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Amended Set of Claims

1. A method of processing video data, the method comprising:
processing one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set;
receiving, in the parameter set, an offset syntax element for the parameter set, wherein the offset syntax element identifies a number of bytes in the parameter set that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the parameter set;
based on the offset syntax element, skipping syntax elements within the parameter set;
processing one or more additional syntax elements in the parameter set, wherein the one or more additional syntax elements are located after the skipped syntax elements in the parameter set.
2. The method of claim 1, wherein the skipped syntax elements comprise one or more syntax elements coded using variable length coding.
3. (Canceled)
4. (Canceled)
5. The method of claim 1, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the skipped syntax elements.

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6. The method of claim 1, wherein the one or more initial syntax elements comprise syntax elements that include information related to session negotiation.
7. The method of claim 1, wherein the one or more initial syntax elements comprise syntax elements for a base layer of the video data and the one or more additional syntax elements comprise syntax elements for a non-base layer of video data.
8. The method of claim 1, wherein the offset syntax element is part of a video parameter set.
9. The method of claim 1, wherein the processing is performed by a media aware network element (MANE), and wherein the method further comprises forwarding the video data to a client device.
10. A method of processing video data, the method comprising:
 - generating one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set;
 - generating an offset syntax element for the parameter set, wherein the offset syntax element identifies a number of bytes in the parameter set that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the parameter set;
 - generating syntax elements to be skipped that correspond to the bytes that are to be skipped; and
 - generating one or more additional syntax elements in the parameter set, wherein the one or more additional syntax elements are located after the syntax elements to be skipped in the parameter set.
11. The method of claim 10, wherein the syntax elements to be skipped comprise one or more syntax elements coded using variable length coding.

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12. (Canceled)

13. (Cancelled)

14. The method of claim 10, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the syntax elements to be skipped.

15. The method of claim 10, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.

16. The method of claim 10, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and the one or more additional syntax elements comprises syntax elements for a non-base layer of video data.

17. The method of claim 10, wherein the offset syntax element is part of a video parameter set.

18. The method of claim 10, wherein the method is performed by a video encoder.

19. The method of claim 10, wherein the method is performed by a post processing device configured to process encoded video data.

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20. A method of decoding video data, the method comprising:
decoding one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set;
receiving, in the video bitstream, an offset syntax element for the parameter set, wherein the offset syntax element identifies corresponding to skipped syntax elements, wherein the one or more initial syntax elements precede the offset syntax element; and
decoding the syntax elements to be skipped.

21. The method of claim 20, wherein the skipped syntax elements comprise one or more variable length syntax elements, and wherein decoding the skipped syntax elements comprises performing an entropy decoding process.

22. A video processing device comprising:
a video processing element configured to process one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set; receive, in the parameter set, an offset syntax element identifying a number of bytes in the parameter set that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the parameter set; based on the offset syntax element, skip syntax elements within the parameter set; and process one or more additional syntax elements in the parameter set, wherein the one or more additional syntax elements are located after the skipped syntax elements in the parameter set.

23. The video processing device of claim 22, wherein the skipped syntax elements comprise one or more syntax elements coded using variable length coding.

24. (Canceled)

25. (Cancelled)

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26. The video processing device of claim 22, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the skipped syntax elements.

27. The video processing device of claim 22, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.

28. The video processing device of claim 22, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and the one or more additional syntax elements comprise syntax elements for a non-base layer of the video data.

29. The video processing device of claim 22, wherein the offset syntax element is part of a video parameter set.

30. The device of claim 22, wherein the device comprises at least one of:
an integrated circuit;
a microprocessor; and
a wireless communication device that comprises a video decoder.

31. A video processing device comprising:
a video processing element configured to generate one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set; generate an offset syntax element for the parameter set, wherein the offset syntax element identifies a number of bytes in the parameter set that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the parameter set; generate syntax elements to be skipped; generate one or more additional syntax elements in the parameter set, wherein the one or more additional syntax elements are located after the syntax elements to be skipped in the parameter set.

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32. The video processing device of claim 31, wherein the syntax elements to be skipped comprise one or more syntax elements coded using variable length coding.
33. (Canceled)
34. (Canceled)
35. The video processing device of claim 31, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the syntax elements to be skipped.
36. The video processing device of claim 31, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.
37. The video processing device of claim 31, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and the one or more additional syntax elements comprise syntax elements for a non-base layer of video data.
38. The video processing device of claim 31, wherein the offset syntax element is part of a video parameter set.
39. The video processing device of claim 31, wherein the video processing element comprises a video encoder.
40. The video processing device of claim 31, wherein the video processing device comprises a post processing device configured to process encoded video data.
41. The device of claim 31, wherein the device comprises at least one of:
an integrated circuit;
a microprocessor; and,
a wireless communication device that comprises a video decoder.

