

United States Patent [19]

Dufresne et al.

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[45] Date of Patent: **Apr. 24, 1990**

[54] CATV SUBSCRIBER TERMINAL TRANSMISSION CONTROL

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[21] Appl. No.: **262,802**

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[30] Foreign Application Priority Data

Nov. 2, 1987 [CA] Canada 550764

[51] Int. Cl.⁵ **H04N 7/08**

[52] U.S. Cl. **370/85.2; 370/94.1; 455/5; 358/86**

[58] Field of Search 370/85, 89, 94, 124, 370/69.1, 123; 325/45, 46; 455/3, 4, 5, 6; 340/825.5; 358/84, 86; 380/10, 20

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Primary Examiner—**Douglas W. Olms**

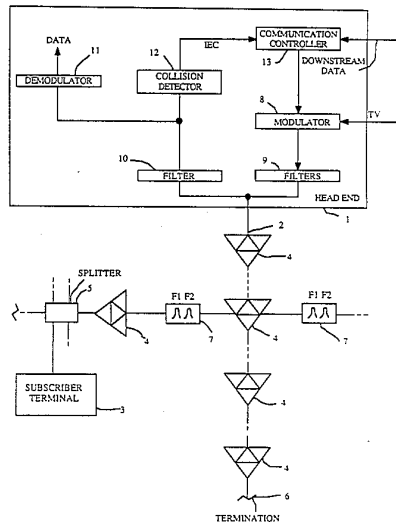
Assistant Examiner—**Alpus H. Hsu**

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[57] ABSTRACT

A bidirectional cable communication system comprising a head end, a bidirectional transmission network connected to the head end for transmitting signals downstream from the head end to a plurality of subscriber stations and for transmitting data signals upstream to the head end from the subscriber stations, means at the head end for detecting collisions between signals received from the subscriber stations and for generating a collision signal, means at the head end for transmitting downstream on the transmission system status bits of data signal indicative of the collision, whereby upon detection thereof by a subscriber station it can be enabled to cease transmission.

