

ABSTRACT

In a recording/reproducing system that performs PRML decoding, a suitable evaluation value for setting a recording condition can be obtained with a simple structure. It is assumed that a value corresponding to a difference between a difference metric between a maximum likelihood path for an equalized signal that is fed to maximum likelihood decoding processing and a path in a bit-advanced shift direction and a difference metric between the maximum likelihood path for the equalized signal and a path in a bit-delayed shift direction is a signal quality evaluation value dSAM. Further, the signal quality evaluation value dSAM is calculated using an equalization error value e_k which is an error between an equalized signal value fed to the maximum likelihood decoding processing and an ideal equalized signal value determined from a decoded signal obtained as a result of the maximum likelihood decoding processing.