

JS005822524A

Patent Number:

5,822,524

United States Patent [19]

Chen et al. [45] Date of Patent: Oct. 13, 1998

12, 13, 14

[11]

[54]	SYSTEM FOR JUST-IN-TIME RETRIEVAL
	OF MULTIMEDIA FILES OVER COMPUTER
	NETWORKS BY TRANSMITTING DATA
	PACKETS AT TRANSMISSION RATE
	DETERMINED BY FRAME SIZE

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[21]	Appl. No	.: 505,488
[22]	Filed:	Jul. 21, 1995

[56]

[52]	U.S. Cl	
[58]	Field of Search	395/600, 200.33,
	395/200.47, 200.49, 200	.61, 200.76; 358/468;
	370/60.1, 84, 94,	60; 364/200; 360/73;
	235/375: 381/41: 37	75/13, 357; 348/7, 10,

[51] Int. Cl.⁶ G06F 13/00

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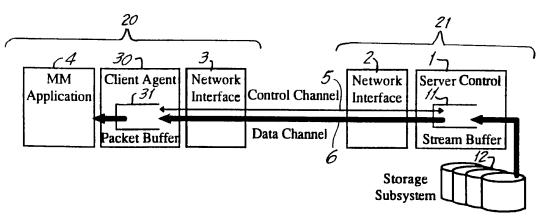
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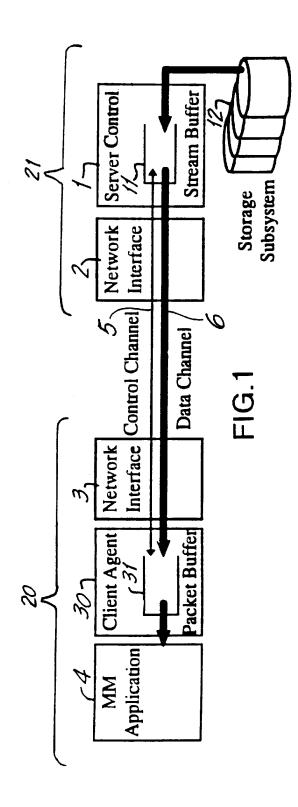
[57] ABSTRACT

A method in computer networks in which a client machine (playback client computer) requests multimedia files, such as compressed video clips, from a server (storage server computer). The transmission uses digital data packets. In the case of video files, the packet headers identify the video frame and the sequence number of each packet derived from the frame. The transmission timing is not based on a steady byte stream or an average of bytes to be transmitted. Instead, in the case of video, the frame rate determines normal transmission and a frame is transmitted during each frame time. The client agent has a normal packet buffer, normally holding 1-5 video frames. The transmission rate is adjusted to keep that buffer filled within its normal range. The timing information required for transmission, in one embodiment, is stored in a separate index file associated with each multimedia file.

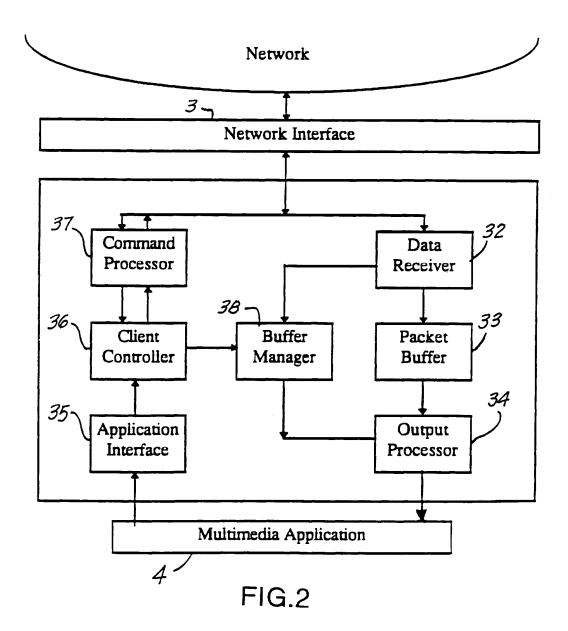
42 Claims, 6 Drawing Sheets



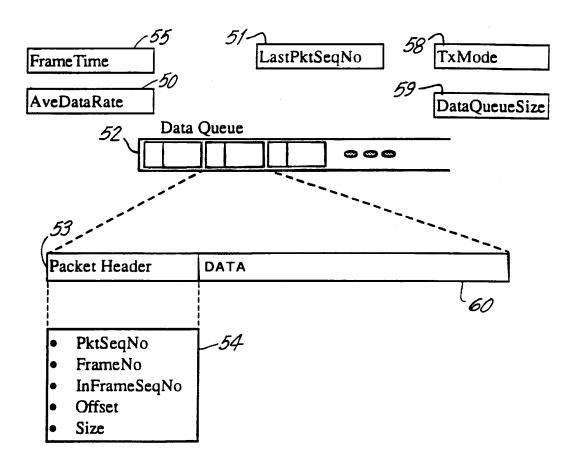












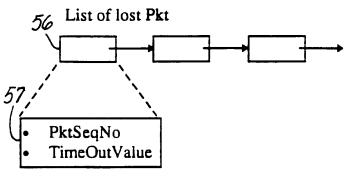
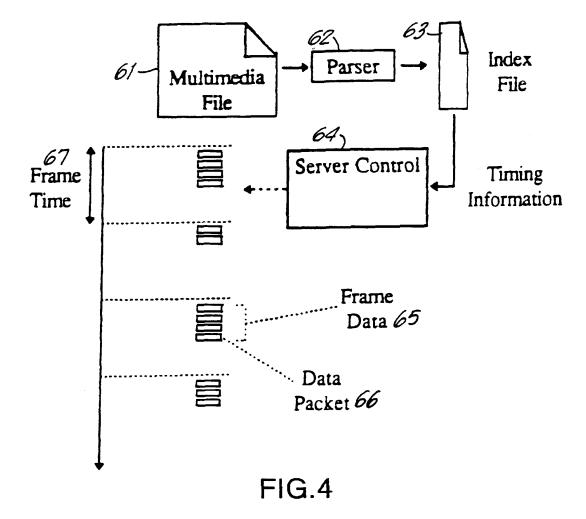


FIG.3





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