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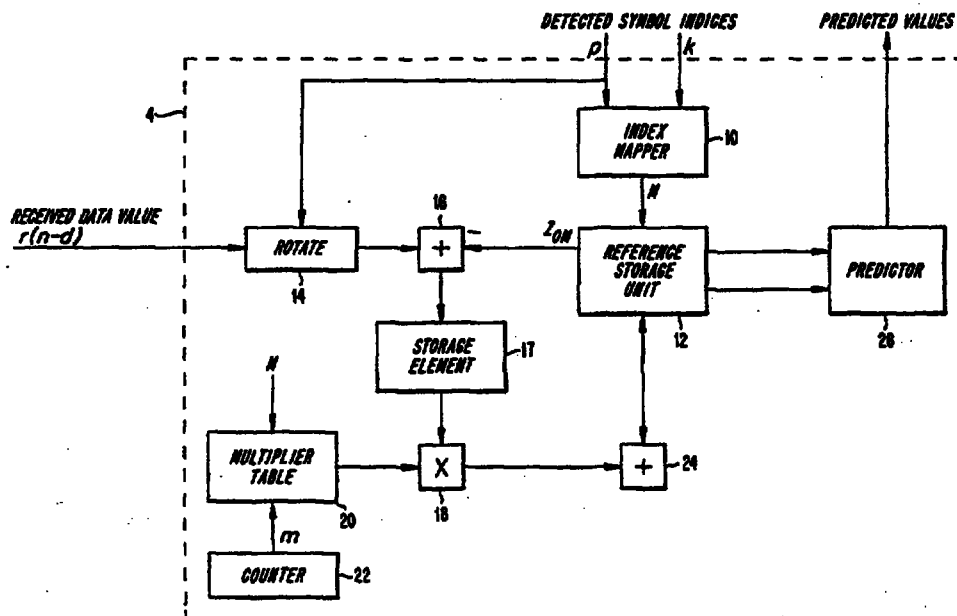


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(54) Title: GENERALIZED DIRECT UPDATE VITERBI EQUALIZER



(57) Abstract

A radio receiver for demodulating and equalizing digital information is disclosed. The receiver receives radio signals and processes the signals to produce data samples which are then stored. Reference values that model what the receiver should receive for various transmitted symbol sequence hypotheses are also stored. The receiver equalizes the received data using the stored reference values to produce symbol detection information, and updates the reference values based on the symbol detection information.