

WHAT IS CLAIMED IS:

1. A method of coding video data, the method comprising:
coding an adaptive loop filter (ALF) clipping index as a fixed-length unsigned integer; and
applying, based on the ALF clipping index, an ALF to a block of a picture of the video data.
2. The method of claim 1, wherein the ALF clipping index is a luma ALF clipping index.
3. The method of claim 1, wherein the ALF clipping index is a chroma ALF clipping index.
4. The method of claim 1, wherein:
the ALF clipping index is a luma ALF clipping index and the block of the picture is a luma block, and
the method further comprises:
coding a chroma ALF clipping index as a fixed-length unsigned integer;
and
applying, based on the ALF clipping index, the ALF to a chroma block of the picture.
5. The method of claim 1, wherein coding the ALF clipping index comprises coding the ALF clipping index regardless of a value of a corresponding filter coefficient of the ALF.
6. The method of claim 5, wherein the method further comprises determining that the corresponding filter coefficient of the ALF is equal to 0.
7. The method of claim 1, wherein coding comprises decoding.

8. The method of claim 6, wherein coding the ALF clipping index comprises parsing the fixed-length unsigned integer from a bitstream that includes an encoded representation of the video data.
9. The method of claim 1, wherein coding comprises encoding.
10. The method of claim 9, wherein coding the ALF clipping index comprises including the fixed-length unsigned integer in a bitstream that includes an encoded representation of the video data.
11. A device for coding video data, the device comprising:
 - a memory configured to store the video data; and
 - one or more processors implemented in circuitry, the one or more processors configured to:
 - code an adaptive loop filter (ALF) clipping index as a fixed-length unsigned integer; and
 - apply, based on the ALF clipping index, an ALF to a block of a picture of the video data.
12. The device of claim 11, wherein the ALF clipping index is a luma ALF clipping index.
13. The device of claim 11, wherein the ALF clipping index is a chroma ALF clipping index.
14. The device of claim 11, wherein:
 - the ALF clipping index is a luma ALF clipping index and the block of the picture is a luma block, and
 - the one or more processors are further configured to:
 - code a chroma ALF clipping index as a fixed-length unsigned integer;
 - and
 - apply, based on the ALF clipping index, the ALF to a chroma block of the picture.

15. The device of claim 11, wherein the one or more processors are configured such that, as part of coding the ALF clipping index, the one or more processors code the ALF clipping index regardless of a value of a corresponding filter coefficient of the ALF.
16. The device of claim 15, wherein the one or more processors are configured to determine that the corresponding filter coefficient of the ALF is equal to 0.
17. The device of claim 11, wherein, to code the ALF clipping index, the one or more processors are configured to parse the fixed-length unsigned integer from a bitstream that includes an encoded representation of the video data.
18. The device of claim 11, wherein, to code the ALF clipping index, the one or more processors are configured to include the fixed-length unsigned integer in a bitstream that includes an encoded representation of the video data.
19. The device of claim 11, further comprising a display configured to display decoded video data.
20. The device of claim 11, wherein the device comprises one or more of a camera, a computer, a mobile device, a broadcast receiver device, or a set-top box.
21. The device of claim 11, wherein the device comprises a video decoder.
22. The device of claim 11, wherein the device comprises a video encoder.
23. A device for coding video data, the device comprising:
 - means for coding an adaptive loop filter (ALF) clipping index as a fixed-length unsigned integer; and
 - means for applying, based on the ALF clipping index, an ALF to a block of a picture of the video data.
24. The device of claim 23, wherein the ALF clipping index is a luma ALF clipping index.

25. The device of claim 23, wherein the ALF clipping index is a chroma ALF clipping index.
26. The device of claim 23, wherein:
the ALF clipping index is a luma ALF clipping index and the block of the picture is a luma block, and
the device further comprises:
means for coding a chroma ALF clipping index as a fixed-length unsigned integer; and
means for applying, based on the ALF clipping index, the ALF to a chroma block of the picture.
27. The device of claim 23, wherein the means for coding the ALF clipping index comprises means for coding the ALF clipping index regardless of a value of a corresponding filter coefficient of the ALF.
28. The device of claim 27, further comprising means for determining that the corresponding filter coefficient of the ALF is equal to 0.
29. The device of claim 23, wherein the means for coding comprises means for parsing the fixed-length unsigned integer from a bitstream that includes an encoded representation of the video data.
30. The device of claim 23, wherein the means for coding comprises means for including the fixed-length unsigned integer in a bitstream that includes an encoded representation of the video data.
31. A computer-readable storage medium having stored thereon instructions that, when executed, cause one or more processors to
code an adaptive loop filter (ALF) clipping index as a fixed-length unsigned integer; and
apply, based on the ALF clipping index, an ALF to a block of a picture of video data.

32. The computer-readable storage medium of claim 31, wherein the ALF clipping index is a luma ALF clipping index.

33. The computer-readable storage medium of claim 31, wherein the ALF clipping index is a chroma ALF clipping index.

34. The computer-readable storage medium of claim 31, wherein:
the ALF clipping index is a luma ALF clipping index and the block of the picture is a luma block, and
execution of the instructions further causes the one or more processors to:
code a chroma ALF clipping index as a fixed-length unsigned integer;
and
apply, based on the ALF clipping index, the ALF to a chroma block of the picture.

35. The computer-readable storage medium of claim 31, wherein the instructions that cause the one or more processors to code the ALF clipping index comprise instructions that, when executed, cause the one or more processors to code the ALF clipping index regardless of a value of a corresponding filter coefficient of the ALF.

36. The computer-readable storage medium of claim 35, wherein execution of the instructions further causes the one or more processors to determine that the corresponding filter coefficient of the ALF is equal to 0.

37. The computer-readable storage medium of claim 31, wherein the instructions that cause the one or more processors to code the ALF clipping index include instructions that cause the one or more processors to parse the fixed-length unsigned integer from a bitstream that includes an encoded representation of the video data.