

ABSTRACT

METHOD OF AND APPARATUS FOR COMPRESSING AND DECOMPRESSING DATA AND DATA PROCESSING APPARATUS AND NETWORK SYSTEM USING THE SAME

In a data compression method using dictionaries, there are adopted a dynamic dictionary and a static dictionary to prevent the deterioration in the data compression ratio in the leading portion of the input data which cannot be efficiently compressed using the dynamic dictionary. Moreover, the configuration removes the disadvantage of the deterioration in the data compression ratio because character strings having a low appearance frequency occupy a large portion of the dictionary. Data to be compressed is inputted via an input unit to be decomposed into input bit strings 202. Using the input bit string as a retrieval key, a bit string retrieval is conducted through the static dictionary by a decision unit and a reference unit. According to a result from comparison between the input bit string and a bit string of the static dictionary and a result from the retrieval by a retrieving unit through the dynamic dictionary, whether or not the input bit string is to be registered to the dynamic dictionary is determined. For registration of the input bit string, an index is added thereto by a register unit before the registration. The input bit string or an index matching the string is outputted as compressed data.

(Figure 2)