

DATA COMPRESSION AND TRANSMISSION METHOD, APPARATUS, DEVICE, AND STORAGE MEDIUM

ABSTRACT

This application provides a data compression and transmission method, an apparatus, a device, and a storage medium. The method includes: A first communication apparatus decomposes an i^{th} piece of subdata Y_i in M pieces of subdata into a dictionary matrix D_i and a sparse matrix X_i , where the sparse matrix X_i is used to express the i^{th} piece of subdata Y_i based on the dictionary matrix D_i , the M pieces of subdata are included in to-be-transmitted first data, M is an integer greater than or equal to 1, and i is an integer greater than or equal to 1 and less than or equal to M ; performs data compression based on the dictionary matrix D_i and the sparse matrix X_i , to obtain compressed data Z_i of the i^{th} piece of subdata Y_i ; and then sends the compressed data Z_i to a second communication apparatus. This implements effective and reliable data compression and transmission on the first data with a large data amount.

(Fig.3)