

Abstract

The present invention relates to coding method and coding device that allow Rate-Compatible LDPC (low-density parity-check) codes to have favorable BER performance both with a low code rate and with a high code rate. In coding of LDPC codes that have plural code rates and whose all parity check matrices are composed of plural cyclic matrices, a coder 121 performs the coding in such a way that $1 < w_0$ and $w_1 < w_0$ are satisfied when the maximum column weight of the cyclic matrices in the check matrix of a certain code whose code rate is not the minimum value among the LDPC codes is defined as w_0 and the maximum column weight of the cyclic matrices in the check matrix of a code having a code rate lower than that of the certain code is defined as w_1 .