CLAIMS

1. A method of decoding a coded video bitstream using at least one processor, the method comprising:

receiving the coded video stream comprising a first flag, wherein the first flag being equal to 1 specifies that horizontal wrap-around motion compensation is enabled for pictures referring to a picture parameter set in the coded video stream;

determining whether a reference picture is not scaled based on whether the width of the reference picture is equal to the width of a current picture;

in response to the reference picture being not scaled, setting a second flag to be equal to a value of the first flag; and

decoding the current layer without the wrap-around compensation based at least on the second flag.

2. The method of claim 1, wherein the wrap-around compensation is disabled based on at least one of a first determination indicating that the current layer is not the independent layer, or a second determination indicating that the reference picture resampling is enabled for the current layer.

3. The method of claim 2, wherein the first determination is made based on a flag signaled in a first syntax structure, and

wherein the second determination is made based on a flag signaled in a second syntax structure lower than the first syntax structure.

4. The method of claim 1, wherein the first flag is signaled in a picture parameter set.

5. The method of claim 4, wherein the wrap-around compensation is disabled based on the first flag being absent from the sequence parameter set.

6. The method of claim 2, further comprising:

based on the first determination indicating that the current layer is not the independent layer, and the second determination indicating that the reference picture resampling is enabled for the current layer, making a third determination regarding whether a width of the current picture is different from a width of a current reference picture,

wherein the wrap-around compensation is disabled based on the third determination indicating that the width of the current picture is different from the width of the current reference picture.

7. The method of claim 6, wherein the third determination is made during an interpolation process for motion compensation.

8. A device for decoding a coded video bitstream, the device comprising:

at least one memory configured to store program code; and

at least one processor configured to read the program code and operate as instructed by the program code, the program code including:

receiving code configured to cause the at least one processor to receive the coded video stream comprising a first flag, wherein the first flag being equal to 1 specifies that horizontal wrap-around motion compensation is enabled for pictures referring to a picture parameter set in the coded video stream;

determining code configured to cause the at least one processor to determine whether a reference picture is not scaled based on whether the width of the reference picture is equal to the width of a current picture;

setting code configured to cause the at least one processor to, in response to the reference picture being not scaled, set a second flag to be equal to a value of the first flag; and

decoding code configured to cause the at least one processor to decode the current layer without the wrap-around compensation based at least on the second flag.

9. The device of claim 8, wherein the wrap-around compensation is disabled based on at least one of a first determination indicating that the current layer is not the independent layer, or a second determination indicating that the reference picture resampling is enabled for the current layer.

10. The device of claim 9, wherein the first determination is made based on a flag signaled in a first syntax structure, and

wherein the second determination is made based on a flag signaled in a second syntax structure lower than the first syntax structure.

11. The device of claim 8, wherein the first flag is signaled in a picture parameter set.

12. The device of claim 11, wherein the wrap-around compensation is disabled based on the first flag being absent from the sequence parameter set.

13. The device of claim 9, wherein the program code further includes third determining code configured to cause the at least one processor to, based on the first determination indicating that the current layer is not the independent layer, and the second determination indicating that the reference picture resampling is enabled for the current layer, make a third determination regarding whether a width of the current picture is different from a width of a current reference picture, and

wherein the wrap-around compensation is disabled based on the third determination indicating that the width of the current picture is different from the width of the current reference picture.

14. The device of claim 13, wherein the third determination is made during an interpolation process for motion compensation.

15. A non-transitory computer-readable medium storing instructions, the instructions comprising: one or more instructions that are configured to, when executed by one or more processors of a device for decoding a coded video bitstream, cause the one or more processors to:

receive the coded video stream comprising a first flag, wherein the first flag being equal to 1 specifies that horizontal wrap-around motion compensation is enabled for pictures referring to a picture parameter set in the coded video stream;

determine whether a reference picture is not scaled based on whether the width of the reference picture is equal to the width of a current picture;

in response to the reference picture being not scaled, set a second flag to be equal to a value of the first flag; and

decode the current layer without the wrap-around compensation based at least on the second flag.

16. The non-transitory computer-readable medium of claim 15, wherein the wrap-around compensation is disabled based on at least one of a first determination indicating that the current layer is not the independent layer, or a second determination indicating that the reference picture resampling is enabled for the current layer.

17. The non-transitory computer-readable medium of claim 15, wherein the first flag is signaled in a picture parameter set, and

wherein the second flag is signaled in a sequence parameter set.

18. The non-transitory computer-readable medium of claim 17, wherein the wrap-around compensation is disabled based on the first flag being absent from the sequence parameter set.

19. The non-transitory computer-readable medium of claim 16, wherein the one or more instructions further cause the one or more processors to, based on the first determination indicating that the current layer is not the independent layer, and the second determination indicating that the reference picture resampling is enabled for the current layer, make a third determination regarding whether a width of the current picture is different from a width of a current reference picture,

wherein the wrap-around compensation is disabled based on the third determination indicating that the width of the current picture is different from the width of the current reference picture.

20. The non-transitory computer-readable medium of claim 19, wherein the third determination is made during an interpolation process for motion compensation.