

CLAIMS

1. An apparatus of decoding video, the apparatus comprising:

- a parser which obtains a split transformation flag for a current depth, from a bitstream, and which, when the split transformation flag indicates non-split for the current depth, determines a transformation depth is equal to the current depth;
 - a context modeler which obtains a context increasement parameter for determining a context index based on whether the transformation depth is equal to a predetermined value without using a size of a transformation unit, and obtains a context model for arithmetic decoding a transformation unit significant coefficient flag using the context index obtained by adding the context increasement parameter and a context offset; and
 - an arithmetic decoder which decodes the transformation unit significant coefficient flag based on the context model and determines whether at least one non-zero transformation coefficient exists in the transformation unit of the transformation depth, based on the transformation unit significant coefficient flag,
- wherein, when the split transformation flag indicates a split for the current depth, the transformation unit of the current depth is split into four transformation units of a next depth, and a split transformation flag for the next depth is obtained from the bitstream, and
- wherein the context model includes an information to determine a most probable symbol (MPS).