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United States Patent [19]

Glaser et al.

[11] **Patent Number:** 5,793,980[45] **Date of Patent:** Aug. 11, 1998**[54] AUDIO-ON-DEMAND COMMUNICATION SYSTEM**

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[51] Int. Cl.⁶ **H04H 1/02; G06F 13/42**

[52] U.S. Cl. **395/200.61; 395/200.49; 395/200.67; 370/528**

[58] **Field of Search** 395/200.13, 200.09, 395/200.14, 200.17, 806, 807, 849, 850, 200.61, 200.49, 200.67, 200.66; 370/231, 476, 486, 496, 528; 364/514 A, 514 C; 375/257, 369, 370; 345/302

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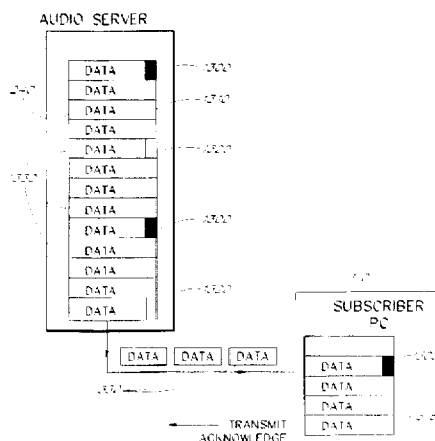
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[57] ABSTRACT

An audio-on-demand communication system provides real-time playback of audio data transferred via telephone lines or other communication links. One or more audio servers include memory banks which store compressed audio data. At the request of a user at a subscriber PC, an audio server transmits the compressed audio data over the communication link to the subscriber PC. The subscriber PC receives and decompresses the transmitted audio data in less than real-time using only the processing power of the CPU within the subscriber PC.. According to one aspect of the present invention, high quality audio data compressed according to lossless compression techniques is transmitted together with normal quality audio data. According to another aspect of the present invention, metadata, or extra data, such as text, captions, still images, etc., is transmitted with audio data and is simultaneously displayed with corresponding audio data. The audio-on-demand system also provides a table of contents indicating significant divisions in the audio clip to be played and allows the user immediate access to audio data at the listed divisions. According to a further aspect of the present invention, servers and subscriber PCs are dynamically allocated based upon geographic location to provide the highest possible quality in the communication link.

6 Claims, 17 Drawing Sheets

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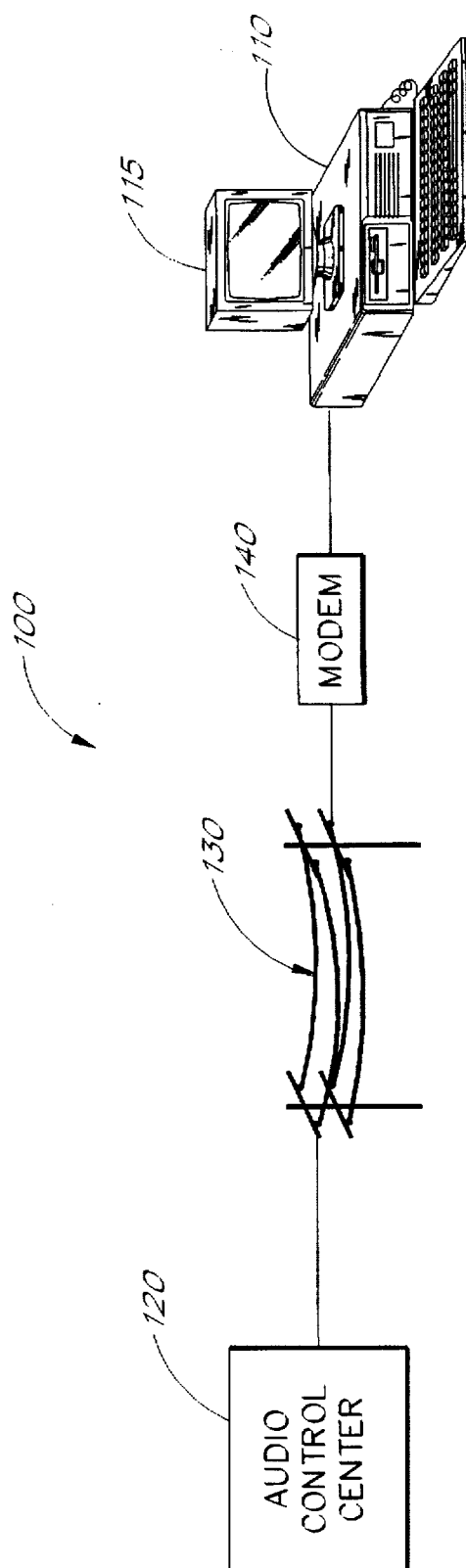


