TRANSFORM AND LAST SIGNIFICANT COEFFICIENT POSITION SIGNALING FOR LOW-FREQUENCY NON-SEPARABLE TRANSFORM IN VIDEO CODING

ABSTRACT

A video decoder determines, based on a block size of a current block and a low-frequency non-separable transform (LFNST) syntax element, a zero-out pattern of normatively defined zero-coefficients. The LFNST syntax element is signaled at a transform unit (TU) level. Additionally, the video decoder determines transform coefficients of the current block. The transform coefficients of the current block include transform coefficients in an LFNST region of the current block and transform coefficients outside the LFNST region of the current block. As part of determining the transform coefficients of the current block, the video decoder applies an inverse LFNST to determine values of one or more transform coefficients in the LFNST region of the current block. The video decoder also determines that transform coefficients of the current block in a region of the current block defined by the zero-out pattern are equal to 0.

Fig. 13