

## CLAIMS

## 1. A method of video processing, comprising:

determining, for a conversion between a current video block of a video and a coded representation of the video, whether a certain partitioning scheme is allowed for the current video block according to a rule that depends on a coding mode type used for representing the current video block in the coded representation and a dimension of the current video block; and

performing the conversion based on the determining.

2. The method of claim 1, wherein the certain partitioning scheme comprises a QT (quaternary tree) split in which the current video block is split into four parts in both horizontal and vertical directions, a vertical TT (ternary tree) split in which the current video block is split into three parts in a vertical direction, a horizontal TT split in which the current video block is split into three parts in a horizontal direction, a vertical BT (binary tree) split in which the current video block is split into two parts in a vertical direction, and/or a horizontal BT split in which the current video block is split into two parts in a horizontal direction.

3. The method of claim 1, wherein the rule specifies that a QT (quaternary tree) split is disallowed for the current video block in case 1) that the coded representation includes a `MODE_TYPE_INTER` value corresponding to the coding mode type in which an inter mode only is allowed for the current video block and 2) that both of a width and a height of the current video block are 8.

4. The method of claim 1, wherein the rule specifies that a TT (ternary tree) split is disallowed for the current video block in case 1) that the coded representation includes a `MODE_TYPE_INTER` value corresponding to the coding mode type in which an inter mode only is allowed for the current video block and 2) that a multiplication of a width and a height of the current video block is 64.

5. The method of claim 4, wherein the rule further specifies that a vertical TT (ternary tree) split is disallowed in a case that the coded representation includes a `MODE_TYPE_INTER` value and the width and the height of the current video block are 16 and 4, respectively.
6. The method of claim 4, wherein the rule further specifies that a horizontal TT (ternary tree) split is disallowed in a case that the coded representation includes a `MODE_TYPE_INTER` value and the width and the height of the current video block are 4 and 16, respectively.
7. The method of claim 1, wherein the rule specifies that a BT (binary tree) split is disallowed for the current video block in case 1) that the coded representation includes a `MODE_TYPE_INTER` value corresponding to the coding mode type in which an inter mode only is allowed for the current video block and 2) that a multiplication of a width and a height of the current video block is 32.
8. The method of claim 7, wherein the rule further specifies that a vertical BT (binary tree) split is disallowed in a case that the coded representation includes a `MODE_TYPE_INTER` value and the width and the height of the current video block are 8 and 4, respectively.
9. The method of claim 7, wherein the rule specifies that a horizontal BT (binary tree) split is disallowed in a case that the coded representation includes a `MODE_TYPE_INTER` value and the width and the height of the current video block are 4 and 8, respectively.
10. A method of video processing, comprising:
  - performing a conversion between a video block of a video and a coded representation of the video, wherein the coded representation conforms to a format rule,
  - wherein the format rule specifies that a characteristic of the video block controls whether a syntax element in the coded representation indicates a prediction mode of the video block.
11. The method of claim 10, wherein the characteristic of the video block includes at least one of color components or a dimension of the video block.

12. The method of claim 10 or 11, wherein the format rule further specifies that the syntax element indicates the prediction mode of the video block corresponding to a chroma block.
13. The method of any of claims 10 to 12, wherein the format rule further specifies that the syntax element does not indicate the prediction mode of the video block corresponding to a luma block and the prediction mode of the video block corresponding to the luma block is included in the coded representation.
14. The method of claim 13, wherein the video block has a width and a height that are greater than 4.
15. A method of video processing, comprising:  
performing a conversion between a video region of a first component of a video and a coded representation of the video,  
wherein the coded representation conforms to a format rule,  
wherein the format rule specifies whether and/or how a syntax field is configured in the coded representation to indicate a differential quantization parameter for the video region depends on a splitting scheme used for splitting samples of the first component.
16. The method of claim 15, wherein the format rule further specifies whether and/or how the syntax field is configured in the coded representation is independent of a splitting scheme used for splitting samples of a second component of the video.
17. The method of claim 15 or 16, wherein the first component is a luma component and the second component is a chroma component.
18. The method of claim 15 or 16, wherein the first component is a chroma component and the second component is a luma component.

19. The method of claim 15, wherein the format rule further specifies to include information related to the differential quantization parameter at most once in a specific region in which a luma component and a chroma component share a same mode type.
20. The method of claim 19, wherein the specific region corresponds to a quantization group.
21. A method of video processing, comprising:  
performing a conversion between a video region of a first component of a video and a coded representation of the video according to a rule,  
wherein the rule specifies, in case that a dual tree and/or a local dual tree coding structure is applied to the video region, that a variable related to a differential quantization parameter of the first component is not modified during a decoding or parsing process of a second component of the video.
22. The method of claim 21, wherein the local dual tree structure is applied to the video region in case that a restriction on a smallest allowed size for a chroma block is applied to the video region.
23. The method of claim 21 or 22, wherein the first component is a luma component and the second component is a chroma component.
24. The method of claim 21 or 22, wherein the first component is a chroma component and the second component is a luma component.
25. The method of any of claims 21 to 24, wherein the differential quantization parameter indicates a difference in a quantization value applied to the video block and a previous quantization value applied to a neighboring video block.

26. The method of any of claims 1 to 25, wherein the performing of the conversion includes generating the coded representation from the video.
27. The method of any of claims 1 to 25, wherein the performing of the conversion includes generating the video from the coded representation.
28. A video processing apparatus comprising a processor configured to implement a method recited in any one or more of claims 1 to 27.
29. 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 27.
30. A computer readable medium that stores a coded representation or a bitstream representation generated according to any of the above described methods.