

DATA PROCESSING METHOD AND DATA PROCESSING APPARATUS

ABSTRACT

Embodiments of this application provide a data processing method and a data processing apparatus, to use FEC encoding in combination with a PCS technology to satisfy a requirement for a longer transmission distance. Specifically, PCS processing is performed on a first bit set in k bits, to obtain a second bit set, where k is an integer greater than 1. FEC encoding is performed on the second bit set and a third bit set in the k bits excluding the first bit set, to obtain a fourth bit set. The fourth bit set includes m_0 first bit subsets, each of the first bit subsets includes F_0 bits, m_0 is an integer greater than 1, and F_0 is an even number greater than 1. First interleaving processing is performed on the fourth bit set to obtain a fifth bit set. The fifth bit set includes m_0 second bit subsets, each of the second bit subsets includes F_0 bits, $F_0/2$ bits in each of the second bit subsets are from the second bit set, and the other $F_0/2$ bits in each of the second bit subsets are from the third bit set and/or parity bits of the FEC encoding.

Fig. 5