



AN AUDIO WATERMARKING ALGORITHM VIA ZERO ASSIGNED FILTER BANKS (MonPmOR4)

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★ Abstract :

In order to identify the owner and distributor of digital data, a watermarking scheme for audio files is proposed in frequency domain. The scheme satisfies the imperceptibility and persistence requirements and is robust against additive noise. It consists of a few stages of wavelet decomposition of several frames of the original signal using special zero assigned filter banks. By assigning zeros to filters on the high frequency portion of the spectrum, filter banks with frequency selective response is obtained. Text information is then inserted in the wavelet-decomposed and compressed signal. Several robustness tests are performed on male voice, female voice, and music files.