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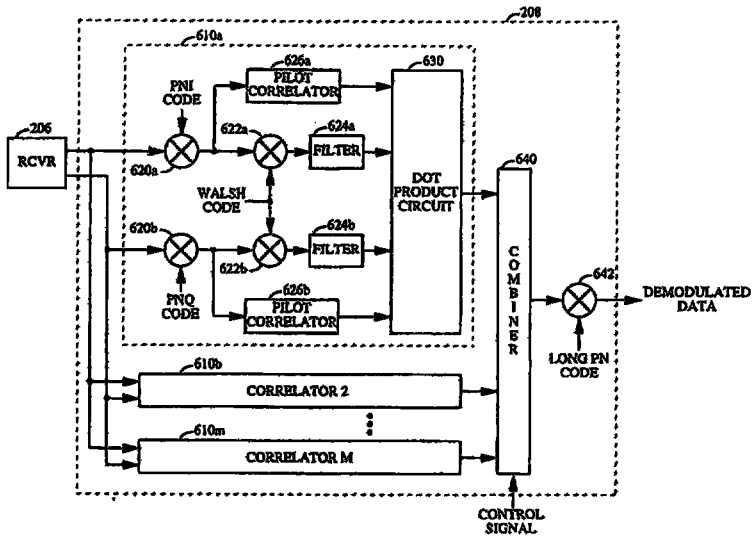
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(54) Title: METHOD AND APPARATUS FOR TIME EFFICIENT RETRANSMISSION USING SYMBOL ACCUMULATION



(57) Abstract

An efficient retransmission of data using symbol accumulation wherein the packet received in error is retransmitted at a lower energy–per–bit level concurrently in the same frame with the new packet. The destination device receives the data transmission and retransmission, demodulate the signal, and separates the received data into the new and retransmitted packet. The destination device then accumulates the energy of the retransmitted packet with the energy already accumulated for the packet received in error and decodes the accumulated packet. The accumulation of the additional energy provided by the subsequent retransmissions improves the probability of a correct decoding. The throughput rate can be improved since the packet received in error is retransmitted concurrently with the transmission of the new data packet. The capacity is maximized since the retransmission of the packet received in error is at a lower energy level than that of the new packet.