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42. A video processing device comprising:
a video processing element configured to decode one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set; receive, in the video bitstream, an offset syntax element identifying a number of bytes in the parameter set that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the parameter set; and decode the syntax elements to be skipped.
43. The video processing device of claim 42, wherein the syntax elements to be skipped comprise one or more variable length syntax elements, and wherein decoding the syntax elements to be skipped comprises performing an entropy decoding process.
44. The device of claim 42, wherein the device comprises at least one of:
an integrated circuit;
a microprocessor; and,
a wireless communication device that comprises a video decoder.

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45. A video processing device comprising:
- means for processing one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set;
 - means for receiving, in the parameter set, an offset syntax element for the parameter set, wherein the offset syntax element identifies a number of bytes in the parameter set that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the parameter set;
 - means for skipping syntax elements within the parameter set based on the offset syntax element; and
 - means for processing one or more additional syntax elements in the parameter set, wherein the one or more additional syntax elements are located after the skipped syntax elements in the parameter set.
46. A computer readable storage medium storing instructions that when executed cause one or more processors to:
- process one or more initial syntax elements for a parameter set associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the parameter set;
 - receive, in the parameter set, an offset syntax element for the parameter set, wherein the offset syntax element identifies a number of bytes in the parameter set that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the parameter set;
 - skip syntax elements within the parameter set based on the offset syntax element; and
 - process one or more additional syntax elements in the parameter set, wherein the one or more additional syntax elements are after the skipped syntax elements in the parameter set.
47. The computer-readable storage medium of claim 46, wherein the skipped syntax elements comprise one or more syntax elements coded using variable length coding.

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48. (Canceled)

49. (Canceled)

50. The computer-readable storage medium of claim 46, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the skipped syntax elements.

51. The computer-readable storage medium of claim 46, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.

52. The computer-readable storage medium of claim 46, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and the one or more additional syntax elements comprise syntax elements for a non-base layer of the video data.

53. The computer-readable storage medium of claim 46, wherein the offset syntax element is part of a video parameter set.

54. The computer-readable storage medium of claim 46 storing further instructions that when executed cause the one or more processors to forward the video data to a client device.

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CLAIMS

1. A method of processing video data, the method comprising:
processing one or more initial syntax elements in a video parameter set (VPS) syntax structure associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the VPS syntax structure, wherein the VPS syntax structure includes information that applies to zero or more entire coded video sequences;
receiving, in the VPS syntax structure, an offset syntax element for the VPS syntax structure, wherein a value of the offset syntax element equals a number of bytes in the VPS syntax structure that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the VPS syntax structure;
based on the offset syntax element, skipping processing of at least one syntax element within the VPS syntax structure;
processing one or more additional syntax elements in the VPS syntax structure, wherein the one or more additional syntax elements are located after the at least one syntax element in the VPS syntax structure.
2. The method of claim 1, wherein the at least one syntax element comprises one or more syntax elements coded using variable length coding.
3. The method of claim 1, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the at least one syntax element.
4. The method of claim 1, wherein the one or more initial syntax elements comprise syntax elements that include information related to session negotiation.
5. The method of claim 1, wherein the one or more initial syntax elements comprise syntax elements for a base layer of the video data and the one or more additional syntax elements comprise syntax elements for a non-base layer of video data.

6. The method of claim 1, wherein the VPS syntax structure is determined by a content of a VPS identification syntax element found in a sequence parameter set (SPS) referred to by a SPS identification syntax element, which is found in a picture parameter set (PPS) referred to by a PPS identification syntax element found in each slice segment header.
7. The method of claim 1, wherein the processing is performed by a media aware network element (MANE), and wherein the method further comprises forwarding the video data to a client device.
8. The method of claim 1, wherein skipping processing of the at least one syntax element within the VPS syntax structure comprises ignoring values of the at least one syntax element.
9. A method of processing video data, the method comprising:
 - generating one or more initial syntax elements for a video parameter set (VPS) syntax structure associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the VPS syntax structure, wherein the VPS syntax structure includes information that applies to zero or more entire coded video sequences;
 - generating an offset syntax element for the VPS syntax structure, wherein a value of the offset syntax element equals a number of bytes in the VPS syntax structure for which processing is to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the VPS syntax structure;
 - generating at least one syntax element for which processing is to be skipped that corresponds to the bytes for which processing is to be skipped; and
 - generating one or more additional syntax elements in the VPS syntax structure, wherein the one or more additional syntax elements are located after the at least one syntax element for which processing is to be skipped in the VPS syntax structure.
10. The method of claim 9, wherein the at least one syntax element for which processing is to be skipped comprise one or more syntax elements coded using variable length coding.

