

METHOD AND APPARATUS FOR A MAXIMUM LIKELIHOOD SEQUENCE DETECTOR

Abstract of the Invention

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In a Viterbi decoder, a branch metrics unit (51) receives samples and provides a branch metric to a first and second adder (54 and 55) that adds the branch metric to a first and second path metric from a path metrics memory (52). Concurrently, a comparator (56) compares the first and second path
10 metrics and provides a select signal to a multiplexor (58) to select the output of the first or second adder (54 or 55). The selection signal is also provided to a path memory unit (33) which provides a detected symbol sequence. The output of the first or second adder (54 or 55) is selected by the multiplexor (58) and provided to the path metric memory (52) as an updated path metric.

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(FIG. 3 accompanies this abstract)