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A block based watermarking approach for color images using discrete wavelet transformation

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Kaiser J. Giri 🗹 & Rumaan Bashir

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Abstract

A new block based blind color image watermarking method is presented in this work. The proposed method has been implemented using discrete wavelet transformation (DWT). The host color image is initially subjected to DWT and the coefficients belonging to a particular frequency band so obtained are divided into different blocks for watermark embedding. The watermark comprising of a grayscale image is bit sliced and the resultant bits are inserted in the image blocks in a predetermined fashion. Only a portion of each image blocks is considered for watermarking embedding and the remaining parts are used as a guard band with the adjacent blocks. The experimental results have shown that the impact of attacks has reduced to a large

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extend by employing the above mentioned procedure which in turn has significantly improved the security and robustness of the proposed watermarking scheme.

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