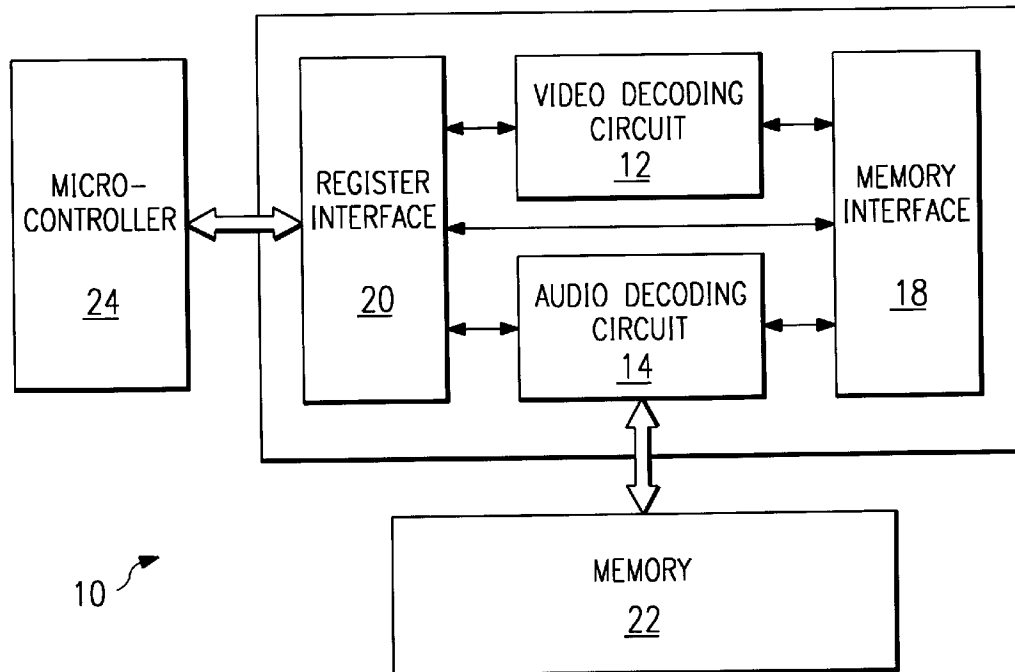


FIG. 1b  
(PRIOR ART)

