CLAIMS

1. A method for decoding an image, comprising:

determining a current intra coding block that uses a constrained intra prediction method among current inter coded frame;

determining that neighboring coding blocks that are adjacent to the current intra coding block comprise a neighboring inter coding block;

updating the neighboring coding blocks with an invariable value only if all of the neighboring coding blocks are determined as neighboring inter coding blocks; otherwise, updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block, and

decoding the current intra coding block based on the updated pixel data in the neighboring inter coding blocks.

2. The method according to claim 1, wherein the updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block comprises:

updating only one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block.

3. The method according to claim 1 or 2, wherein it is determined according to a corresponding coding method identifier of the current coding block of the current inter coded frame in a bit stream that the current coding block uses an intra-frame coding method for coding.

4. The method according to any one of claims 1 to 3, wherein it is determined according to a constrained intra prediction flag in a bit stream that the current coding block uses a constrained intra prediction method for coding.

5. The method according to any one of claims 1 to 4, wherein the updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current

intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block comprises:

determining that the neighboring coding blocks comprise at least two neighboring intra coding blocks; and

updating the image data in the neighboring inter coding block based on image data in the at least two neighboring intra coding blocks through weighted average of distances from the at least two neighboring intra coding blocks to the current intra coding block.

6. The method according to any one of claims 1 to 4, wherein the updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block comprises:

determining that the neighboring coding blocks comprise at least two neighboring intra coding block; and

updating the image data in the neighboring inter coding block based on image data in a neighboring intra coding block that is most adjacent to the neighboring inter coding block.

7. A method for coding an image, comprising:

determining a current intra coding block that uses a constrained intra prediction method among current inter coded frame;

determining that neighboring coding blocks that are adjacent to the current intra coding block comprise a neighboring inter coding block;

updating the neighboring coding blocks with an invariable value only if all of the neighboring coding blocks are determined as neighboring inter coding blocks; otherwise,

updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block; and

coding the current intra coding block based on the updated pixel data in the neighboring inter coding blocks.

8. The method according to claim 7, wherein the updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding

block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block comprises:

updating only one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block.

9. The method according to claim 7 or 8, wherein the updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block comprises:

determining that the neighboring coding blocks comprise at least two neighboring intra coding block; and

updating the image data in the neighboring inter coding block based on image data in a neighboring intra coding block that is most adjacent to the neighboring inter coding block.

10. The method according to claim 7 or 8, wherein the updating at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block comprises:

determining that the neighboring coding blocks comprise at least two neighboring intra coding blocks; and

updating the image data in the neighboring inter coding block based on image data in the at least two neighboring intra coding blocks through weighted average of distances from the at least two neighboring intra coding blocks to the current intra coding block.

11. The method according to any one of claims 7 to 10, comprising: determining according to a constrained intra prediction flag in a bit stream that the current coding block uses a constrained intra prediction method for coding.

12. A device for coding an image, wherein the device comprises:

a first determining module, configured to determine a current intra coding block that uses a constrained intra prediction method among current inter coded frame;

a second determining module, configured to determine that neighboring coding blocks that are adjacent to the current intra coding block comprise a neighboring inter coding block;

an updating module, configured to, update the neighboring coding blocks with an invariable value only if all of the neighboring coding blocks are determined as neighboring inter coding blocks; otherwise, update at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block; and

an coding module, configured to code the current intra coding block based on the updated pixel data in the neighboring inter coding blocks.

13. The device according to claim 12, wherein the updating module comprises:

a second determining unit, configured to determine that the neighboring coding blocks comprise at least two neighboring intra coding blocks; and

a second updating unit, configured to update the image data in the neighboring inter coding block based on image data in the at least two neighboring intra coding blocks through weighted average of distances from the at least two neighboring intra coding blocks to the current intra coding block.

14. The device according to claim 12, wherein the updating module comprises:

a first determining unit, configured to determine that the neighboring coding blocks comprise at least two neighboring intra coding block; and

a first updating unit, configured to update the image data in the neighboring inter coding block based on image data in a neighboring intra coding block that is most adjacent to the neighboring inter coding block.

15. A device for decoding an image, wherein the device comprises:

a first determining module, configured to determine a current intra coding block that uses a constrained intra prediction method among current inter coded frame;

a second determining module, configured to determine that neighboring coding blocks that are adjacent to the current intra coding block comprise a neighboring inter coding block;

an updating module, configured to, update the neighboring coding blocks with an invariable value only if all of the neighboring coding blocks are determined as neighboring inter coding blocks; otherwise, update at least one pixel data in one row or one column of pixel data in the neighboring inter coding block adjacent to the current intra coding block based on at least one pixel

data determined from one row or one column of pixel data in the neighboring intra coding block adjacent to the current intra coding block;

and

a decoding module, configured to decode the current intra coding block based on the updated pixel data in the neighboring inter coding blocks.

16. The device according to claim 15, wherein the updating module comprises:

a second determining unit, configured to determine that the neighboring coding blocks comprise at least two neighboring intra coding blocks; and

a second updating unit, configured to update the image data in the neighboring inter coding block based on image data in the at least two neighboring intra coding blocks through weighted average of distances from the at least two neighboring intra coding blocks to the current intra coding block.

17. The device according to claim 15, wherein the updating module comprises:

a first determining unit, configured to determine that the neighboring coding blocks comprise at least two neighboring intra coding block; and

a first updating unit, configured to update image data in the neighboring inter coding block based on image data in a neighboring intra coding block that is most adjacent to the neighboring inter coding block.

18. A computer-readable storage medium having a program recorded thereon; where the program makes the computer execute method of any of claims 1 to 11.