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Mirashrafi et al.

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[54] **PREEMPTIVE PRIORITY-BASED TRANSMISSION OF SIGNALS USING VIRTUAL CHANNELS**

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[22] Filed: **Nov. 15, 1994**

Related U.S. Application Data

- [63] Continuation-in-part of Ser. No. 157,694, Nov. 24, 1993.
- [51] **Int. Cl.⁶** **G06F 9/46; G06F 13/36**
- [52] **U.S. Cl.** **395/800; 364/231.4; 364/241.2; 364/DIG. 1; 364/DIG. 2; 395/788; 395/561; 340/825.5; 340/825.16; 370/85.4; 379/94; 348/12; 348/15**
- [58] **Field of Search** **395/800, 125, 395/575, 152, 154, 550, 725, 775, 500, 250, 275, 200, 325, 118, 153, 162, 66, 650, 879, 12, 68; 364/DIG. 1, DIG. 2, 514 C, 514 A; 348/15, 16, 384, 423, 18, 17, 388, 385, 14, 12, 400; 370/62, 58.2, 60, 124, 85.4; 340/825.51, 825.03, 825.5, 825.16; 381/52; 379/94, 95, 96, 206**

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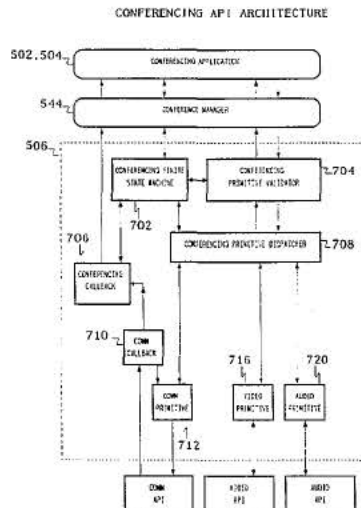
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[57] ABSTRACT

A computer system for transmitting two or more types of signals. Each type of signal is assigned a priority level. Signals of a particular type are transmitted as they become ready for transmission, unless signals of a different type having a greater priority become ready for transmission. In that case, the transmission of the low-priority signals is interrupted to allow transmission of the high-priority signals. The transmission of the low-priority signals is resumed after the transmission of the high-priority signals is complete. In a preferred embodiment directed to conferencing systems, audio signals are assigned higher priorities than video, data, and control signals in order to provide a high-quality to the audio portion of a conferencing session.

33 Claims, 41 Drawing Sheets



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FIG. 1. POINT-TO-POINT CONFERENCE NETWORK

