

- [54] **HIGH SPEED DATA COMMUNICATIONS SYSTEM**
- [75] Inventors: **Luigi F. Mojoli, Vimercate; Angelo F. Olivieri, Dovera, both of Italy**
- [73] Assignee: **Coenco Ltd., Great Britain**
- [21] Appl. No.: **620,580**
- [22] Filed: **Jun. 14, 1984**
- [51] Int. Cl.⁴ **H04B 7/02**
- [52] U.S. Cl. **375/40; 375/58; 375/60; 375/100; 375/103; 375/111; 455/59; 455/133**
- [58] **Field of Search** **375/38, 40, 58, 60, 375/100, 103, 106, 111; 455/59, 61, 52, 133, 134, 135, 65, 307, 312; 371/36, 68; 340/825.01; 364/718, 726, 825; 328/14; 370/100**

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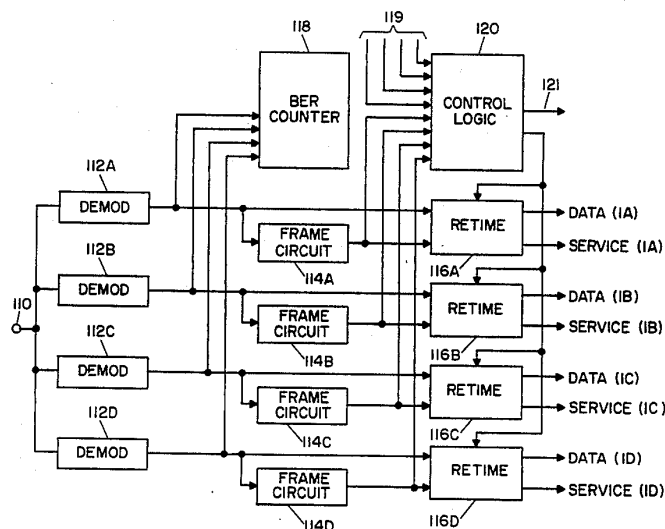
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[57] **ABSTRACT**

An improved data transmission system has a transmitter which includes a modulator responsive to a synthesized modulating signal, which provides for transmission of data substreams on parallel subchannels, for example, by using subcarrier frequencies. At the receiver the subcarriers are received and data is selected from the received subcarriers at two diverse receivers. In addition, there are provided signals added to the transmitted data for retiming the data at the receiver.

