**WHAT IS CLAIMED IS:**

1. A method of decoding video data, the method comprising:

decoding a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header;

when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, decoding a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice; and

when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, determining that the second syntax element is not present in the slice header to be decoded.

2. The method of claim 1, wherein the picture layer parameter set comprises one of a picture parameter set (PPS) or an adaptation parameter set (APS).

3. The method of claim 1, wherein decoding the first syntax element comprises decoding the first syntax element in one of the picture layer parameter set or a sequence parameter set (SPS).

4. The method of claim 1, further comprising, when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, defining the deblocking filter applied to the current video slice based on deblocking filter parameters present in one of the picture layer parameter set and the slice header.

5. The method of claim 1, wherein decoding the first syntax element comprises decoding an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

6. The method of claim 5, wherein, when the override is enabled, decoding the second syntax element comprises decoding an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice.

7. The method of claim 5, wherein, when the override is not enabled, determining that the second syntax element is not present in the slice header comprises determining that an override flag is not present in the slice header to be decoded, further comprising defining the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

8. The method of claim 1, wherein decoding the first syntax element comprises decoding an inherit enabled flag that indicates whether the first set of deblocking filter parameters is present in the picture layer parameter set to be inherited by the slice header.

9. The method of claim 8, wherein, when the first set of deblocking filter parameters is present to be inherited by the slice header, decoding the second syntax element comprises decoding an inherit flag in the slice header that indicates whether to use the second set of deblocking filter parameters included in the slice header or to inherit the first set of deblocking filter parameters from the picture layer parameter set to define the deblocking filter applied to the current video slice.

10. The method of claim 8, wherein, when the first set of deblocking filter parameters is not present to be inherited by the slice header, determining that the second syntax element is not present in the slice header comprises determining that an inherit flag is not present in the slice header to be decoded, further comprising defining the deblocking filter applied to the current video slice based on the second set of deblocking filter parameters included in the slice header.

11. The method of claim 1, further comprising decoding a third syntax element defined to indicate that deblocking filter control syntax elements are present in the picture layer parameter set and the slice header prior to decoding the first syntax element, wherein the first syntax element and the second syntax element comprise deblocking filter control syntax elements.

12. The method of claim 11, wherein decoding the third syntax element comprises decoding a control present syntax element in one of the picture layer parameter set and a sequence parameter set (SPS).

13. The method of claim 1, further comprising decoding a fourth syntax element defined to indicate that the deblocking filter is enabled for the current video slice.

14. The method of claim 13, wherein decoding the fourth syntax element comprises decoding a deblocking filter enabled flag in a sequence parameter set (SPS) prior to decoding the first syntax element.

15. A video decoding device comprising:

a memory that stores video data; and

a processor configured to decode a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header,

wherein the processor is configured to, when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, decode a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice, and

wherein the processor is configured to, when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, determine that the second syntax element is not present in the slice header to be decoded.

16. The video decoding device of claim 15, wherein the picture layer parameter set comprises one of a picture parameter set (PPS) or an adaptation parameter set (APS).

17. The video decoding device of claim 15, wherein the processor is configured to decode the first syntax element in one of the picture layer parameter set or a sequence parameter set (SPS).

18. The video decoding device of claim 15, wherein the processor is configured to, when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, define the deblocking filter applied to the current video slice based on deblocking filter parameters present in one of the picture layer parameter set and the slice header.

19. The video decoding device of claim 15, wherein the processor is configured to decode an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

20. The video decoding device of claim 19, wherein the processor is configured to, when the override is enabled, decode an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice.

21. The video decoding device of claim 19, wherein the processor is configured to, when the override is not enabled, determine that an override flag is not present in the slice header to be decoded, and define the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

22. The video decoding device of claim 15, wherein the processor is configured to decode an inherit enabled flag that indicates whether the first set of deblocking filter parameters is present in the picture layer parameter set to be inherited by the slice header.

