

WHAT IS CLAIMED IS:

1. A method of generating an encoded video bitstream using at least one processor, the method comprising:

making a first determination regarding whether a current layer of a current picture is an independent layer;

making a second determination regarding whether reference picture resampling is enabled for the current layer;

based on the first determination and the second determination, disabling wrap-around compensation for the current layer; and

encoding the current layer without the wrap-around compensation.

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

3. The method of claim 1, wherein the first determination is made based on a first flag signaled in a first syntax structure, and

wherein the second determination is made based on a second 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 video parameter set, and wherein the second flag is signaled in a sequence parameter set.

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

6. The method of claim 1, 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 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 generating an encoded 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:

first determining code configured to cause the at least one processor to make a first determination regarding whether a current layer of a current picture is an independent layer;

second determining code configured to cause the at least one processor to make a second determination regarding whether reference picture resampling is enabled for the current layer;

disabling code configured to cause the at least one processor to, based on the first determination and the second determination, disable wrap-around compensation for the current layer; and

encoding code configured to cause the at least one processor to encode the current layer without the wrap-around compensation.

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

10. The device of claim 8, wherein the first determination is made based on a first flag signaled in a first syntax structure, and

wherein the second determination is made based on a second 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 video parameter set, and wherein the second flag is signaled in a sequence parameter set.

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

13. The device of claim 8, 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 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 generating an encoded video bitstream, cause the one or more processors to:

- make a first determination regarding whether a current layer of a current picture is an independent layer;

- make a second determination regarding whether reference picture resampling is enabled for the current layer;

- based on the first determination and the second determination, disable wrap-around compensation for the current layer; and

- encode the current layer without the wrap-around compensation.

16. The non-transitory computer-readable medium of claim 15, wherein the wrap-around compensation is disabled based on at least one of the first determination indicating that the current layer is not the independent layer, or the 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 video 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 second flag being absent from the sequence parameter set.

19. The non-transitory computer-readable medium of claim 15, 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 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.