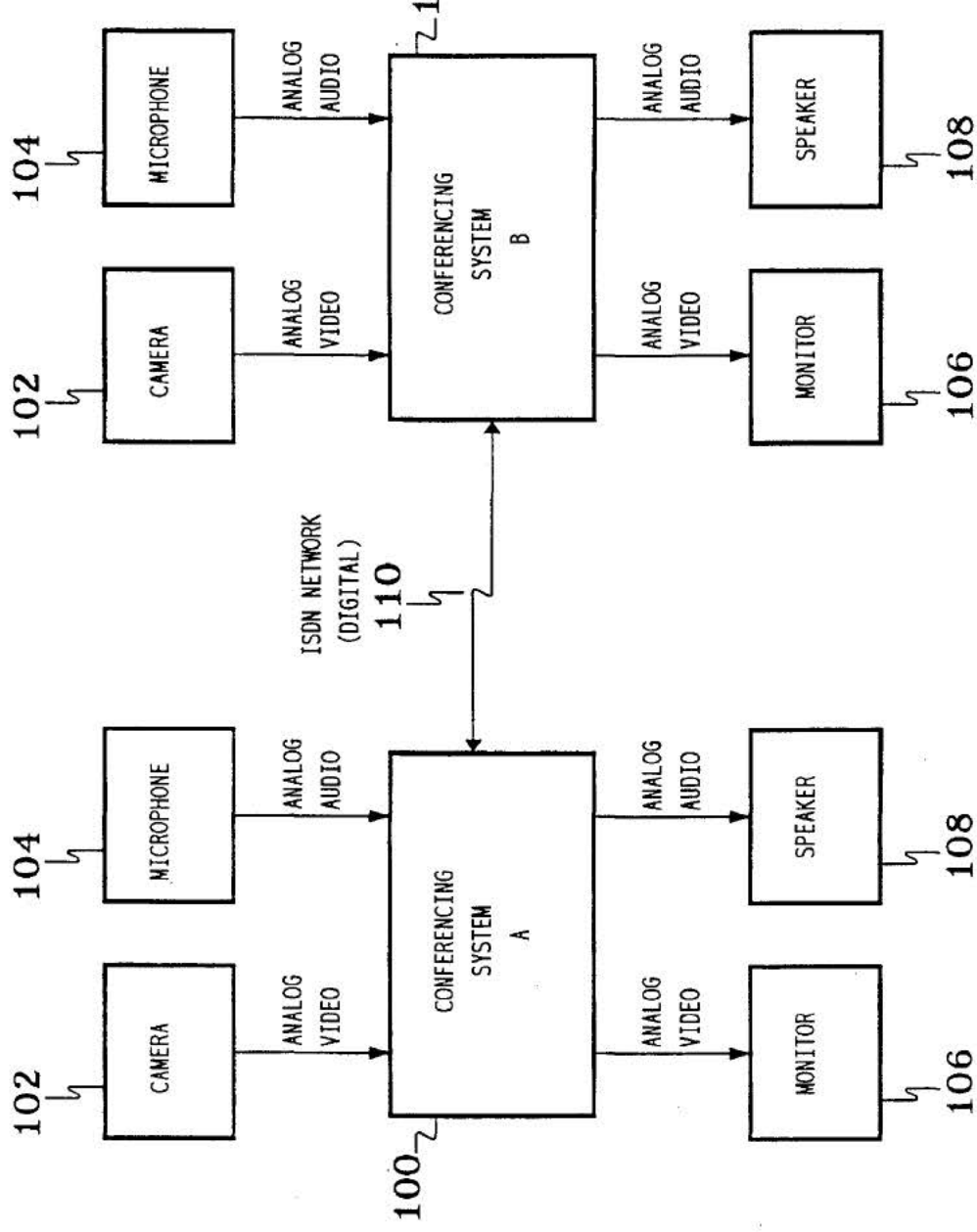


FIG. 2. CONFERENCEING SYSTEM HARDWARE CONFIGURATION

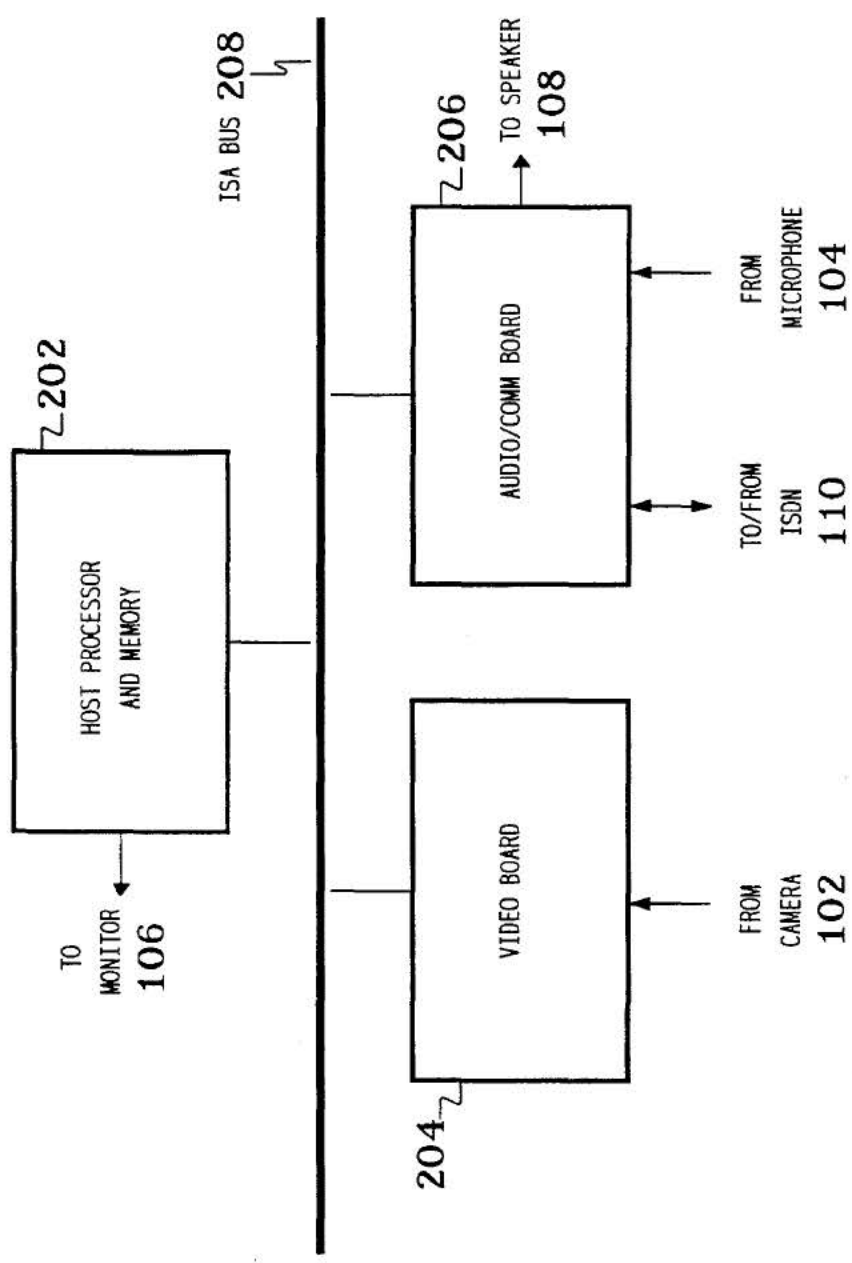