35 Claims, 21 Drawing Figures



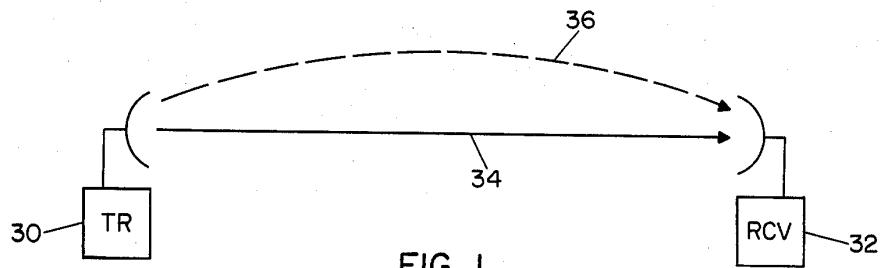


FIG. 1

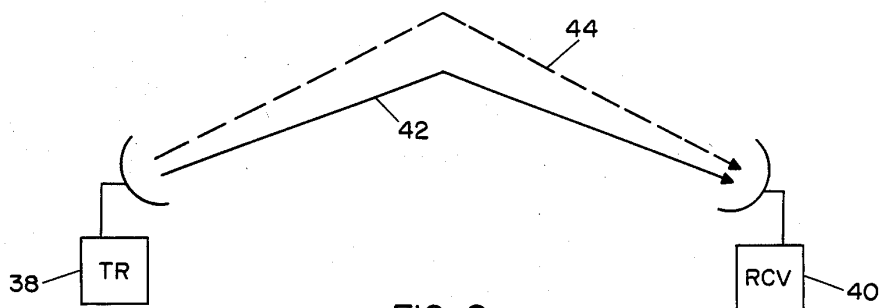


FIG. 2

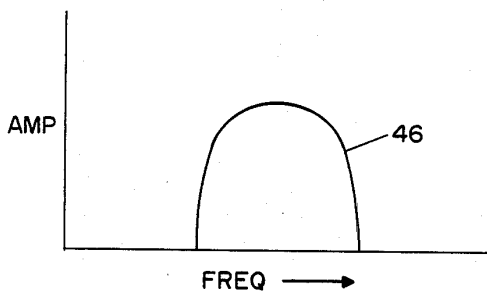


FIG. 3A

