

CLAIMS

1. A method of video processing, comprising:
determining a partitioning scheme for partitioning a chroma video region of a video into one or more chroma blocks based on a color format of the video according to a rule; and
performing a conversion between the video and a coded representation of the video according to the partitioning scheme.
2. The method of claim 1, wherein the rule specifies for inter slice or intra slice with three color components represented with a same coding tree node.
3. The method of claim 1 or 2, wherein the rule specifies to use a same partitioning scheme to a chroma block and a luma block for a 4:4:4 color format.
4. The method of claim 1 or 2, wherein the rule specifies to use a same partitioning constraints for 4:2:0 and 4:2:2 color formats.
5. The method of claim 1 or 2, wherein the rule specifies not to apply the partitioning scheme and/or constraints on prediction modes for 4:0:0 or 4:4:4 color format.
6. The method of any of claim 1 or 2, wherein the rule specifies the partitioning scheme and/or prediction modes that are applied based on the color format of the video.
7. The method of claim 6, wherein, for a MxN coding tree node with a horizontal BT (binary tree) split or a horizontal TT (ternary tree) split, in a 4:2:2 color format, the horizontal BT split or the horizontal TT split is allowed for both of a chroma block and a luma block.
8. The method of claim 6, wherein, for a MxN coding tree node with a horizontal BT (binary tree) split or a horizontal TT (ternary tree) split, in a 4:2:0 color format, the horizontal BT split or

the horizontal TT (ternary tree) split is allowed for a luma block but not allowed for a chroma block.

9. The method of claim 6, wherein, for a MxN coding tree node with a vertical BT (binary tree) split or a vertical TT (ternary tree) split, in a 4:2:2 color format, the vertical BT split or the vertical TT split is allowed for both of a chroma block and a luma block.

10. The method of claim 6, wherein, for a MxN coding tree node with a vertical BT (binary tree) split or a vertical TT (ternary tree) split, in a 4:2:0 color format, the vertical BT split or the vertical TT (ternary tree) split is allowed for a luma block but not allowed for a chroma block.

11. The method of any of claims 7-10, wherein M and/or N is predefined or signaled.

12. The method of claim 11, wherein M and/or N is dependent on the color format of the video region.

13. The method of claim 6, wherein the rule specifies not to apply the partitioning scheme to 4:0:0 and/or 4:4:4 color format.

14. The method of claim 1, wherein the rule specifies that a smallest chroma intra prediction unit (SCIPU) defined to restrict a size of a chroma block is enabled for the conversion based on the color format of the video.

15. The method of claim 14, wherein the smallest chroma intra prediction unit is allowed for 4:2:0 and/or 4:2:2 color format.

16. The method of claim 14, wherein smallest chroma intra prediction unit is disallowed for 4:0:0 and/or 4:4:4: color format.

17. A method of video processing, comprising:

determining prediction modes or prediction types for subblocks of a coding tree node of a video based on a color format of the video; and

performing a conversion between the video and a coded representation of the video based on the determining,

wherein the coding tree node is partitioned into the subblocks for coding in the coded representation.

18. The method of claim 17, wherein a prediction mode of a subblock is determined as `MODE_TYPE_ALL` indicating an applicability of an inter coding mode, an intra mode, a palette mode, and an intra block copy mode, due to the color format being 4:2:2.

19. The method of claim 17, wherein a prediction mode of a subblock is determined to be either i) `MODE_TYPE_INTER` indicating an applicability of inter coding modes only or ii) `MODE_TYPE_INTRA` indicating an applicability of an intra mode, a palette mode, and an intra block copy mode due to the color format being 4:2:0.

20. The method of claim 18 or 19, wherein the inter coding mode includes representing or reconstructing the video using a temporal correlation, the inter mode includes representing or reconstructing the video based on a previously processed video block, the palette mode includes representing or reconstructing the video using a palette of representative sample values, or the intra block copy mode includes representing or reconstructing the video using at least a block vector pointing to a video frame.

21. The method of any one of claims 18 to 20, wherein the coding tree node satisfies one of following conditions: i) the coding tree node corresponds to a 8x8 luma block with a horizontal binary tree split, ii) the coding tree node corresponds to a 16x4 luma block with a vertical binary tree split, iii) the coding tree node corresponds to a 8x16 luma block with a horizontal ternary tree split, or iv) the coding tree node corresponds to a 32x4 luma block with a vertical ternary tree split.

22. The method of claim 17, wherein the coding tree node is an $M \times N$ coding tree node and M and/or N is predefined or signaled.
23. The method of claim 22, wherein M and/or N is dependent on the color format of the video.
24. The method of any of claims 1 to 23, wherein the performing of the conversion includes generating the coded representation from the video.
25. The method of any of claims 1 to 23, wherein the performing of the conversion includes generating the video from the coded representation.
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 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.