



- [54] **VARIABLE RATE AND VARIABLE MODE TRANSMISSION SYSTEM**
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- [21] Appl. No.: **494,082**
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- [51] Int. Cl.<sup>6</sup> ..... **G06F 15/163**
- [52] U.S. Cl. .... **395/200.63; 395/200.81**
- [58] Field of Search ..... 395/200.01, 200.6,  
395/200.63, 200.81

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Primary Examiner—Eric Coleman  
Attorney, Agent, or Firm—Lowe, Price, LeBlanc & Becker

[57] **ABSTRACT**

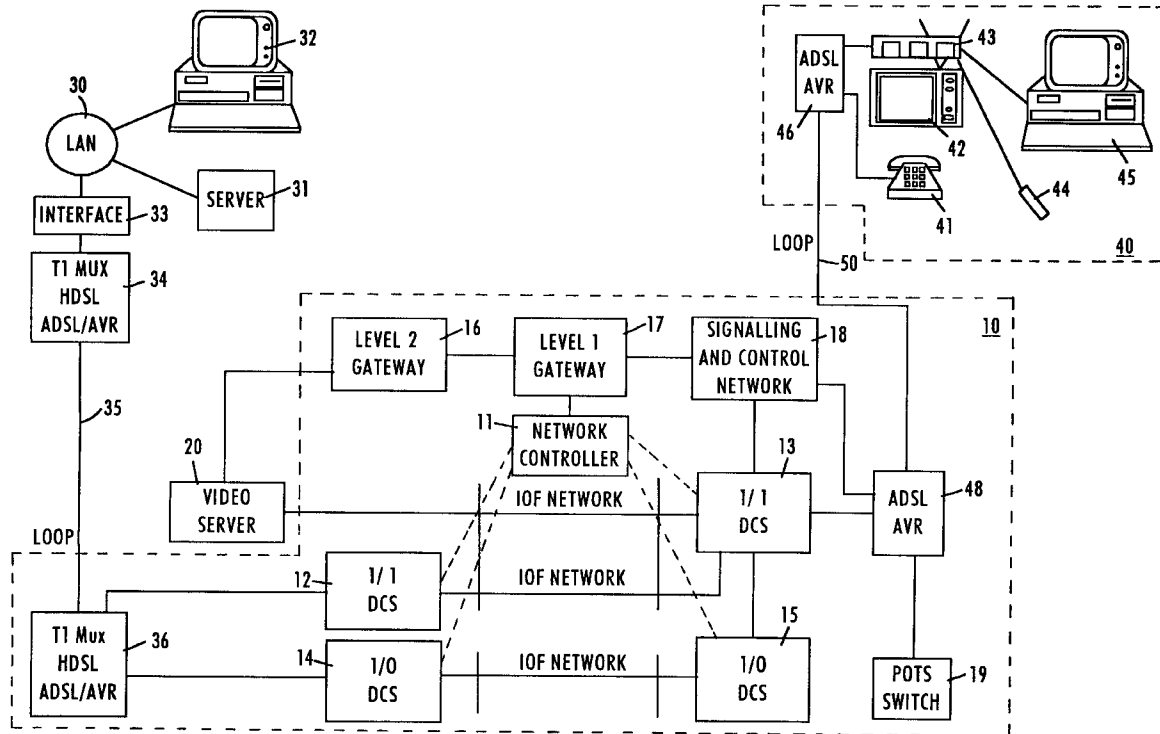
A public switched telephone network (PSTN) provides communication of digital data from a data provider or LAN to one or more of a plurality of subscriber premises. Asymmetrical digital subscriber line interface units operating at variable rates and in variable modes (ADSL/AVRs) over a local loop offer one-way video-on-demand and other services and carry the necessary signalling between the subscribers and information providers. In an asymmetric mode, the interface units frequency multiplex digital information with voice information to the subscriber and support transmission of a reverse control channel from the subscriber to the central office for transmission back to the information provider. Other modes are supported which permit selective bi-directional and reversible communications as well.