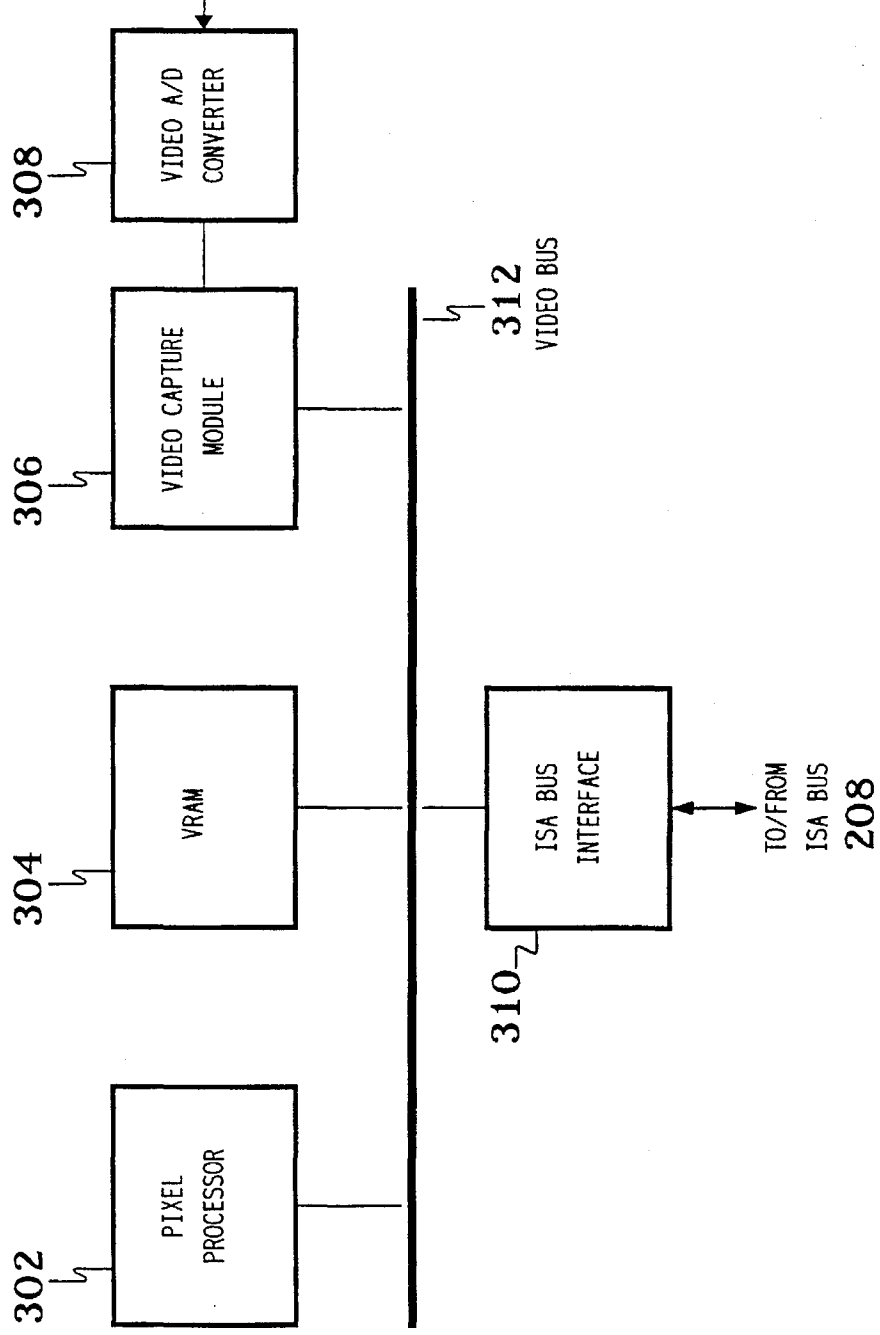


FIG. 3. VIDEO BOARD HARDWARE CONFIGURATION



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