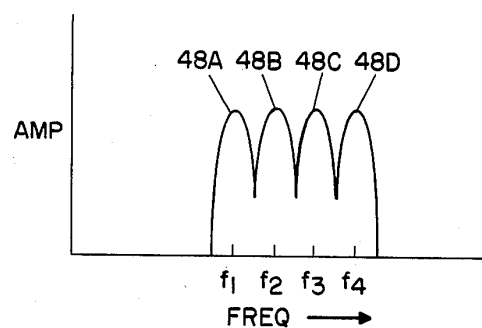


FIG. 3B

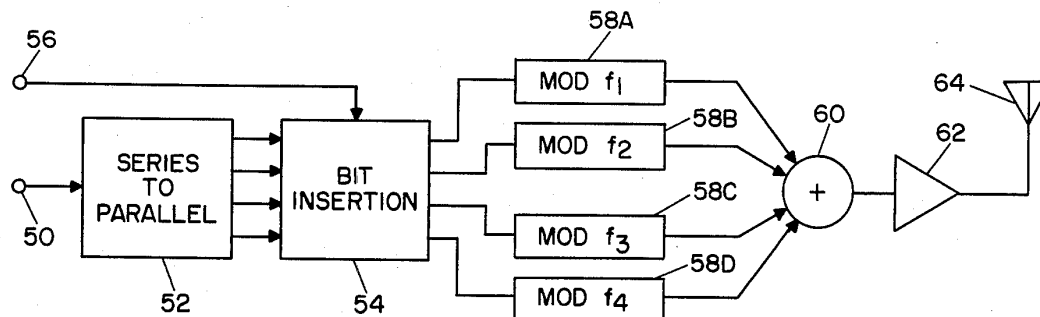


FIG. 4

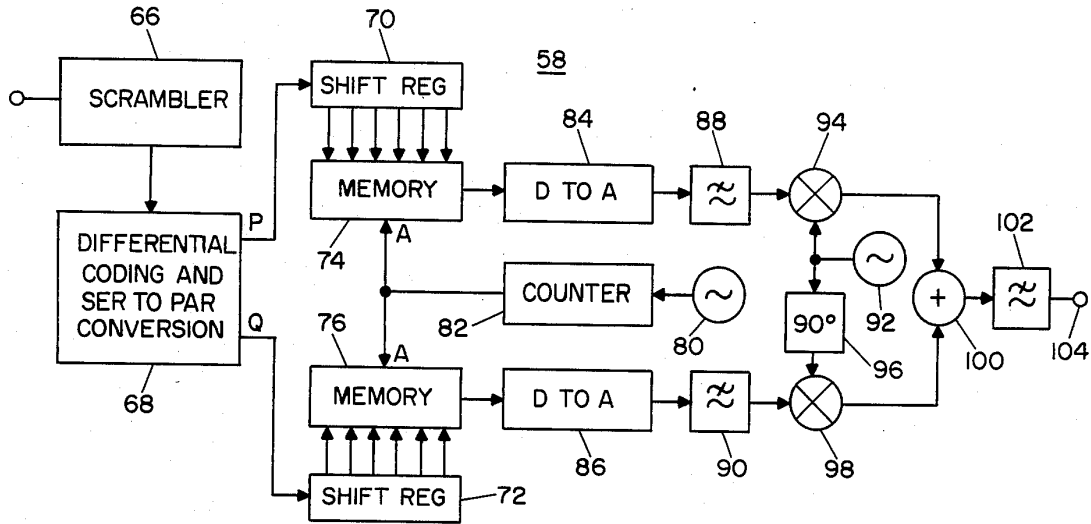


FIG. 5

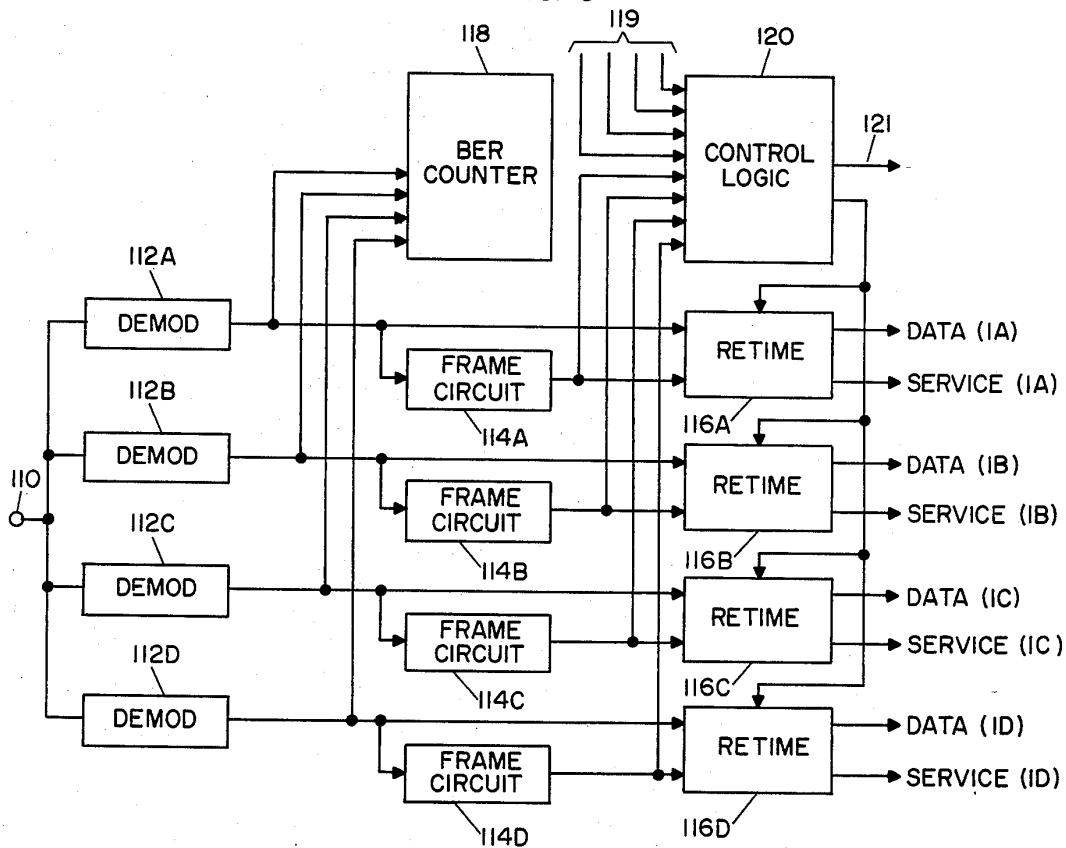