[56] **References Cited**

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26 Claims, 8 Drawing Sheets



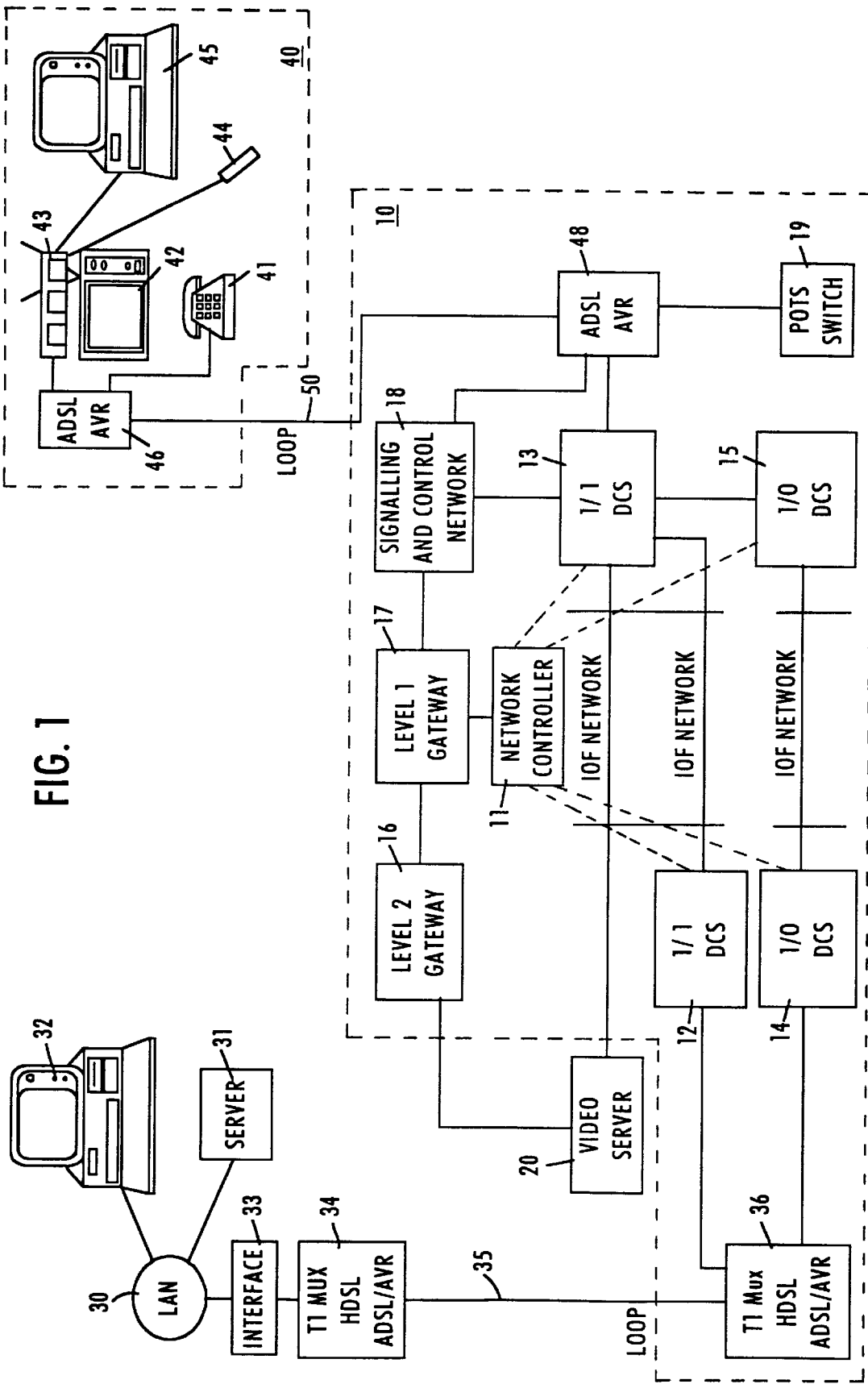