23. The video decoding device of claim 22, wherein the processor is configured to, when the first set of deblocking filter parameters is present to be inherited by the slice header, decode an inherit flag in the slice header that indicates whether to use the second set of deblocking filter parameters included in the slice header or to inherit the first set of deblocking filter parameters from the picture layer parameter set to define the deblocking filter applied to the current video slice.

24. The video decoding device of claim 22, wherein the processor is configured to, when the first set of deblocking filter parameters is not present to be inherited by the slice header, determine that an inherit flag is not present in the slice header to be decoded, and define the deblocking filter applied to the current video slice based on the second set of deblocking filter parameters included in the slice header.

25. A video decoding device comprising:

means for decoding a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header;

when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, means for decoding a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice; and

when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, means for determining that the second syntax element is not present in the slice header to be decoded.

26. The video decoding device of claim 25, wherein the picture layer parameter set comprises a picture parameter set (PPS).

27. The video decoding device of claim 25, wherein the means for decoding the first syntax element comprise means for decoding an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

28. The video decoding device of claim 27, wherein, when the override is enabled, the means for decoding the second syntax element comprise means for decoding an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice.

29. The video decoding device of claim 27, wherein, when the override is not enabled, the means for determining that the second syntax element is not present in the slice header comprise means for determining that an override flag is not present in the slice header to be decoded, further comprising means for defining the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

30. A computer readable medium comprising instructions for decoding video data that when executed cause one or more processors to:

decode a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header;

when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, decode a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice; and

when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, determine that the second syntax element is not present in the slice header to be decoded.

31. A method of encoding video data, the method comprising:

encoding a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header;

when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, encoding a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice; and

when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, eliminating encoding of the second syntax element in the slice header.

32. The method of claim 31, wherein the picture layer parameter set comprises one of a picture parameter set (PPS) or an adaptation parameter set (APS).

33. The method of claim 31, wherein encoding the first syntax element comprises encoding the first syntax element in one of the picture layer parameter set or a sequence parameter set (SPS).

34. The method of claim 31, further comprising, when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, defining the deblocking filter applied to the current video slice based on deblocking filter parameters present in one of the picture layer parameter set and the slice header.

35. The method of claim 31, wherein encoding the first syntax element comprises encoding an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

36. The method of claim 35, wherein, when the override is enabled, encoding the second syntax element comprises encoding an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice.

37. The method of claim 35, wherein, when the override is not enabled, eliminating encoding of the second syntax element comprises eliminating encoding of an override flag in the slice header, further comprising defining the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

38. The method of claim 31, wherein encoding the first syntax element comprises encoding an inherit enabled flag that indicates whether the first set of deblocking filter parameters is present in the picture layer parameter set to be inherited by the slice header.

39. The method of claim 38, wherein, when the first set of deblocking filter parameters is present to be inherited by the slice header, encoding the second syntax element comprises encoding an inherit flag in the slice header that indicates whether to use the second set of deblocking filter parameters included in the slice header or to inherit the first set of deblocking filter parameters from the picture layer parameter set to define the deblocking filter applied to the current video slice.

40. The method of claim 38, wherein, when the first set of deblocking filter parameters is not present to be inherited by the slice header, eliminating encoding of the second syntax element comprises eliminating encoding of an inherit flag in the slice header, further comprising defining the deblocking filter applied to the current video slice based on the second set of deblocking filter parameters included in the slice header.

41. The method of claim 31, further comprising encoding a third syntax element defined to indicate that deblocking filter control syntax elements are present in the picture layer parameter set and the slice header prior to encoding the first syntax element, wherein the first syntax element and the second syntax element comprise deblocking filter control syntax elements.

42. The method of claim 41, wherein encoding the third syntax element comprises encoding a control present syntax element in one of the picture layer parameter set and a sequence parameter set (SPS).

43. The method of claim 31, further comprising encoding a fourth syntax element defined to indicate that the deblocking filter is enabled for the current video slice.

44. The method of claim 43, wherein encoding the fourth syntax element comprises encoding a deblocking filter enabled flag in a sequence parameter set (SPS) prior to encoding the first syntax element.

