

CLAIMS

1. A method of video processing, comprising:
performing a conversion between a video and a bitstream of the video according to a format rule, wherein the bitstream includes one or more output layer sets (OLSs), each OLS comprising one or more coded layer video sequences, and
wherein the format rule specifies that a video parameter set indicates, for each of the one or more OLSs, a greatest allowed value of a chroma format indicator and/or a greatest allowed value of a bit depth used to represent pixels of the video.
2. The method of claim 1, wherein the greatest allowed value of the chroma format indicator for an OLS is applicable to all sequence parameter sets that are referred to by the one or more coded layer video sequences in the OLS.
3. The method of claim 1 or 2, wherein the greatest allowed value of the bit depth for an OLS is applicable to all sequence parameter sets that are referred to by the one or more coded layer video sequences in the OLS.
4. The method of any of claims 1 to 3, wherein, for performing the conversion for an OLS containing more than one coded layer video sequence and having an OLS index, i , the rule specifies to allocate memory for a decoded picture buffer according to values of at least one of syntax elements that include `ols_dpb_pic_width[ i ]` indicating a width of each picture storage buffer for an i -th OLS, `ols_dpb_pic_height[ i ]` indicating a height of each picture storage buffer for the i -th OLS, a syntax element indicating the greatest allowed value of the chroma format indicator for the i -th OLS, and a syntax element indicating the greatest allowed value of a bit depth for the i -th OLS.
5. The method of any of claims 1 to 4, wherein the video parameter set is included in the bitstream.

6. The method of any of claims 1 to 4, wherein the video parameter set is indicated separately from the bitstream.
7. A method of video processing, comprising:
 - performing a conversion between a video having one or more video layers and a bitstream of the video according to a format rule, and
 - wherein the format rule specifies that a maximum picture width and/or a maximum picture height for video pictures of all video layers controls a value of a variable that indicates whether pictures in a decoded picture buffer prior to a current picture in decoding order in the bitstream are output before the pictures are removed from the decoded picture buffer.
8. The method of claim 7, wherein the variable is derived based at least on one or more syntax elements included in a video parameter set.
9. The method of claim 7, wherein the value of the variable is set to 1 in case that a value of a maximum width of each picture, a maximum height of each picture, a greatest allowed value of a chroma format indicator, or a greatest allowed value of a bit depth that is derived for a current access unit is different from a value of a maximum width of each picture, a maximum height of each picture, a greatest allowed value of a chroma format indicator or a greatest allowed value of a bit depth that is derived for a preceding access unit in decoding order.
10. The method of claim 9, wherein the value of the variable being equal to 1 indicates pictures in a decoded picture buffer prior to a current picture in decoding order are not output before the pictures are removed from the decoded picture buffer.
11. The method of any of claims 7 to 10, wherein the value of the variable is further based on a greatest allowed value of a chroma format indicator and/or a greatest allowed value of a bit depth used to represent pixels of the video.
12. The method of any of claims 7 to 11, wherein the video parameter set is included in the bitstream.

13. The method of any of claims 7 to 11, wherein the video parameter set is indicated separately from the bitstream.
14. A method of video processing, comprising:
performing a conversion between a video having one or more video layers and a bitstream of the video according to a format rule, and
wherein the format rule specifies that a greatest allowed value of a chroma format indicator and/or a greatest allowed value of a bit depth used to represent pixels of the video control a value of a variable that indicates whether pictures in a decoded picture buffer prior to a current picture in decoding order in the bitstream are output before the pictures are removed from the decoded picture buffer.
15. The method of claim 14, wherein the variable is derived based at least on one or more syntax elements signaled in a video parameter set.
16. The method of claim 14, wherein the value of the variable is set to 1 in case that a value of a maximum width of each picture, a maximum height of each picture, a greatest allowed value of a chroma format indicator or a greatest allowed value of a bit depth that is derived for a current access unit is different from a value of a maximum width of each picture, a maximum height of each picture, a greatest allowed value of a chroma format indicator or a greatest allowed value of a bit depth that is derived for a preceding access unit in decoding order.
17. The method of claim 16, wherein the value of the variable being equal to 1 indicates pictures in a decoded picture buffer prior to a current picture in decoding order are not output before the pictures are removed from the decoded picture buffer.
18. The method of any of claims 14 to 17, wherein the value of the variable is further based on a maximum picture width and/or a maximum picture height for video pictures of all video layers.

19. The method of any of claims 14 to 18, wherein the video parameter set is included in the bitstream.
20. The method of any of claims 14 to 18, wherein the video parameter set is indicated separately from the bitstream.
21. A method of video processing, comprising:
performing a conversion between a video having one or more video layers and a bitstream of the video according to a rule, and
wherein the rule specifies that a value of a variable that indicates whether pictures in a decoded picture buffer prior to a current picture in decoding order in the bitstream are output before the pictures are removed from the decoded picture buffer is independent of whether separate color planes are used for encoding the video.
22. The method of claim 21, wherein, in case that separate color planes are not used for encoding the video, the rule specifies that decoding is performed only once for a video picture or, in case that separate color planes are used for encoding the video, the rule specifies that picture decoding is invoked three times.
23. The method of any of claims 1 to 22, wherein the conversion includes encoding the video into the bitstream.
24. The method of any of claims 1 to 22, wherein the conversion includes decoding the video from the bitstream.
25. The method of claims 1 to 22, wherein the conversion includes generating the bitstream from the video, and the method further comprises: storing the bitstream in a non-transitory computer-readable recording medium.
26. A video processing apparatus comprising a processor configured to implement a method recited in any one or more of claims 1 to 25.

27. A method of storing a bitstream of a video, comprising, a method recited in any one of claims 1 to 25, and further including storing the bitstream to a non-transitory computer-readable recording medium.

28. A computer readable medium storing program code that, when executed, causes a processor to implement a method recited in any one or more of claims 1 to 25.

29. A computer readable medium that stores a bitstream generated according to any of the above described methods.

30. A video processing apparatus for storing a bitstream representation, wherein the video processing apparatus is configured to implement a method recited in any one or more of claims 1 to 25.