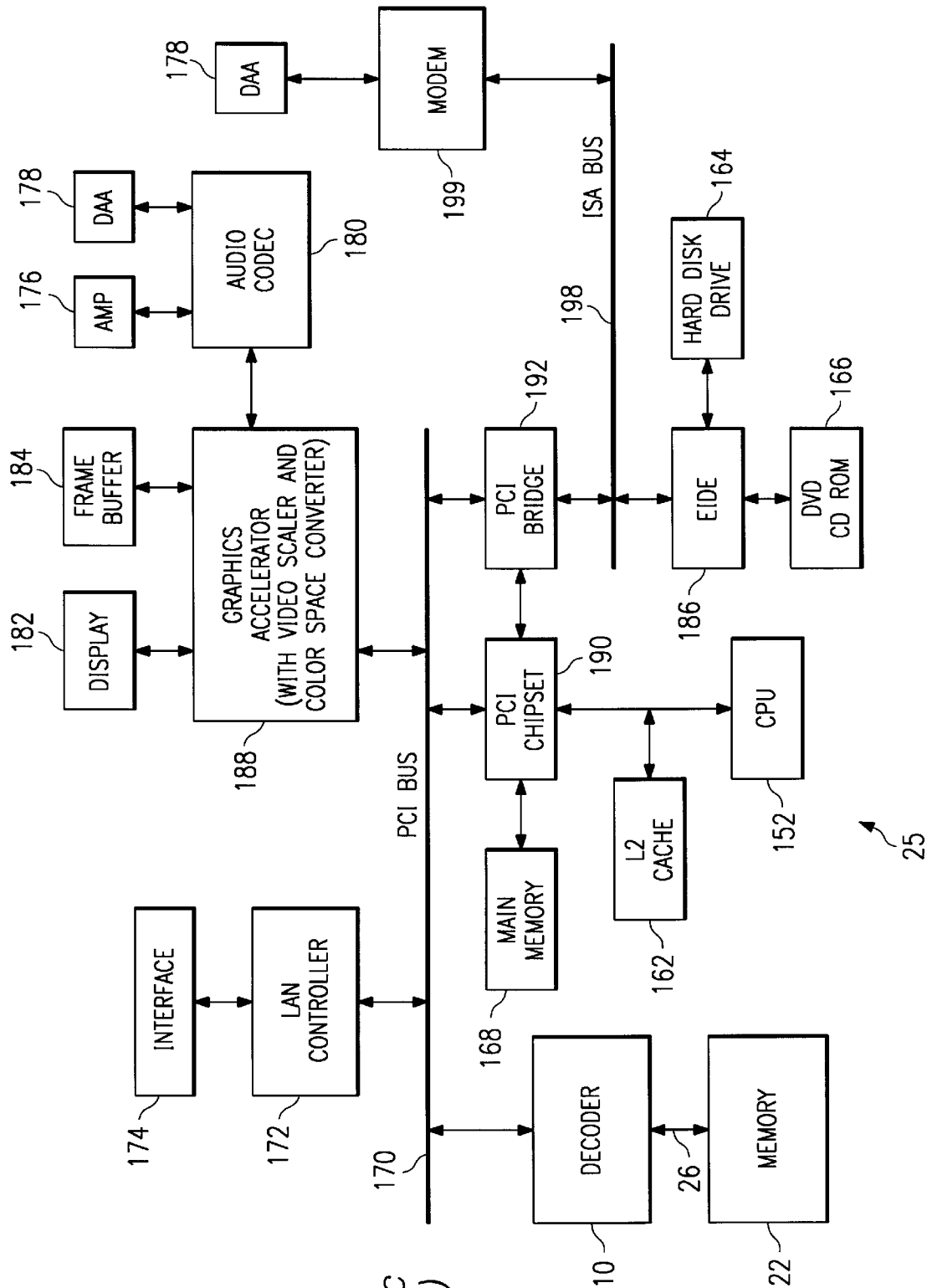


FIG. 1C  
(PRIOR ART)