FIG. 6

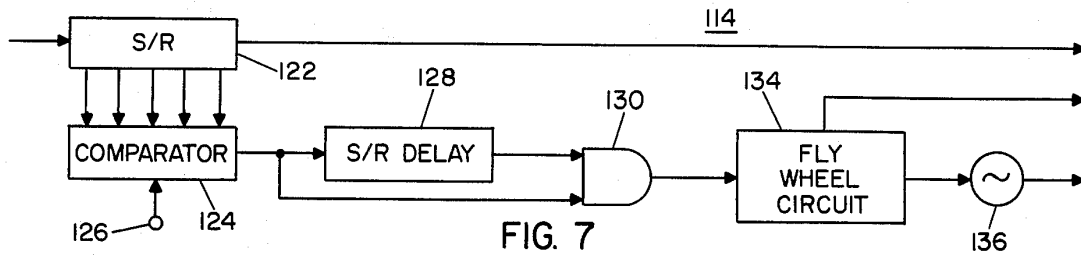


FIG. 7

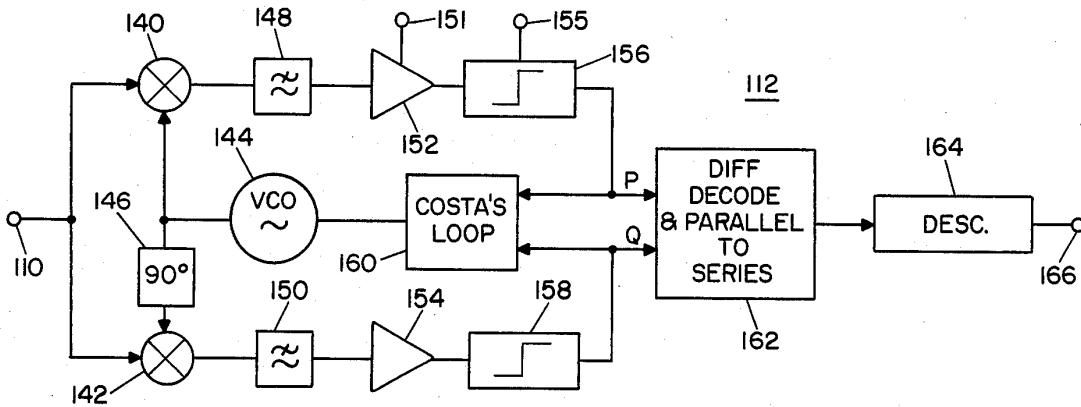


FIG. 8

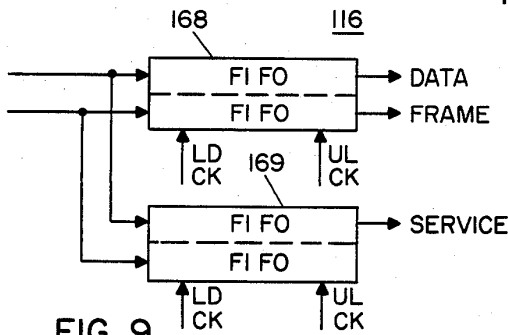


FIG. 9

