

ABSTRACT

This application relates to the field of optical communication technologies, and discloses a data processing method and apparatus in optical communication, to provide a data processing solution applicable to scenarios in which a transmission rate is higher than 800 Gbps. In
5 embodiments of this application, data streams are distributed, so that bits obtained through FEC encoding processing are relatively evenly distributed in different data streams, for example, on optical signals with different wavelengths and in different polarization directions, or on different optical fibers and in different polarization directions. The way of distribution makes parallel transmission of data streams possible, thereby improving a transmission rate. Additionally, this
10 application does not require devices with a higher baud rate, and is applicable to metro telecommunication transmission and data center transmission scenarios that require low power consumption. Additionally, because the bits obtained through FEC encoding processing are relatively evenly distributed in the different data streams, decoding errors of a receiver are relatively evenly distributed on a plurality of paths of FEC decoding processing, so that codec
15 performance can be improved.