45. A video encoding device comprising:

a memory that stores video data; and

a processor configured to encode a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header,

wherein the processor is configured to, when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, encode a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice, and

wherein the processor is configured to, when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, eliminate encoding of the second syntax element in the slice header.

46. The video encoding device of claim 45, wherein the picture layer parameter set comprises one of a picture parameter set (PPS) or an adaptation parameter set (APS).

47. The video encoding device of claim 45, wherein the processor is configured to encode the first syntax element in one of the picture layer parameter set or a sequence parameter set (SPS).

48. The video encoding device of claim 45, wherein the processor is configured to, when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, define the deblocking filter applied to the current video slice based on deblocking filter parameters present in one of the picture layer parameter set and the slice header.

49. The video encoding device of claim 45, wherein the processor is configured to encode an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

50. The video encoding device of claim 49, wherein the processor is configured to, when the override is enabled, encode an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice.

51. The video encoding device of claim 49, wherein the processor is configured to, when the override is not enabled, eliminate encoding of an override flag in the slice header, and define the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

52. The video encoding device of claim 45, wherein the processor is configured to encode an inherit enabled flag that indicates whether the first set of deblocking filter parameters is present in the picture layer parameter set to be inherited by the slice header.

53. The video encoding device of claim 52, wherein the processor is configured to, when the first set of deblocking filter parameters is present to be inherited by the slice header, encode an inherit flag in the slice header that indicates whether to use the second set of deblocking filter parameters included in the slice header or to inherit the first set of deblocking filter parameters from the picture layer parameter set to define the deblocking filter applied to the current video slice.

54. The video encoding device of claim 52, wherein the processor is configured to, when the first set of deblocking filter parameters is not present to be inherited by the slice header, eliminate encoding of an inherit flag in the slice header, and define the deblocking filter applied to the current video slice based on the second set of deblocking filter parameters included in the slice header.

55. A video encoding device comprising:

means for encoding a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header;

when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, means for encoding a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice; and

when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, means for eliminating encoding of the second syntax element in the slice header.

56. The video encoding device of claim 55, wherein the picture layer parameter set comprises a picture parameter set (PPS).

57. The video encoding device of claim 55, wherein the means for encoding the first syntax element comprise means for encoding an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

58. The video encoding device of claim 57, wherein, when the override is enabled, the means for encoding the second syntax element comprise means for encoding an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice.

59. The video encoding device 57, wherein, when the override is not enabled, the means for eliminating encoding of the second syntax element comprise means for eliminating encoding of an override flag in the slice header, further comprising means for defining the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

60. A computer readable medium comprising instructions for encoding video data that when executed cause one or more processors to:

encode a first syntax element defined to indicate whether deblocking filter parameters are present in both a picture layer parameter set and a slice header;

when the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, encode a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to a current video slice; and

when the first syntax element indicates that deblocking filter parameters are not present in both the picture layer parameter set and the slice header, eliminate encoding of the second syntax element in the slice header.

## CLAIMS

1. A method of decoding video data, the method comprising:

decoding a first syntax element in a picture layer parameter set defined to indicate whether deblocking filter parameters are present in both the picture layer parameter set and a slice header, wherein the picture layer parameter set is associated with at least one picture of the video data, and the slice header is associated with a current video slice included in the at least one picture of the video data;

in the case that the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header: decoding a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to the current video slice and defining the deblocking filter applied to the current video slice according to the indicated one of the first set of deblocking filter parameters or the second set of deblocking filter parameters;

in the case that the first syntax element indicates that deblocking filter parameters are present in only one of the picture layer parameter set or the slice header: determining that the second syntax element is not present in the slice header to be decoded and defining the deblocking filter applied to the current video slice according to the deblocking filter parameters that are present in the one of the picture layer parameter set or the slice header;

decoding a video block of the current video slice; and

applying the defined deblocking filter to the video block of the current video slice.

