United States Patent [19]

Cannon et al.

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[54] **METHODS AND APPARATUS FOR IMPLEMENTING CONTROL FUNCTIONS IN A STREAMED VIDEO DISPLAY SYSTEM**

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Related U.S. Application Data

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[51] **Int. Cl.^{7}** **G06F 13/00**

[52] **U.S. Cl.** **709/231**; 709/217; 709/219; 709/248

[58] **Field of Search** 395/200.48, 200.61, 395/200.63, 200.59, 200.65, 182.16; 709/217, 218, 219, 229, 231, 233, 235, 248; 371/30, 32, 33; 707/10

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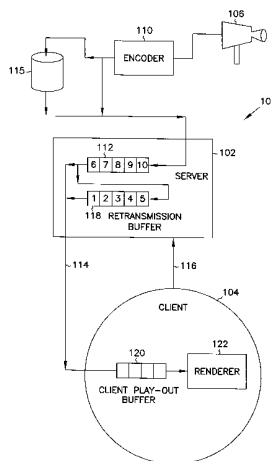
[57] **ABSTRACT**

A method for displaying streamed digital video data on a client computer. The client computer is configured to receive the streamed digital video data from a server computer via a computer network. The streamed digital video data is transmitted from the server computer to the client computer as a stream of video frames. The method includes receiving a first plurality of video frames at the client computer. The plurality of video frames represents a subset of the stream of video frames. The stream of video frames comprises independent playable video frames and dependent playable video frames. The method further includes displaying the first plurality of video frames on a video display terminal associated with the client computer. There is further included issuing a rewind command from the client computer to the server. The rewind command causes a second plurality of video frames of the stream of video frames different from the first plurality of video frames to be streamed from the server computer to the client computer. The second plurality of video frames has been streamed at least once to the client computer.

