Voluntary Amendment

1. A video decoding method performed by a video decoding apparatus, the method comprising:

~~obtaining image information from~~receiving a bitstream~~,~~ comprising ~~the image information including~~ a picture header ~~related to~~for a current picture~~, and the current picture including a plurality of slices~~;

parsing, from the picture header, at least one of a first flag ~~representing~~related to whether information ~~necessary~~ for an inter ~~prediction operation for a decoding process~~slice is present in the picture header or a second flag ~~representing~~related to whether information ~~necessary~~ for an intra ~~prediction operation for the decoding process~~slice is present in the picture header;

~~generat~~deriving prediction samples ~~by performing at least one of an intra prediction or an inter prediction for~~ for blocks in ~~the~~ slices in the current picture based on at least one of the first flag or the second flag, wherein the prediction samples are derived by performing at least one of an intra prediction or an inter prediction; and

generating reconstructed samples based on the prediction samples~~.~~,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.

~~2. The video decoding method of claim 1, wherein the information necessary for the inter prediction operation comprises a syntax element used for decoding of an inter slice, and~~

~~the information necessary for the intra prediction operation includes a syntax element used for decoding of an intra slice.~~

~~3. The video decoding method of claim 1, wherein the generating the prediction samples comprises:~~

~~determining that syntax elements used for the inter prediction are present in the picture header based on that a value of the first flag is 1; and~~

~~determining that the syntax elements used for the inter prediction are not present in the picture header based on that the value of the first flag is 0.~~

~~4~~2. The video decoding method of claim ~~2~~1, wherein slices in the current picture have a type of I slice based on that a value of the first flag is 0.

~~5~~3. The video decoding method of claim 1, wherein 0 or more slices in the current picture have a type of P slice or B slice based on that a value of the first flag is 1.

~~6. The video decoding method of claim 1, wherein the generating the prediction samples comprises:~~

~~determining that syntax elements used for the intra prediction are present in the picture header based on that a value of the second flag is 1; and~~

~~determining that the syntax elements used for the intra prediction are not present in the picture header based on that the value of the second flag is 0.~~

~~7. The video decoding method of claim 1, wherein slices in the current picture have a type of P slice or B slice based on that a value of the second flag is 0.~~

~~8. The video decoding method of claim 1, wherein 0 or more slices in the current picture have a type of I slice based on that a value of the first flag is 1.~~

~~9~~4. A video encoding method performed by a video encoding apparatus, the method comprising:

determining ~~a prediction mode~~types of slices ~~a current block~~ in a current picture, the current picture including ~~a plurality of~~the slices;

~~generating prediction samples for the current block based on the prediction mode;~~

generating at least one of a first ~~information~~ flag ~~representing~~ related to whether information ~~necessary~~ for an inter ~~prediction operation for a decoding process~~slice is present in a picture header related to the current picture or a second ~~information~~ flag ~~representing~~ related to whether information ~~necessary~~ for an intra ~~prediction operation for the decoding process~~slice is present in the picture header ~~based on the prediction mode~~; and

encoding image information including at least one of the first ~~information~~ flag or the second ~~information~~flag,

wherein the first ~~information~~ flag and the second ~~information~~flag are ~~included~~comprised in the picture header of the image information~~.~~,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.

~~10. The video encoding method of claim 9, wherein the information necessary for the inter prediction operation comprises a syntax element used for decoding of an inter slice, and~~

~~the information necessary for the intra prediction operation includes a syntax element used for decoding of an intra slice.~~

~~11~~5. The video encoding method of claim ~~9~~4, wherein a value of a first flag is 0 based on that all slices in the current picture have a type of I slice.

~~12~~6. The video encoding method of claim ~~9~~4, wherein a value of a first flag is 1 based on that ~~0~~ one or more slices in the current picture have a type of P slice or B slice.

~~13. The video encoding method of claim 9, wherein a value of a second flag is 0 based on that slices in the current picture have a type of P slice or B slice.~~

~~14. The video encoding method of claim 9, wherein a value of a first flag is 1 based on that 0 or more slices in the current picture have a type of I slice.~~

~~15~~7. A non-transitory computer-readable digital storage medium ~~including information causing a decoding apparatus to perform~~storing a bitstream generated by a video ~~de~~encoding method, the video ~~de~~encoding method comprising:

determining types of slices in a current picture, the current picture including the slices;

generating at least one of a first flag related to whether information for an inter slice is present in a picture header related to the current picture or a second flag related to whether information for an intra slice is present in the picture header; and

encoding image information including at least one of the first flag or the second flag,

wherein the first flag and the second flag are comprised in the picture header of the image information,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.~~obtaining image information from a bitstream, the image information including a picture header related to a current picture, and the current picture including a plurality of slices;~~

~~parsing, from the picture header, at least one of a first flag representing whether information necessary for an inter prediction operation for a decoding process is present in the picture header or a second flag representing whether information necessary for an intra prediction operation for the decoding process is present in the picture header;~~

~~generating prediction samples by performing at least one of an intra prediction or an inter prediction for the slices in the current picture based on at least one of the first flag or the second flag; and~~

~~generating reconstructed samples based on the prediction samples.~~

8. A transmission method of data for a video, the method comprising:

obtaining a bitstream for the video, wherein the bitstream is generated based on determining types of slices in a current picture, the current picture including the slices, generating at least one of a first flag related to whether information for an inter slice is present in a picture header related to the current picture or a second flag related to whether information for an intra slice is present in the picture header, and encoding image information including at least one of the first flag or the second flag; and

transmitting the data comprising the bitstream,

wherein the first flag and the second flag are comprised in the picture header of the image information,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.