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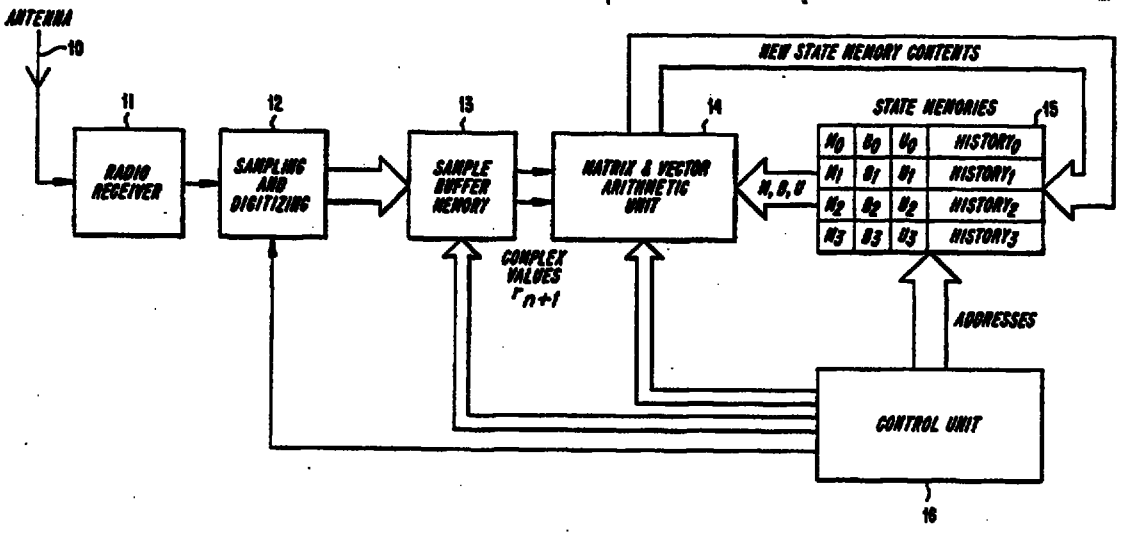
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Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

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(54) Title: BLIND EQUALIZING APPARATUS

channel-independent equalizer device



(57) Abstract

A demodulator for demodulating a signal modulated with digital information symbols so as to extract the information symbols is disclosed. A receiver receives a signal over a communications channel and samplers and digitizers produce a sequence of numerical sample values representative of the received signal. Memories are provided each having a number of state memories each associated with a hypothesized symbol string. A controller selectively retrieves values from the memory means and controls the timing of operations thereupon. A metric computer computes candidate metrics using a hypothesis of a next of the information symbols to be demodulated made by the controller, one of the numerical sample values, path metric values, B-matrices, and U-vectors and the candidate metrics associated state number selected by the controller from the memory means. A best predecessor computer determines the best of the candidate metrics to be selected to be written back into the memory means along with a successor B-matrix, U-vector and path history. The successor B-matrices, U-vectors and path history are then updated using corresponding values associated with the best predecessor and one of numerical sample values.

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