FIG. 1

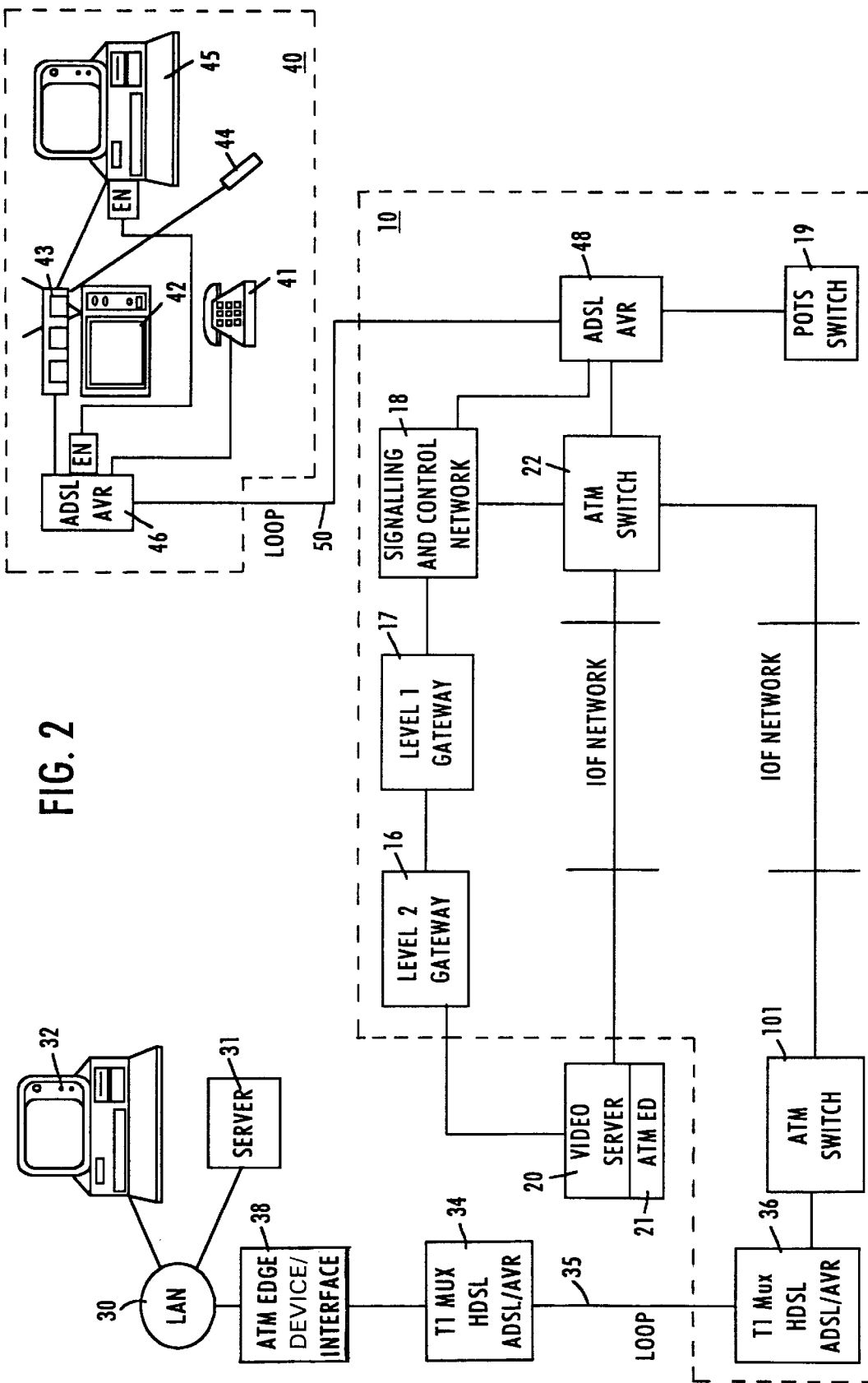


FIG. 2

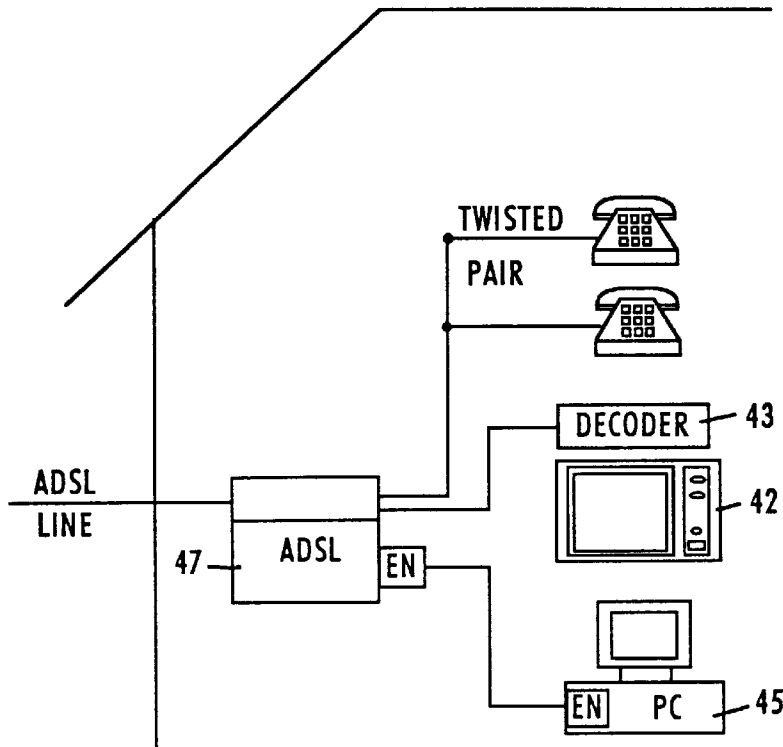


FIG. 5  
(PRIOR ART)

