

MULTI-LEVEL SIGNIFICANCE MAPS FOR ENCODING AND DECODING

ABSTRACT

Methods of encoding and decoding for video data are described in which multi-level significance maps are used in the encoding and decoding processes. The significant-coefficient flags that form the significance map are grouped into contiguous groups, and a significant-coefficient-group flag signifies for each group whether that group contains no non-zero significant-coefficient flags. If there are no non-zero significant-coefficient flags in the group, then the significant-coefficient-group flag is set to zero. The set of significant-coefficient-group flags is encoded in the bitstream. Any significant-coefficient flags that fall within a group that has a significant-coefficient-group flag that is non-zero are encoded in the bitstream, whereas significant-coefficient flags that fall within a group that has a significant-coefficient-group flag that is zero are not encoded in the bitstream.

Fig. 7