28 Claims, 8 Drawing Sheets

FIG. 1A

FIG. 1B

FIG. 2

FIG. 3

DOCKET ALARM
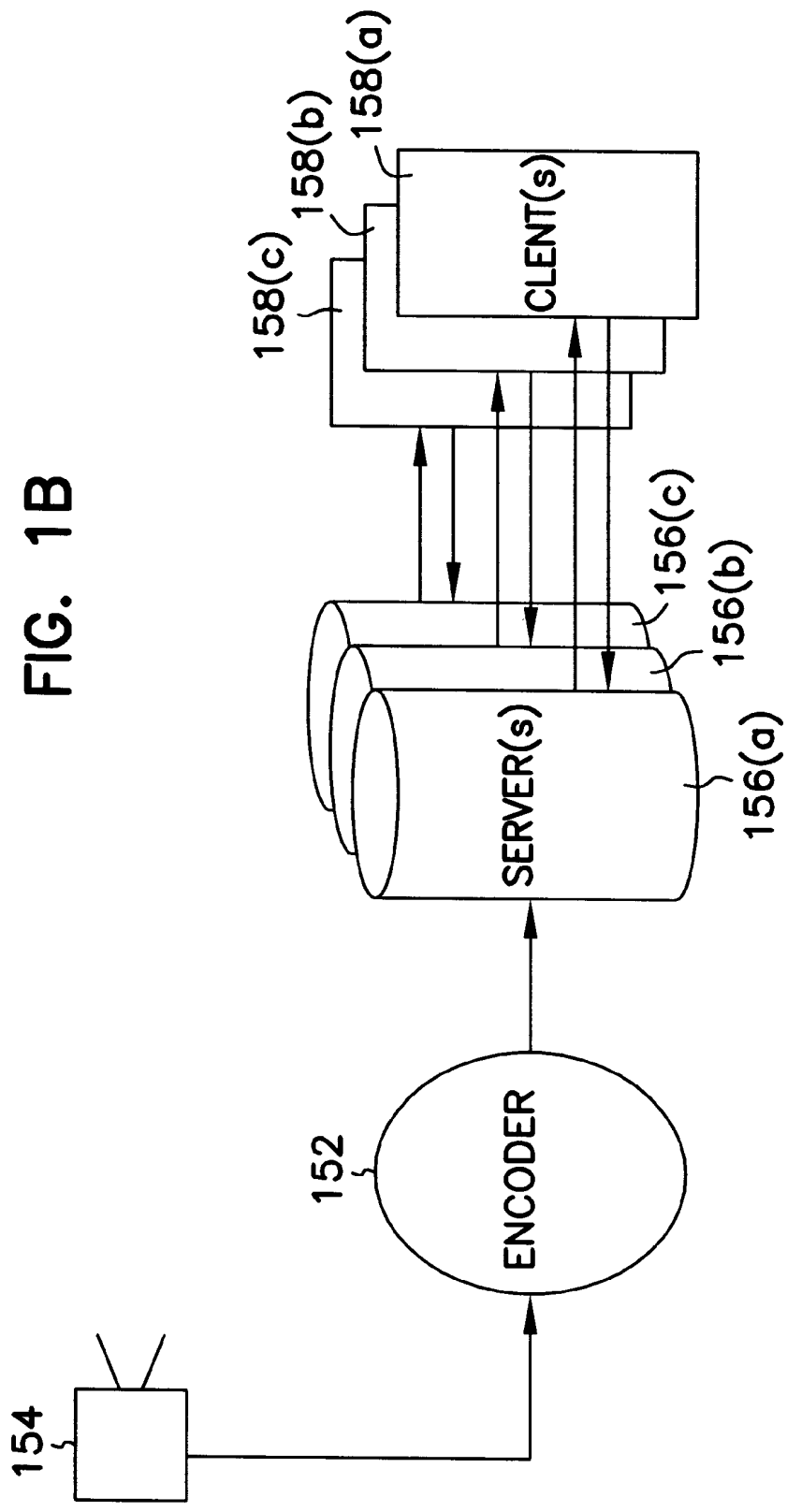