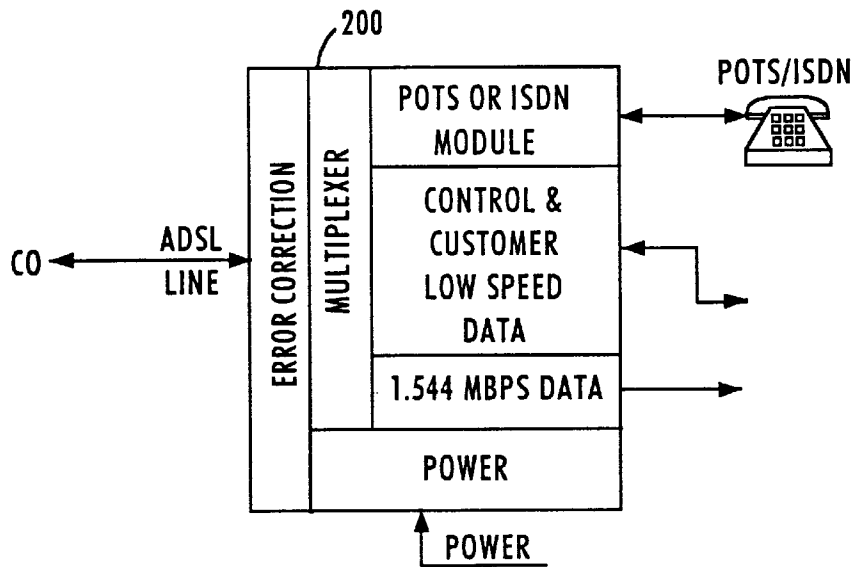


FIG. 3  
(PRIOR ART)

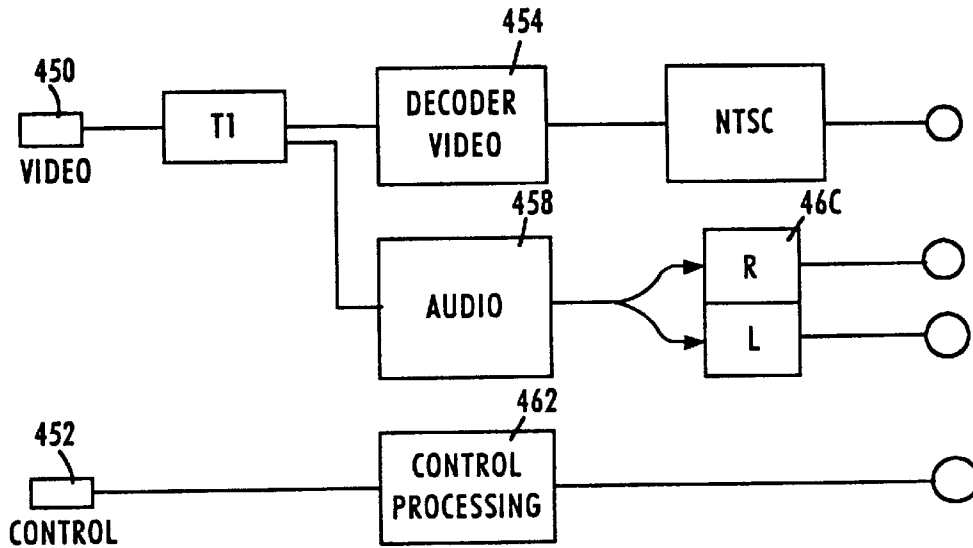


FIG. 8  
(PRIOR ART)

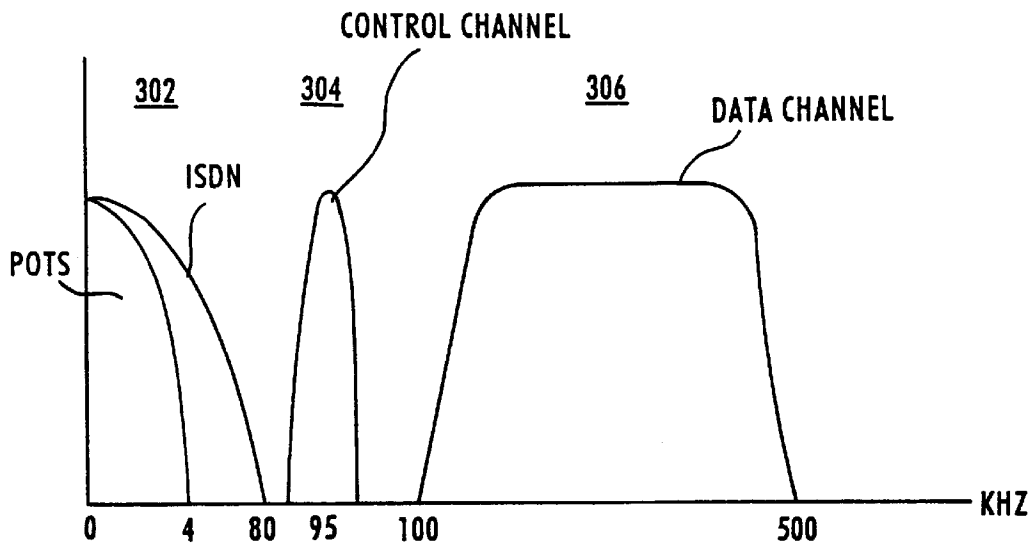


FIG. 4  
(PRIOR ART)

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