

SOFT SYMBOL DECODING

Abstract

There is disclosed a soft symbol for use in a decoding process generated from a binary representation of a branch metric. When a hard decision bit is a zero, 5 a preselected number of bits of a binary representation of the branch metric are concatenated with a hard decision bit to form the soft symbol. When the hard decision bit is a one, the ones complement of the preselected number of bits of the binary representation of the branch metric are concatenated with the hard decision bit to form the soft symbol. The concatenation function can be achieved using an 10 exclusive OR function with the preselected bits of the binary representation of the branch metric and the hard decision bit to form the soft symbol. The hard decision bit may be selectable from more than one source.

FIG. 1