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Text Image Compression Based on the Formation and Classification of Vertical Elements of a Row in the Graphical Dictionary of Symbol Data

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ABSTRACT

The method of compressing images of a text on the basis of formation and classification of vertical elements of the row of symbolic data of the graphical dictionary, obtained at the first phase of automatic classification of symbols, is proposed. This enables one to create the new dictionary of the vertical elements of a row and the map of their location, all of which have a smaller volume than the initial graphical dictionary. The proposed two-phase algorithm of image compression of a text has an advantage of the degree of compression as compared with the JB2 algorithm (DjVu format) about 25 % for resolutions of the text from 200 to 600 dpi.

Keywords: text image compression, graphical dictionary of symbol data, two-phase algorithm of image compression, development of the JB2 algorithm (DjVu format)

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