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Chauvel et al.

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(54) **AUDIO AND VIDEO DECODER CIRCUIT AND SYSTEM**

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(52) **U.S. Cl.** **348/423.1; 348/558; 370/474**

(58) **Field of Search** **370/474; 348/558, 348/553, 423, 461, 569, 564, 423.1**

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(57) **ABSTRACT**

An improved audio-visual circuit is provided that includes a transport packet parsing circuit for receiving a transport data packet stream, a CPU circuit for initializing said integrated circuit and for processing portions of said data packet stream, a ROM circuit for storing data, a RAM circuit for storing data, an audio decoder circuit for decoding audio portions of said data packet stream, a video decoder circuit for decoding video portions of said data packet stream, an NTSC/PAL encoding circuit for encoding video portions of said data packet stream, an OSD coprocessor circuit for processing OSD portions of said data packets, a traffic controller circuit moving portions of said data packet stream between portions of said integrated circuit, an extension bus interface circuit, a P1394 interface circuit, a communication coprocessors circuit, an address bus connected to said circuits, and a data bus connected to said circuits.

12 Claims, 76 Drawing Sheets

