

A NOVEL MPEG-4 TEXTURE CODING ALGORITHM USING DIRECTIONAL SA-DCT

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Abstract

In this paper, we propose the directional SA-DCT (DSA-DCT) algorithm for coding arbitrarily shaped video objects. The DSA-DCT algorithm reorders the object pixels within a boundary block according to the edge direction of the binary shape information of the boundary block. As a result, the AC coefficients after performing SA-DCT on the reordered block will be small. Therefore, the computational complexity as well as the bit rate required to represent the reordered boundary block can be reduced. Experimental results have shown the effectiveness of the proposed algorithm.

Keyword :