blocks and applying compression to single representatives of groups. The effectiveness of the proposed algorithm is additionally improved by optimization of hierarchic topology, when similar parts are joined and described by only one F-transform component.

Resulting tables contain PSNR estimations of the reconstructed images Lena and Cameraman compressed by the proposed algorithm. The results show that the proposed algorithm is comparable with one of most used algorithm for image compression - JPEG.

The proposed algorithm can be applied for both type of images (photo like and cartoon like), and it is more effective for the images of the second type.

The future research will be focused on the reduction of computation complexity of the proposed algorithm.

8. Acknowledgment

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