ABSTRACT

A new blind digital image watermarking scheme that employs a Hadamard matrix to spread the CDMA watermark in selected DWT coefficients in a gray-level cover image is proposed. The coefficients are obtained from the 1- level DWT Haar decomposition of the image. A binary image is used as a watermark and is embedded to produce a watermarked image that is perceptually indistinguishable from the original image. A secret key is used to detect the presence of the watermark in a suspect image. The experimental results obtained by computer simulation show that the proposed scheme is robust against common attacks such as additive Gaussian noise, cropping, low pass filtering, and JPEG compression.