11. The method of claim 9, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the at least one syntax element for which processing is to be skipped.
12. The method of claim 9, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.
13. The method of claim 9, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and the one or more additional syntax elements comprises syntax elements for a non-base layer of video data.
14. The method of claim 9, wherein the VPS syntax structure is determined by a content of a VPS identification syntax element found in a sequence parameter set (SPS) referred to by a SPS identification syntax element, which is found in a picture parameter set (PPS) referred to by a PPS identification syntax element found in each slice segment header.
15. The method of claim 9, wherein the method is performed by a video encoder.
16. The method of claim 9, wherein the method is performed by a post processing device configured to process encoded video data.
17. A method of decoding video data, the method comprising:
 - decoding one or more initial syntax elements for a video parameter set (VPS) syntax structure associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the VPS syntax structure, wherein the VPS syntax structure includes information that applies to zero or more entire coded video sequences;
 - receiving, in the video bitstream, an offset syntax element for the VPS syntax structure, wherein a value of the offset syntax element equals a number of bytes in the VPS syntax structure for which processing is to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the VPS syntax structure;

ignoring the value of the offset syntax element; and
 decoding the at least one syntax element for which processing is to be skipped.

18. The method of claim 17, wherein the at least one syntax element for which processing is to be skipped comprise one or more variable length syntax elements, and wherein decoding the at least one syntax element for which processing is to be skipped comprises performing an entropy decoding process.

19. A video processing device comprising:
 a memory storing video data from a video bitstream; and
 one or more processors configured to:

process one or more initial syntax elements for a video parameter set (VPS)
 syntax structure associated with the video bitstream, wherein the one
 or more initial syntax elements comprise fixed-length syntax elements
 that are located prior to any variable length syntax elements in the VPS
 syntax structure, wherein the VPS syntax structure includes
 information that applies to zero or more entire coded video sequences;
 receive, in the VPS syntax structure, an offset syntax element with a value
 equal to a number of bytes in the VPS syntax structure that are to be
 skipped, wherein the one or more initial syntax elements precede the
 offset syntax element in the VPS syntax structure;
 based on the offset syntax element, skip processing of at least one syntax
 element within the VPS syntax structure; and
 process one or more additional syntax elements in the VPS syntax structure,
 wherein the one or more additional syntax elements are located after
 the at least one syntax element in the VPS syntax structure.

20. The video processing device of claim 19, wherein the at least one syntax element comprises one or more syntax elements coded using variable length coding.

21. The video processing device of claim 19, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the at least one syntax element.

22. The video processing device of claim 19, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.
23. The video processing device of claim 19, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and the one or more additional syntax elements comprise syntax elements for a non-base layer of the video data.
24. The video processing device of claim 19, wherein the VPS syntax structure is determined by a content of a VPS identification syntax element found in a sequence parameter set (SPS) referred to by a SPS identification syntax element, which is found in a picture parameter set (PPS) referred to by a PPS identification syntax element found in each slice segment header.
25. The video processing device of claim 19, wherein the device comprises a media aware network element (MANE) configured to forward a sub-bitstream of the video bitstream to a client device.
26. The video processing device of claim 19, wherein to skip processing of the at least one syntax element within the VPS syntax structure, the one or more processors are configured to ignore values of the at least one syntax element.
27. A video processing device comprising:
 - a memory storing video data from a video bitstream; and
 - one or more processors configured to:
 - generate one or more initial syntax elements for a video parameter set (VPS) syntax structure associated with the video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the VPS syntax structure, wherein the VPS syntax structure includes information that applies to zero or more entire coded video sequences;
 - generate an offset syntax element for the VPS syntax structure, wherein a value of the offset syntax element equals a number of bytes in the VPS syntax structure for which processing is to be skipped, wherein the one or more initial syntax

elements precede the offset syntax element in the VPS syntax structure;
generate at least one syntax element for which processing is to be skipped that
corresponds to the bytes for which processing is to be skipped; and
generate one or more additional syntax elements in the VPS syntax structure, wherein
the one or more additional syntax elements are located after the at least one
syntax element for which processing is to be skipped in the VPS syntax
structure.

