

## ABSTRACT OF THE DISCLOSURE

TITLE OF INVENTION: METHOD AND DEVICE FOR DETERMINING TRESHOLDS  
OF METRIC VALUES USED IN VITERBI  
SYNCHRONIZATION EVALUATION CIRCUITS

A method and device determines the metric value threshold used in a Viterbi synchronization evaluation circuit which enables to synchronize with a correct coding rate when multiple coding rates exist in the input signal to a Viterbi decoder. A first coding rate setting unit sets a coding rate for which the metric value threshold may need to be identified, and a second coding rate setting unit sets a coding rate other than the coding rate set by the first coding rate setting unit. A metric value threshold setting unit decreases values gradually from the maximum metric value threshold as the synchronous/asynchronous state of the Viterbi decoder is monitored by a synchronous/asynchronous monitor in order to find the minimum metric value threshold where the Viterbi decoder is not completely synchronized (limit for judging asynchronicity). This minimum value is determined as the metric value threshold for the coding rate set by the first coding rate setting unit.

Figure 1.