FIG. 1

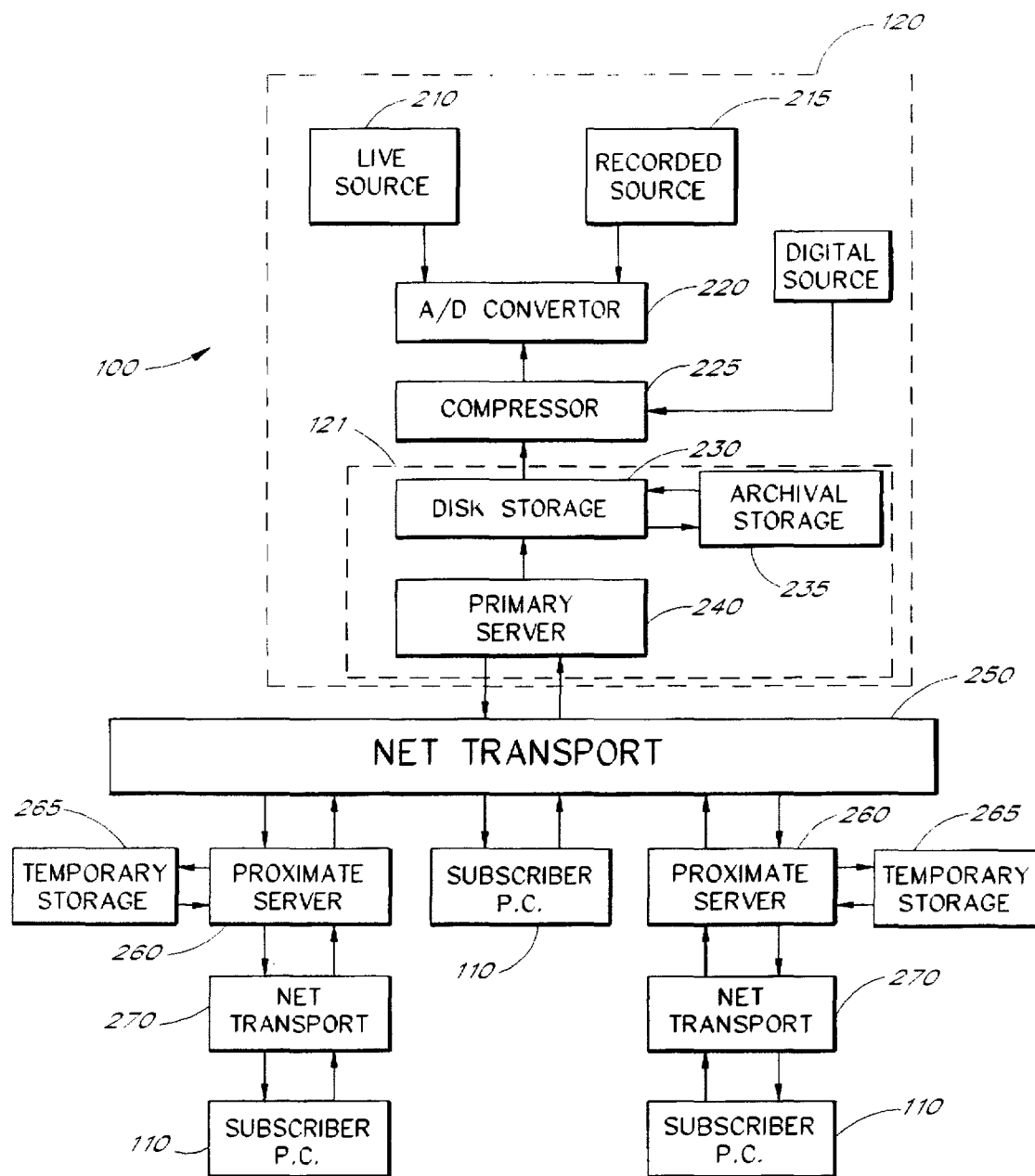


FIG. 2A

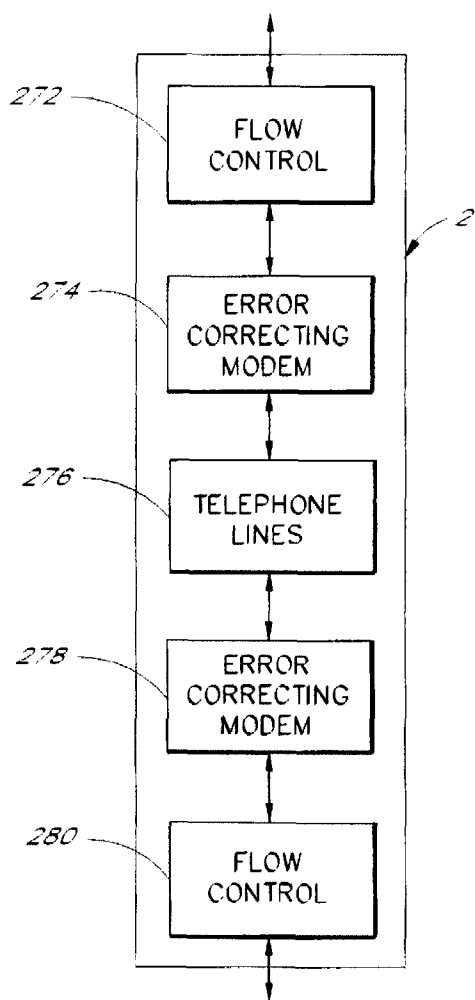


FIG. 2B

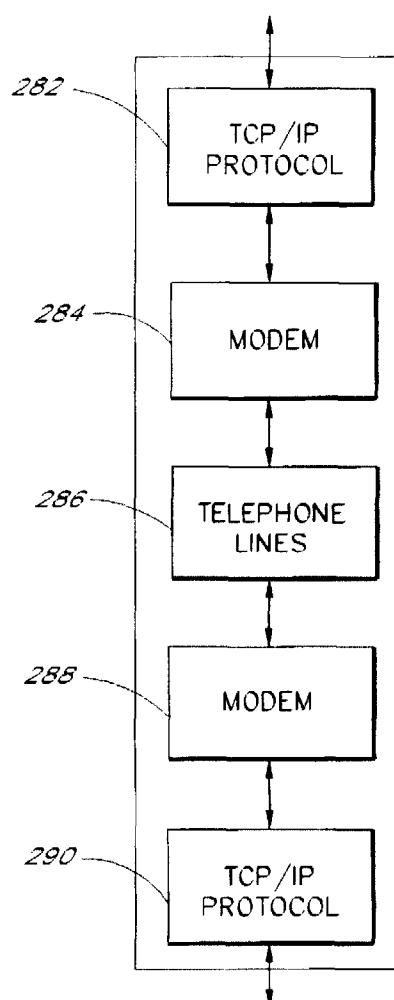


FIG. 2C

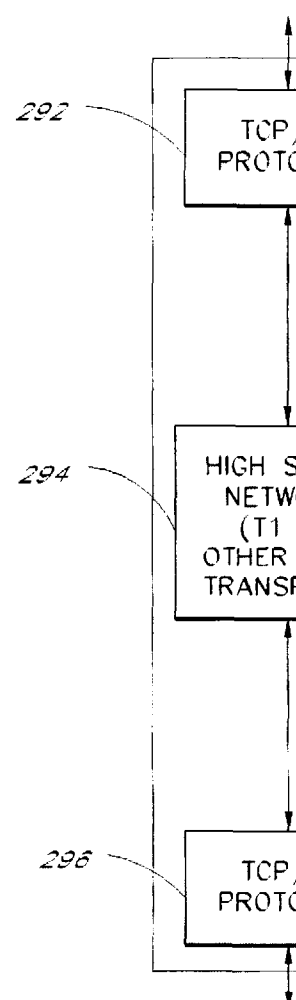


FIG. 2D

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