

Claims

1. A method for decoding an image using a division unit, comprises:
dividing an encoded image included in a received bitstream into at least one division unit
by referring to a syntax obtained from the received bitstream;
deriving an intra prediction mode of a current block in the division unit;
deriving a reference sample layer of the current block from a plurality of reference
sample layers;
generating reference samples based on the derived reference sample layer; and
generating a prediction sample of the current block based on the reference samples and
the intra prediction mode,
wherein the plurality of reference sample layers are included in reconstructed
neighboring blocks of the current block, and
wherein each of the reference sample layers of the current block has a different distance
from a boundary of the current block.
2. The method of claim 1,
wherein when the intra prediction mode is a non-directional mode, the prediction sample
is generated by using only the reference sample layer having a shortest distance from the
boundary of the current block.

3. The method of claim 2,
wherein the non-directional mode is representative of a planar mode.
4. The method of claim 1,
wherein the reference sample layer is derived based on a color component.
5. The method of claim 1,
wherein a number of the plurality of reference sample layers is equal to or more than 3.
6. A method for encoding an image using a division unit, comprises:
dividing the image into at least one division unit;
determining an intra prediction mode of a current block in the division unit;
determining a reference sample layer of the current block from a plurality of reference
sample layers;
generating reference samples based on the determined reference sample layer; and
generating a prediction sample of the current block based on the reference samples and
the intra prediction mode,
wherein the plurality of reference sample layers are included in reconstructed
neighboring blocks of the current block, and
wherein each of the reference sample layers of the current block has a different distance
from a boundary of the current block.

7. The method of claim 6,
wherein when the intra prediction mode is a non-directional mode, the prediction sample is generated by using only the reference sample layer having a shortest distance from the boundary of the current block.

8. The method of claim 7,
wherein the non-directional mode is representative of a planar mode.

9. The method of claim 6,
wherein the reference sample layer is determined based on a color component.

10. The method of claim 6,
wherein a number of the plurality of reference sample layers is equal to or more than 3.

11. A non-transitory computer readable storage medium storing information causing a decoding apparatus to perform operations comprising:

dividing an encoded image included in a received bitstream into at least one division unit by referring to a syntax obtained from the received bitstream;

deriving an intra prediction mode of a current block in the division unit;

deriving a reference sample layer of the current block from a plurality of reference

sample layers;

generating reference samples based on the derived reference sample layer; and

generating a prediction sample of the current block based on the reference samples and the intra prediction mode,

wherein the plurality of reference sample layers are included in reconstructed neighboring blocks of the current block, and

wherein each of the reference sample layers of the current block has a different distance from a boundary of the current block.