30 Claims, 6 Drawing Sheets



Petitioner ARRIS Group, Inc.'s

EXHIBIT
1014

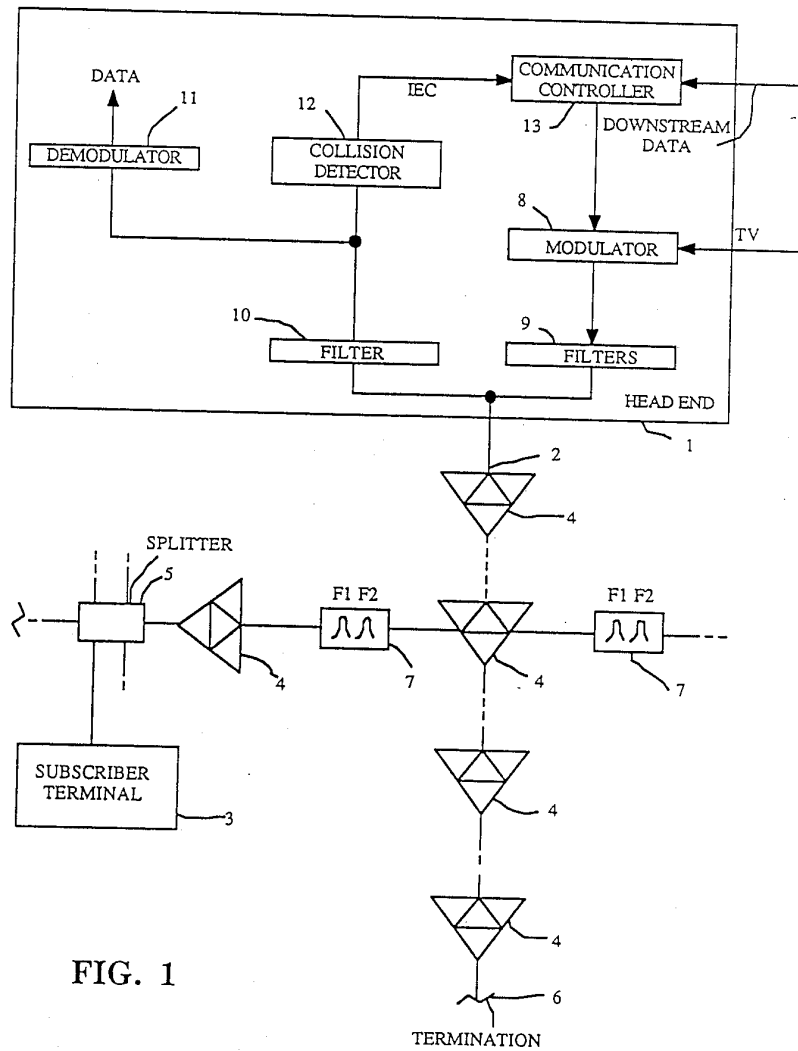


FIG. 1

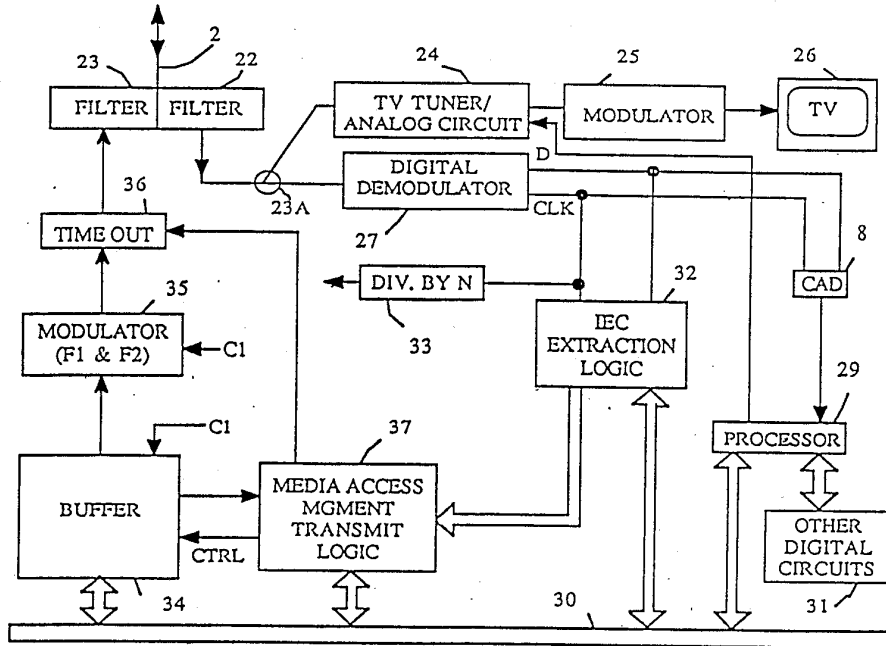


Fig. 4

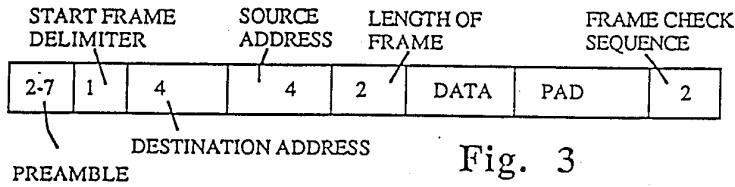