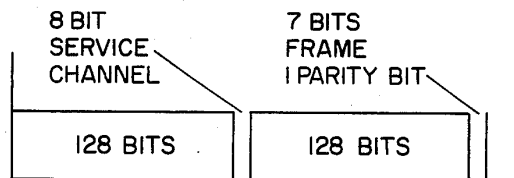


FIG. 10

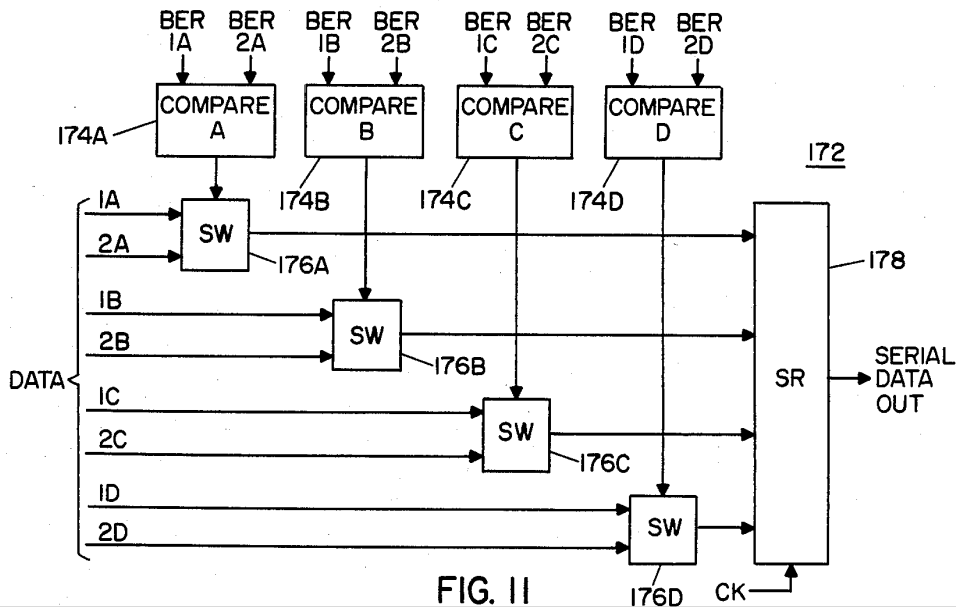


FIG. 11

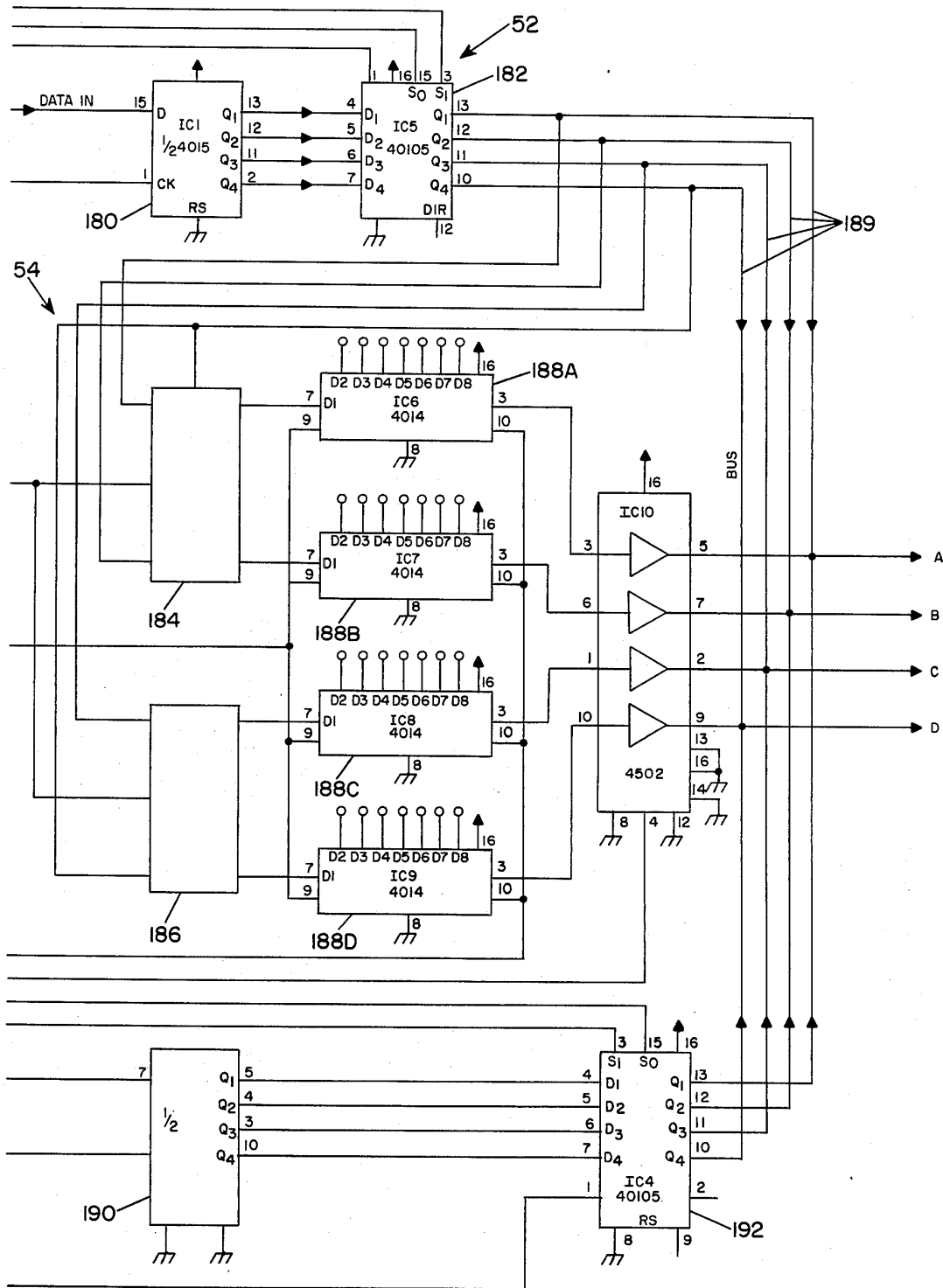


FIG. 12

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