

CLAIMS

1. A method of processing video data, comprising:
performing a conversion between a video comprising one or more subpictures and a bitstream of the video according to a format rule,
wherein the format rule specifies that a first syntax element in a scalable nesting supplemental enhancement information message in the bitstream is set to a particular value in response to the scalable nesting supplemental enhancement information message including one or more subpicture level information supplemental enhancement information messages, and
wherein the particular value of the first syntax element indicates that the scalable nesting supplemental enhancement information message includes one or more scalable-nested supplemental enhancement information messages that apply to a specific output video layer set.
2. The method of claim 1,
wherein the format rule that specifies that a value of a second syntax element in the bitstream is equal to 0 in response to the scalable nesting supplemental enhancement information message including the one or more subpicture level information supplemental enhancement information messages, and
wherein the value of the second syntax element being equal to 0 specifies that the scalable nesting supplemental enhancement information message includes the one or more scalable-nested supplemental enhancement information messages that apply to one or more output video layer sets or one or more video layers apply to all subpictures of the one or more output video layer sets or the one or more video layers.
3. The method of any of claims 1 to 2,
wherein the format rule specifies that a payload type of the one or more scalable-nested supplemental enhancement information messages in the scalable nesting supplemental enhancement information message is 203, and
wherein a payload type of 203 for a supplemental enhancement information message indicates that the supplemental enhancement information message is a subpicture level information supplemental enhancement information message.

4. The method of any of claims 1 to 3, wherein the particular value of the first syntax element is equal to 1.
5. A method of processing video data, comprising:
performing a conversion between a video comprising a plurality of subpictures and a bitstream of the video,
wherein the conversion is according to a format rule that specifies that a scalable nesting supplemental enhancement information message is disallowed from including a first supplemental enhancement information message of a first payload type and a second supplemental enhancement information message of a second payload type.
6. The method of claim 5, wherein the first payload type includes a payload type of a buffering period supplemental enhancement information message.
7. The method of claim 5, wherein the first payload type includes a payload type of a picture timing supplemental enhancement information message.
8. The method of claim 5, wherein the first payload type includes a payload type of a decoding unit information supplemental enhancement information message.
9. The method of claim 5, wherein the first payload type includes a payload type of a subpicture level information supplemental enhancement information message.
10. The method of claim 5, wherein the second payload type includes a payload type that is not one of the following:
 - (i) the payload type of a buffering period supplemental enhancement information message,
 - (ii) the payload type of a picture timing supplemental enhancement information message,
 - (iii) the payload type of a decoding unit information supplemental enhancement information message, and

(iv) the payload type of a subpicture level information supplemental enhancement information message.

11. The method of any of claims 1 to 10, wherein the performing the conversion comprising encoding the video into the bitstream.
12. The method of any of claims 1 to 10, wherein the performing the conversion comprises generating the bitstream from the video, and the method further comprises storing the bitstream in a non-transitory computer-readable recording medium.
13. The method of any of claims 1 to 10, wherein the performing the conversion comprises decoding the video from the bitstream.
14. A video decoding apparatus comprising a processor configured to implement a method recited in one or more of claims 1 to 13.
15. A video encoding apparatus comprising a processor configured to implement a method recited in one or more of claims 1 to 13.
16. A computer program product having computer instructions stored thereon, the instructions, when executed by a processor, causes the processor to implement a method recited in any of claims 1 to 13.
17. A non-transitory computer-readable storage medium that stores a bitstream generated according to the method in any one of claims 1 to 13.
18. A non-transitory computer-readable storage medium storing instructions that cause a processor to implement a method recited in any of claims 1 to 13.
19. A method of bitstream generation, comprising:

generating a bitstream of a video according to a method recited in any of claims 1 to 13,
and
storing the bitstream on a computer-readable program medium.

20. A method, an apparatus, a bitstream generated according to a disclosed method or a system described in the present document.