

MULTI-LEVEL SIGNIFICANCE MAP SCANNING

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. A multi-level scan order may be used in which significant-coefficient flags are scanned group-by-group. The group scan order specifies the order in which the groups are processed, and the scan order specifies the order in which individual significant-coefficient flags within the group are processed. The bitstream may interleave the significant-coefficient-group flags and their corresponding significant-coefficient flags, if any.

Fig. 7