United States Patent [19]

McNamara et al.

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[54]	CATV COMMUNICATION SYSTEM						
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	Int. Cl. ³	H04N 7/16					
[52]	U.S. Cl						
[58]	358/114; 455/5; 340/825.5; 375/2.1						
[30]	Field of Search						
	22.07, 22.08, 22.09, 22.10, 22.11, 22.12, 22.13,						
	22.14, 22.15, 22.16, 22.17, 22.18, 22.19; 455/5,						
		6, 3					
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Primary Examiner—Robert L. Griffin									

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Primary Examiner—Robert L. Griffin Assistant Examiner—Timothy K. Greer Attorney, Agent, or Firm—Allan J. Jacobson

[57] ABSTRACT

A two way digital communication arrangement utilizes a CATV system to provide bidirectional data transport service between any two points within the CATV system. The headend receives an upstream message and selectively rebroadcasts such message on the downstream portion of the spectrum. System intelligence is thus distributed throughout the system as server and subscriber nodes can be located anywhere in the CATV network. In order to obtain access to the CATV communication resources, user equipment at each node must attach a frame verifier (FV) code to each respective message. The headend examines the FV and permits rebroadcast of messages only if the FV code indicates that the user is authorized.

11 Claims, 17 Drawing Figures

NETWO	ORK ARCH	ITECTURE	HEADEND	DATA CHANINA KCESS MONI	الح⊆	22 ONE WAY BEWOCAST	3	
	38	40	28	26 — 26,		NETWORK TRUFFIC MONITOR	NET THE PARTY OF T	NETWOOK
•	vau	SERVER NODE	23/	•	28	26	(NAC)] (Man)
			AG VER DE	24	NOTES - NETWOOK LINK		29	
Ţ		SUES	CRIBER NADE	42,		INTER NETWOOD SATURIAN		



BANDWIDTH ALLOCATION

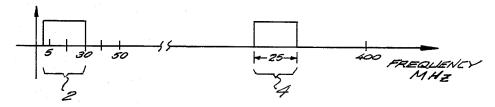


FIG. 1

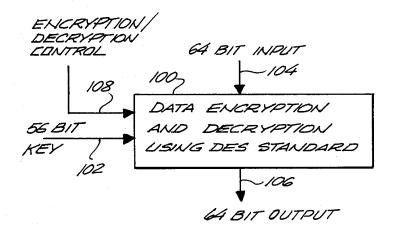


FIG. 5

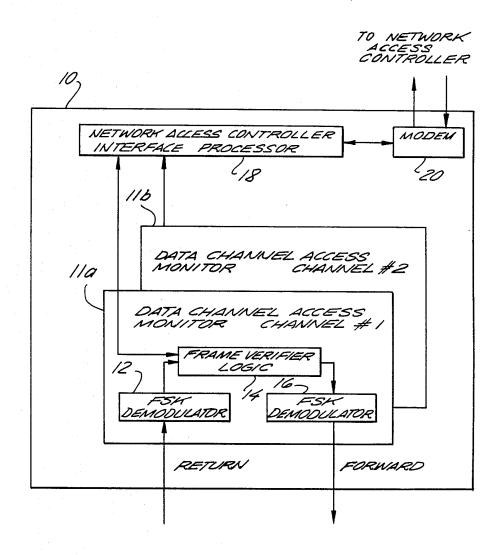


FIG. 2

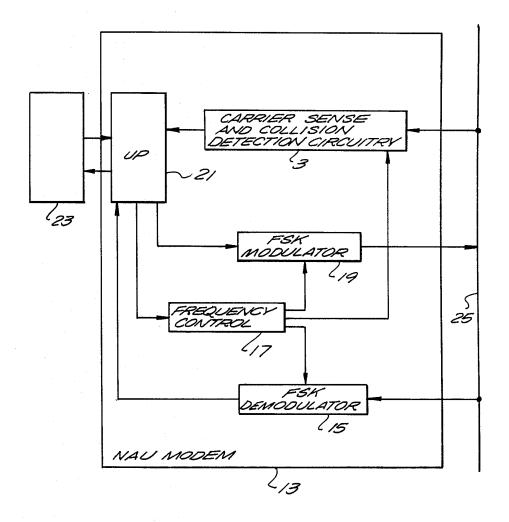
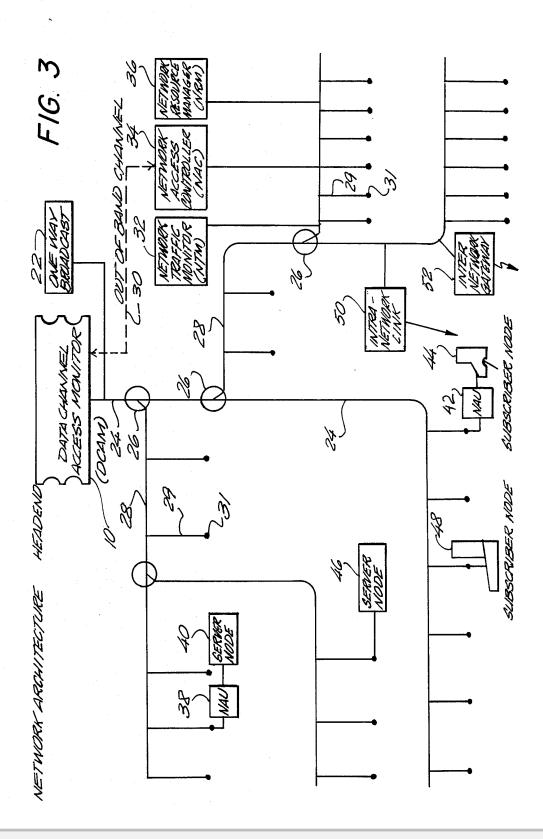


FIG. 2a



DOCKET

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