WATERMARKING OF A COLOR BITMAP IMAGE

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Abstract

The images need to be signed to protect it from piracy. Many techniques are available but most popular of them is watermarking. Out of wide variety of watermark schemes invisible scheme is very secure and prolific. As discoveries of various algorithms continue, this is an attempt to make a small contribution. This paper suggests a mechanism to embed a small image like watermark in bitmap image for copyright purpose. This can be used to prove that some corporation or person creates a particular image by extracting the watermark. The watermark image is encrypted so that no one can extract it without the private key. The watermark has encrypted using transposition algorithm. The 24 bit color bitmap image has no effect if any LSB of a single color is changed. So this effect exploited to get the work done. The watermark bits are inserted into LSB of one color byte of original image. As it is invisible, thief doesn't know it has watermark. So this can be used for copyright purpose. At the time of extraction, reverse process is carried out. i.e. Pixels are extracted and an image is created using this data. This image is exactly similar to watermark.