CLAIMS

1. A video decoding method comprising:

obtaining, from a bitstream, maximum split information for an inter mode and information about a prediction mode for a coding unit;

when the information about the prediction mode indicates the inter mode, determining a maximum split level of a transformation unit based on the maximum split information for the inter mode, wherein the transformation unit is determined from the coding unit;

when a current split level of a current transformation unit is less than the maximum split level, obtaining sub-split information about the current transformation unit from the bitstream;

when the sub-split information indicates a split of the current transformation unit, splitting the current transformation unit into transformation units of a next split level, wherein the next split level is greater than the current split level; and

performing inverse-transform on the current transformation unit.

2. The video decoding method of claim 1, wherein the maximum split information indicates a maximum number of available splits for generating the transformation unit by splitting the coding unit.

3. The video decoding method of claim 1, wherein the maximum split information for the inter mode is obtained as parameters with respect to one data level from among data levels comprising a picture sequence, a picture, a slice, and a data unit for encoding a video.

4. The video decoding method of claim 1, wherein a minimum size of the transformation unit determined from the coding unit based on the maximum split level of the transformation unit is not less than a minimum size of a transformation unit according to minimum size information of transformation unit obtained from the bitstream or a size of a transformation unit at a lowermost level obtained by splitting the coding unit to the maximum split level.

5. A video decoding apparatus comprising:

an extracting unit which obtains, from a bitstream, maximum split information for an inter mode, information about a prediction mode for a coding unit, and sub-split information about a transformation unit; and

a decoding unit which determines a maximum split level of the transformation unit based on the maximum split information for the inter mode when the information about the prediction mode indicates the inter mode, wherein the transformation unit is determined from the coding unit,

wherein the extracting unit obtains sub-split information about a current transformation unit from the bitstream when a current split level of the current transformation unit is less than the maximum split level,

wherein the decoding unit splits the current transformation unit into transformation units of a next split level when the sub-split information about the current transformation unit indicates a split of the current transformation unit, wherein the next split level is greater than the current split level, and

wherein the decoding unit performs inverse-transform on the current transformation unit.