Fig. 3

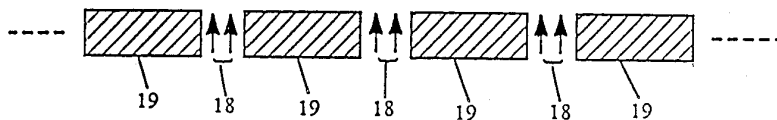


Fig. 2

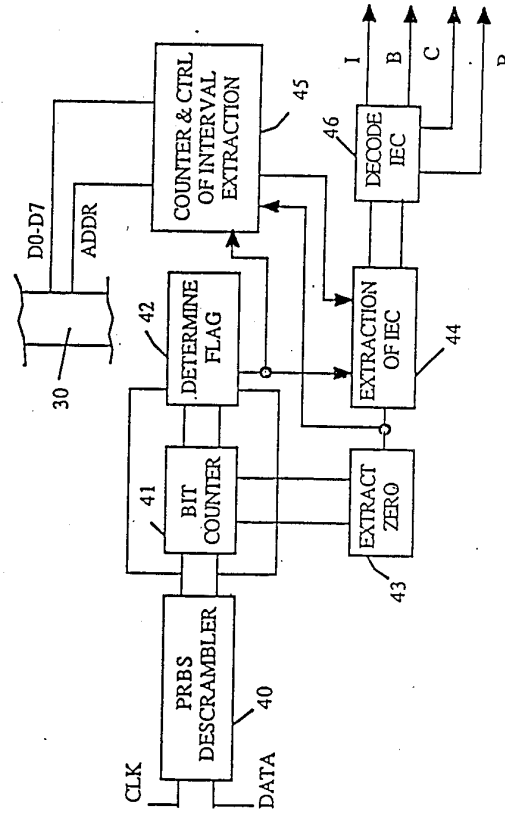


FIG. 5

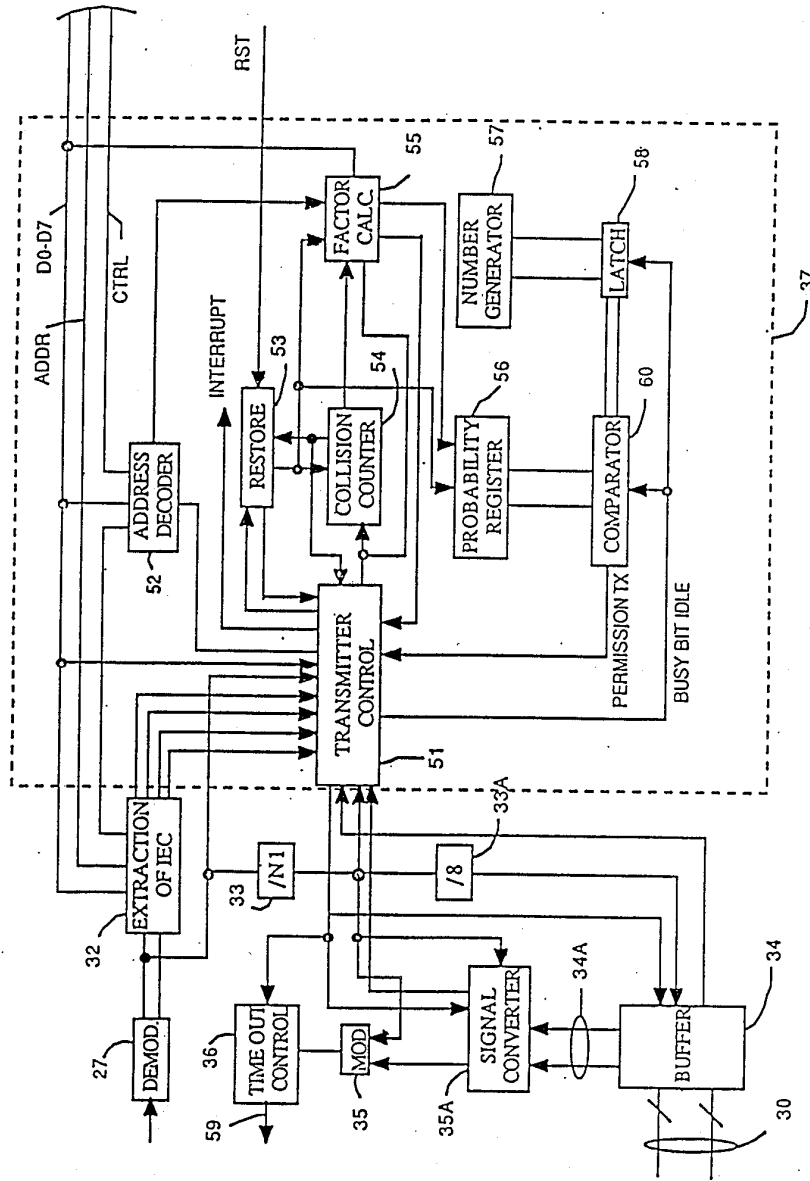


Fig. 6

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