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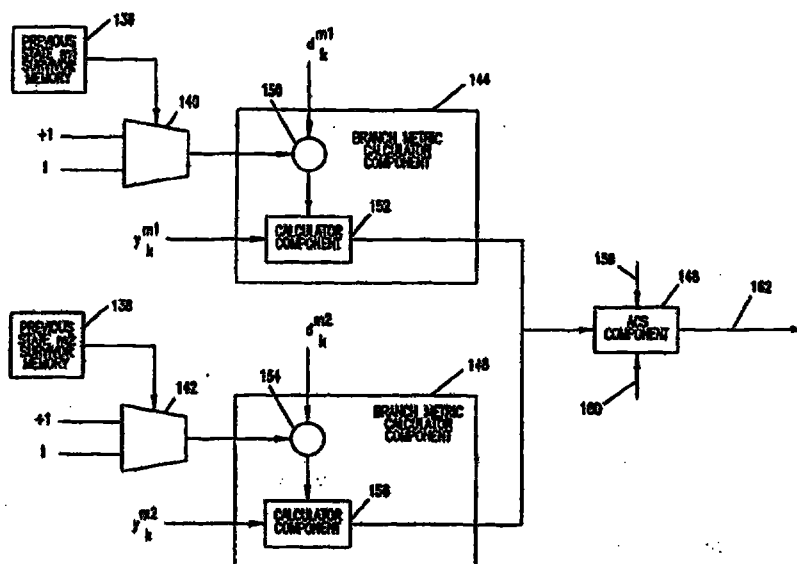
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(54) Title: METHOD AND APPARATUS FOR DETECTING DATA IN MAGNETIC RECORDING USING DECISION FEEDBACK



(57) Abstract

The present invention provides a method and apparatus for detecting data received from a magnetic storage channel (100) having a channel pulse response represented by a polynomial including intersymbol interference (ISI) terms. The detector (124) includes a Viterbi detector (124) corresponding to a trellis structure (134) having states connected by branches having associated branch metrics. In one embodiment, the Viterbi detector (124) includes a branch metric calculator component (144) configured to calculate a branch metric associated with each of the plurality of branches by removing a contribution to the branch metric associated with a predetermined ISI term.