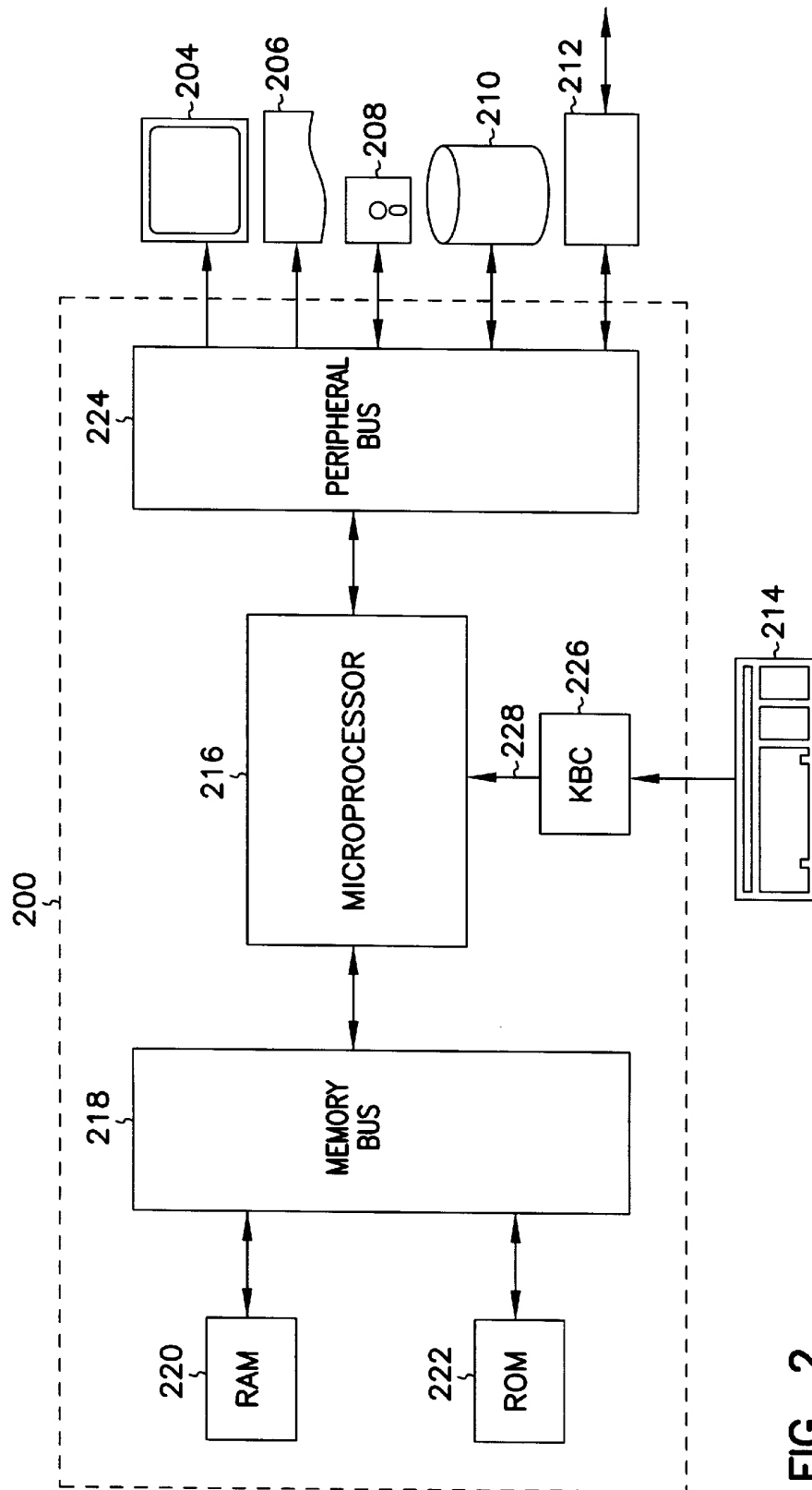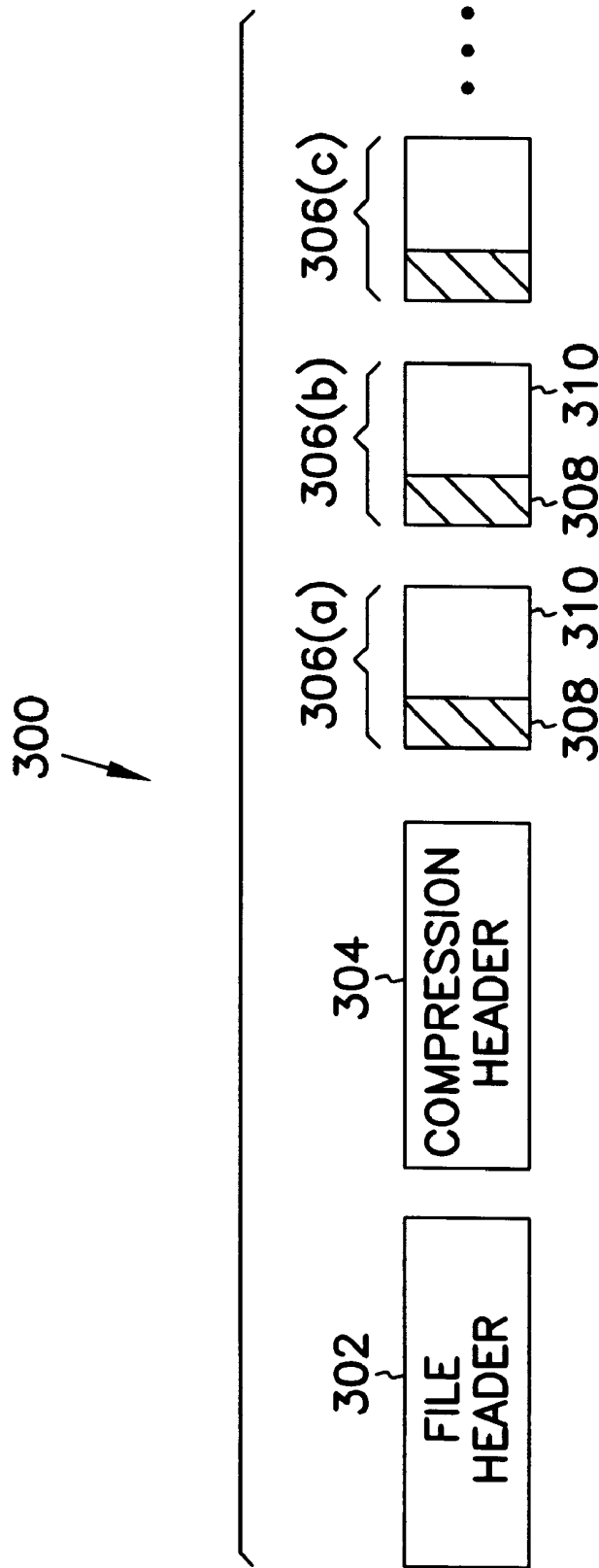
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