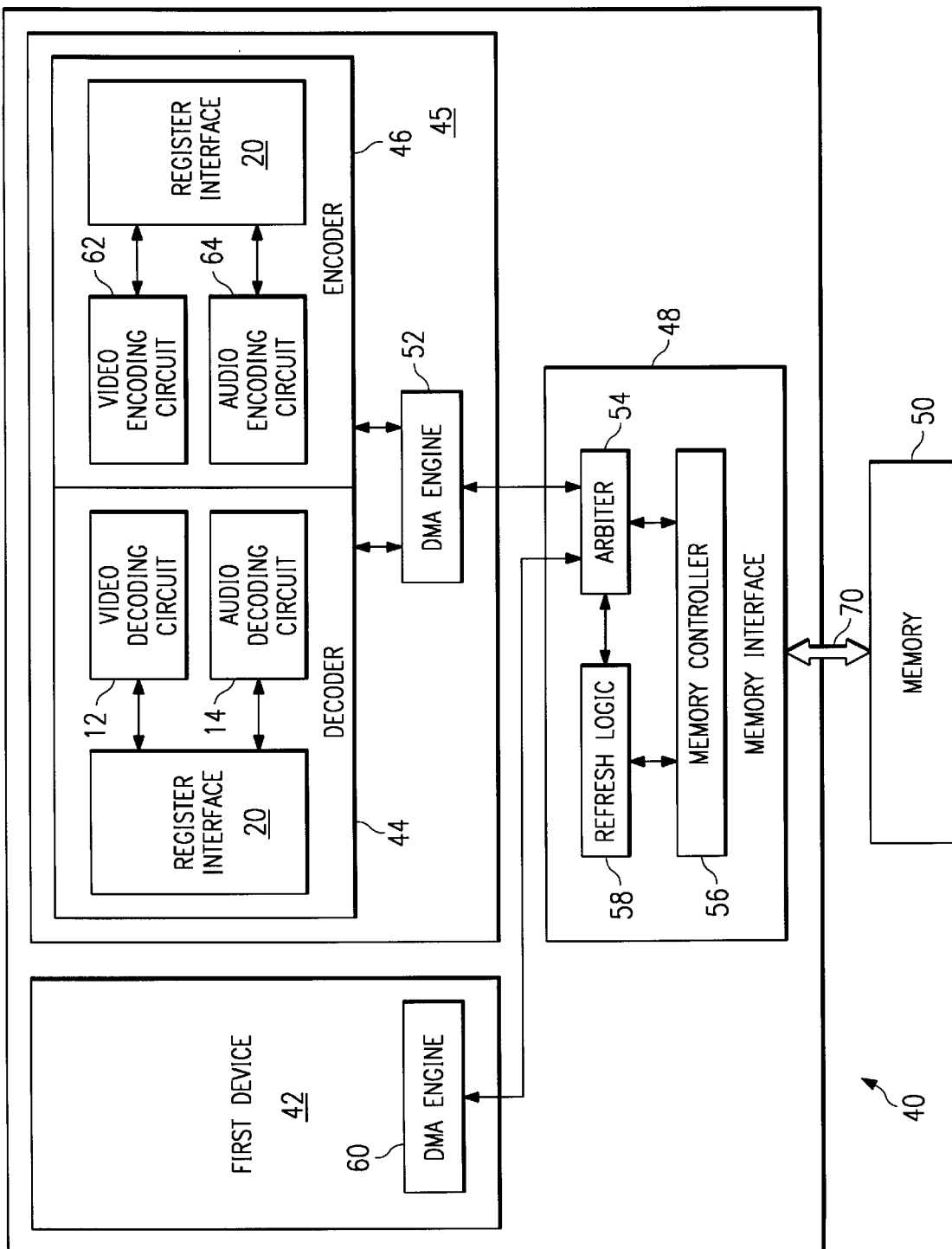
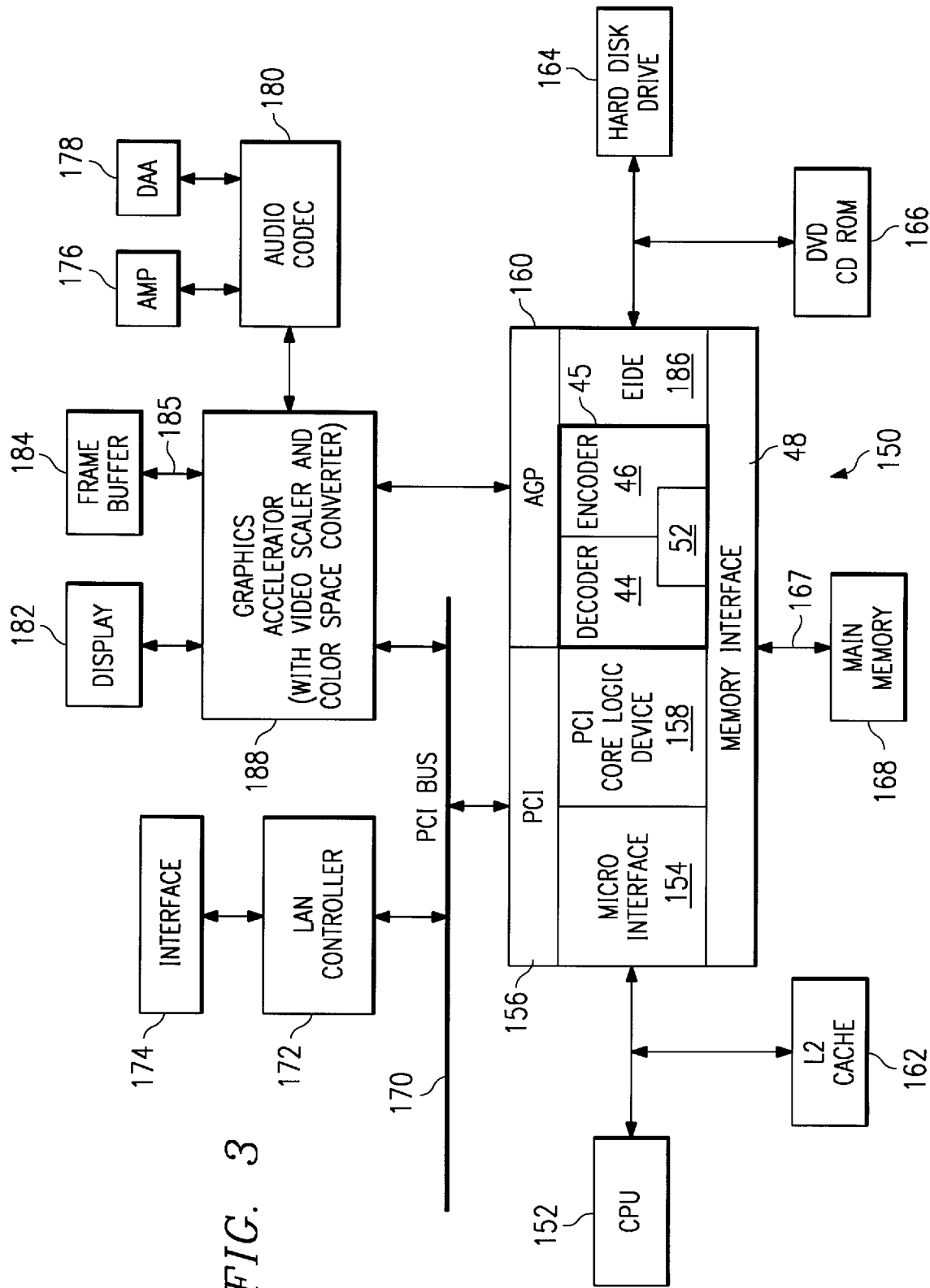


FIG. 2



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