



WAVELET-BASED DISTRIBUTED SOURCE CODING OF VIDEO (WedPmOR10)

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★ Abstract :

A wavelet-based video coder built on the principles of distributed source coding is described. The encoder employs a syndrome-based encoding strategy for intercoded coefficients while other coefficients are intracoded using an embedded wavelet-based coder designed for the coding of arbitrarily shaped image objects. The decoder uses a reference frame in the domain of a redundant wavelet transform to search for blocks matching the syndrome received from the encoder in order to decode intercoded coefficients. Experimental results indicate that, due to improved intraframe coding, the proposed wavelet-based algorithm significantly outperforms a similar technique constructed with JPEG-like intraframe coding.