CLAIMS

1. A method of decoding an image, comprising:

dividing one picture into a plurality of division units;

determining whether to perform filtering on a boundary of a current division unit based on a predetermined flag; and

performing filtering on the boundary of the current division unit in response to the determination,

wherein the current division unit includes at least one of a sub picture, a slice, or a tile,

wherein the flag includes at least one of a first flag indicating whether filtering is performed on a boundary of a division unit within the one picture or a second flag indicating whether filtering is performed on the boundary of the current division unit in the one picture,

wherein whether to perform filtering on the boundary of the current division unit is determined by further considering a third flag indicating whether filtering is performed on a boundary of a neighboring division unit adjacent to the current division unit.

2. The method of claim 1, wherein when the first flag is a first value, it is not restricted so that filtering is not performed on the boundary of the division unit within the one picture, and when the first flag is a second value, the restriction on the boundary of the division unit within the picture is not

imposed,

wherein when the second flag is the first value, it is restricted so that filtering is not performed on the boundary of the current division unit, and when the second flag is the second value, filtering is allowed to be performed on the boundary of the current division unit.

3. The method of claim 2, wherein the second flag is decoded only when it is not restricted so that filtering is not performed on the boundary of the division unit within the one picture according to the first flag.

4. The method of claim 1, wherein a position of the neighboring division unit is determined based on whether the boundary of the current division unit is a vertical boundary or a horizontal boundary.

5. The method of claim 1, wherein performing the filtering comprises:

specifying a block boundary for deblocking filtering;

deriving a decision value for the block boundary;

determining a filter type for the deblocking filtering based on the decision value; and

performing the filtering on the block boundary based on the

filter type.

6. A method of encoding an image, comprising:

dividing one picture into a plurality of division units;

determining whether to perform filtering on a boundary of a current division unit; and

performing filtering on the boundary of the current division unit in response to the determination,

wherein the current division unit includes at least one of a sub picture, a slice, or a tile,

wherein determining whether to perform filtering on the boundary of the current division unit comprises,

encoding at least one of a first flag indicating whether filtering is performed on a boundary of a division unit within the one picture or a second flag indicating whether filtering is performed on the boundary of the current division unit in the one picture,

wherein whether to perform filtering on the boundary of the current division unit is determined by further considering a third flag indicating whether filtering is performed on a boundary of a neighboring division unit adjacent to the current division unit.

7. The method of claim 6, wherein when it is determined that filtering is restricted not to be performed on the boundary of the

division unit within the one picture, the first flag is encoded as a first value, and when it is determined that the restriction is not imposed on the boundary of the division unit within the picture, the first flag is encoded as a second value,

wherein when it is determined that filtering is restricted not to be performed on the boundary of the current division unit, the second flag is encoded as the first value, and when it is determined that filtering is allowed to be performed on the boundary of the current division unit, the second flag is encoded as the second value.

8. The method of claim 7, wherein the second flag is encoded only when it is not restricted so that filtering is not performed on the boundary of the division unit within the one picture.

9. The method of claim 6, wherein a position of the neighboring division unit is determined based on whether the boundary of the current division unit is a vertical boundary or a horizontal boundary.

10. The method of claim 6, wherein performing the filtering comprises:

specifying a block boundary for deblocking filtering;

deriving a decision value for the block boundary;

determining a filter type for the deblocking filtering based on the decision value; and

performing the filtering on the block boundary based on the filter type.

11. A non-transitory computer-readable storage medium storing instructions that, when executed, cause a processor to:

divide a picture into a plurality of division units;

determine whether to perform filtering on a boundary of a current division unit based on a predetermined flag; and

perform filtering on the boundary of the current division unit in response to the determination,

wherein the current division unit comprises at least one of a sub picture, a slice, or a tile,

wherein the flag comprises at least one of a first flag indicating whether filtering is performed on a boundary of a division unit within the one picture or a second flag indicating whether filtering is performed on the boundary of the current division unit in the one picture,

wherein whether to perform filtering on the boundary of the current division unit is determined by further considering a third flag indicating whether filtering is performed on a boundary of a neighboring division unit adjacent to the current division unit.

12. A method of transmitting a bitstream generated by an image encoding method, the image encoding method comprising:

dividing one picture into a plurality of division units;

determining whether to perform filtering on a boundary of a current division unit; and

performing filtering on the boundary of the current division unit in response to the determination for generating the bitstream,

wherein the current division unit includes at least one of a sub picture, a slice, or a tile,

wherein determining whether to perform filtering on the boundary of the current division unit comprises,

encoding at least one of a first flag indicating whether filtering is performed on a boundary of a division unit within the one picture or a second flag indicating whether filtering is performed on the boundary of the current division unit in the one picture,

wherein whether to perform filtering on the boundary of the current division unit is determined by further considering a third flag indicating whether filtering is performed on a boundary of a neighboring division unit adjacent to the current division unit.