28. The video processing device of claim 27, wherein the at least one syntax element for which processing is to be skipped comprise one or more syntax elements coded using variable length coding.

29. The video processing device of claim 27, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the at least one syntax element for which processing is to be skipped.

30. The video processing device of claim 27, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.

31. The video processing device of claim 27, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and the one or more additional syntax elements comprise syntax elements for a non-base layer of video data.

32. The video processing device of claim 27, wherein the VPS syntax structure is determined by a content of a VPS identification syntax element found in a sequence parameter set (SPS) referred to by a SPS identification syntax element, which is found in a picture parameter set (PPS) referred to by a PPS identification syntax element found in each slice segment header.

33. The video processing device of claim 27, wherein the one or more processors comprises a video encoder.

34. The video processing device of claim 27, wherein the video processing device

comprises a post processing device configured to process encoded video data.

35. The video processing device of claim 27, wherein the video processing device comprises at least one of:

- an integrated circuit;
- a microprocessor; or
- a wireless communication device that comprises a video encoder.

36. A video processing device comprising:

- a memory storing video data from a video bitstream; and
- one or more processors configured to:

- decode one or more initial syntax elements for a video parameter set (VPS) syntax structure associated with the video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the VPS syntax structure, wherein the VPS syntax structure includes information that applies to zero or more entire coded video sequences;
- receive, in the video bitstream, an offset syntax element with a value equal to a number of bytes in the VPS syntax structure for which processing is to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the VPS syntax structure;
- ignore the value of the offset syntax element; and
- decode the at least one syntax element for which processing is to be skipped.

37. The video processing device of claim 36, wherein the at least one syntax element for which processing is to be skipped comprise one or more variable length syntax elements, and wherein decoding the at least one syntax element for which processing is to be skipped comprises performing an entropy decoding process.

38. The video processing device of claim 36, wherein the video processing device comprises at least one of:

- an integrated circuit;
- a microprocessor; or
- a wireless communication device that comprises a video decoder.

39. A video processing device comprising:

means for processing one or more initial syntax elements for a video parameter set (VPS) syntax structure associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the VPS syntax structure, wherein the VPS syntax structure includes information that applies to zero or more entire coded video sequences;

means for receiving, in the VPS syntax structure, an offset syntax element for the v syntax structure, wherein a value of the offset syntax element equals a number of bytes in the VPS syntax structure that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the VPS syntax structure;

means for skipping the processing of at least one syntax element within the VPS syntax structure based on the offset syntax element; and

means for processing one or more additional syntax elements in the VPS syntax structure, wherein the one or more additional syntax elements are located after the at least one syntax element in the VPS syntax structure.

40. A non-transitory computer readable storage medium storing instructions that when executed cause one or more processors to:
- process one or more initial syntax elements for a video parameter set (VPS) syntax structure associated with a video bitstream, wherein the one or more initial syntax elements comprise fixed-length syntax elements that are located prior to any variable length syntax elements in the VPS syntax structure, wherein the VPS syntax structure includes information that applies to zero or more entire coded video sequences;
 - receive, in the VPS set syntax structure, an offset syntax element for the VPS syntax structure, wherein a value of the offset syntax element equals a number of bytes in the VPS syntax structure that are to be skipped, wherein the one or more initial syntax elements precede the offset syntax element in the VPS syntax structure;
 - skip processing of at least one syntax element within the VPS syntax structure based on the offset syntax element; and
 - process one or more additional syntax elements in the VPS syntax structure, wherein the one or more additional syntax elements are after the at least one syntax element in the VPS syntax structure.
41. The non-transitory computer-readable storage medium of claim 40, wherein the at least one syntax element comprises one or more syntax elements coded using variable length coding.
42. The non-transitory computer-readable storage medium of claim 40, wherein the one or more additional syntax elements comprise additional fixed-length syntax elements and wherein the one or more additional syntax elements follow the offset syntax element and follow the at least one syntax element.
43. The non-transitory computer-readable storage medium of claim 40, wherein the one or more initial syntax elements comprise syntax elements including information related to session negotiation.
44. The non-transitory computer-readable storage medium of claim 40, wherein the one or more initial syntax elements comprise syntax elements for a base layer of video data and

the one or more additional syntax elements comprise syntax elements for a non-base layer of the video data.

45. The non-transitory computer-readable storage medium of claim 40 storing further instructions that when executed cause the one or more processors to forward the video data to a client device.