**2**. The method of claim **1**, wherein decoding the first syntax element comprises decoding an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

**3**. The method of claim **2**,

wherein, in the case that the override is enabled, decoding the second syntax element comprises decoding an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice, and

wherein, in the case that the override is not enabled, determining that the second syntax element is not present in the slice header comprises determining that an override flag is not present in the slice header to be decoded, and defining the deblocking filter comprises defining the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

**4**. A video decoding device comprising:

a memory configured to store a video block of a current video slice; and

a processor comprising a video decoder configured to decode a first syntax element in a picture layer parameter set defined to indicate whether deblocking filter parameters are present in both the picture layer parameter set and a slice header, wherein the picture layer parameter set is associated with a least one picture of the video data, and the slice header is associated with the current video slice included in the at least one picture of the video data,

wherein the processor is configured to, in the case that the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, decode a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to the current video slice, and define the deblocking filter applied to the current video slice according to the indicated one of the first set of deblocking filter parameters or the second set of deblocking filter parameters,

wherein the processor is configured to, in the case that the first syntax element indicates that deblocking filter parameters are present in only one of the picture layer parameter set or the slice header, determine that the second syntax element is not present in the slice header to be decoded, and define the deblocking filter applied to the current video slice according to the deblocking filter parameters that are present in the one of the picture layer parameter set or the slice header, and

wherein the processor is further configured to:

decode the video block of the current video slice; and

apply the defined deblocking filter to the video block of the current video slice.

**5**. The video decoding device of claim **4**, wherein the processor is configured to decode an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

**6**. The video decoding device of claim **5**, wherein the processor is configured to:

in the case that the override is enabled, decode an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice, and

in the case that the override is not enabled, determine that an override flag is not present in the slice header to be decoded, and define the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

**7**. The video decoding device of claim **4**, further comprising a display configured to display the filtered video block.

**8**. A video encoding device comprising:

a memory configured to store a video block of a current video slice; and

a processor comprising a video encoder configured to encode a first syntax element in a picture layer parameter set defined to indicate whether deblocking filter parameters are present in both the picture layer parameter set and a slice header, wherein the picture layer parameter set is associated with at least one picture of the video data, and the slice header is associated with the current video slice included in the at least one picture of the video data,

wherein the processor is configured to, in the case that the first syntax element indicates that deblocking filter parameters are present in both the picture layer parameter set and the slice header, encode a second syntax element in the slice header defined to indicate whether to use a first set of deblocking filter parameters included in the picture layer parameter set or a second set of deblocking filter parameters included in the slice header to define a deblocking filter applied to the current video slice, and define the deblocking filter applied to the current video slice according to the indicated one of the first set of deblocking filter parameters or the second set of deblocking filter parameters,

wherein the processor is configured to, in the case that the first syntax element are encoded to indicate that deblocking filter parameters are present in only one of the picture layer parameter set or the slice header, encode the slice header such that the slide header excludes the second syntax element, and define the deblocking filter applied to the current video slice

according to the deblocking filter parameters that are present in the one of the picture layer parameter set or the slice header, and

wherein the processor is further configured to:

apply the defined deblocking filter to the video block of the current video slice; and

encode the video block of the current video slice.

**9**. The video encoding device of claim **8**, wherein the picture layer parameter set comprises one of a picture parameter set (PPS) or an adaptation parameter set (APS).

**10**. The video encoding device of claim **8**, wherein the processor is configured to encode an override enabled flag in the picture layer parameter set that indicates whether an override of the first set of deblocking filter parameters by the second set of deblocking filter parameters is enabled.

**11**. The video encoding device of claim **10**, wherein the processor is configured to:

in the case that the override is enabled, encode an override flag in the slice header that indicates whether to use the first set of deblocking filter parameters from the picture layer parameter set or to override the first set of deblocking filter parameters with the second set of deblocking filter parameters included in the slice header to define the deblocking filter applied to the current video slice, and

in the case that the override is not enabled, encode the slice header such that the slice header excludes an override flag, and define the deblocking filter applied to the current video slice based on the first set of deblocking filter parameters included in the picture layer parameter set.

**12**. The video encoding device of claim **8**, further comprising a camera configured to generate data indicative of the video block of the current video slice.