

CLAIMS

What is claimed is:

1. A method of video processing, comprising:
performing a conversion between a current block of a video and a coded representation of the video using a palette mode in which a palette of representative sample values is used for coding the current block, wherein, during the conversion, a predictor palette is used for predicting the palette of representative sample values, and wherein updating of the predictor palette after the conversion of the current block is disabled according to a rule based on a characteristic of the current block.
2. The method of claim 1, wherein the characteristic of the current block comprises coded information associated with the current block.
3. The method of claim 1, wherein the characteristic of the current block comprises a dimension of the current block.
4. The method of claim 3, wherein the rule specifies that the updating of the predictor palette is disabled in case a width of the current block is smaller than or equal to a first threshold, and a height of the current block is smaller than or equal to a second threshold.
5. The method of claim 3, wherein the rule specifies that the updating of the predictor palette is disabled in case a height of the current block is smaller than or equal to a first threshold.
6. The method of claim 3, wherein the rule specifies that the updating of the predictor palette is disabled in case a width of the current block is greater than or equal to a first threshold, and a height of the current block is greater than or equal to a second threshold.
7. The method of claim 3, wherein the rule specifies that the updating of the predictor palette is disabled in case a height of the current block is greater than or equal to a first threshold.

8. The method of any of claims 4 to 7, wherein the first threshold or the second threshold is predefined or signaled in the coded representation.
9. The method of any of claims 4 to 8, wherein the first threshold is 4, 16, or 1024.
10. The method of any of claims 4 to 8, wherein the second threshold is 4, 16, or 1024.
11. The method of any of claims 4 to 7, wherein the first threshold or the second threshold is based on a color component of the current block.
12. A method of video processing, comprising:
performing a conversion between a current block of a video and a coded representation of the video using a palette mode in which a palette of representative sample values is used for coding the current block, wherein, during the conversion, a predictor palette is used for predicting the palette of representative sample values, and wherein whether a change to the predictor palette is to be performed is determined according to a color component of the current block.
13. The method of claim 11, wherein the change to the predictor palette comprises updating, initialization, or resetting the predictor palette.
14. The method of claim 11, wherein the color component comprises a luma or a chroma component.
15. The method of any of claims 12 to 14, wherein the predictor palette comprises information corresponding to the color component of the current block.
16. The method of any of claims 12 to 14, wherein the predictor palette comprises information corresponding to all color components of the current block.

17. The method of any of claims 12 to 14, wherein the predictor palette comprises information corresponding to two chroma components of the current block.
18. A method of video processing, comprising:
performing a conversion between a current block in a video unit of a video and a coded representation of the video using a palette mode in which a palette of representative sample values is used for coding the current block, wherein, during the conversion, multiple predictor palettes are used for predicting the palette of representative sample values.
19. The method of claim 18, wherein a predictor palette of the current block is updated according to at least a global palette and a local palette.
20. The method of claim 18, wherein the multiple predictor palettes are associated with K blocks in the video unit that have been coded using the palette mode.
21. The method of any of claims 18 to 20, wherein palettes for different color components are determined according to different predictor palettes of the multiple predictor palettes.
22. The method of any of claims 18 to 21, wherein the multiple predictor palettes are reset or re-initialized prior to a conversion of a first block in the video unit or after a conversion of a last block in a previously converted video unit.
23. The method of any of claims 18 to 21, wherein an index of a predictor palette of the multiple predictor palettes is signaled in a coding unit, a prediction unit, a coding tree unit, a coding tree block, a sub-region of a coding tree unit, or a sub-region of a coding tree block in the coded representation.
24. A method of video processing, comprising:
performing a conversion between a current block in a video unit of a video and a coded representation of the video using a palette mode in which a palette of representative sample values is used for coding the current block, wherein, during the conversion, a predictor palette is used for

predicting the palette of representative sample values, and wherein the predictor palette is reset or re-initialized prior to a conversion of a first block in the video unit or after a conversion of a last video block in a previous video unit according to a rule.

25. The method of claim 24, wherein the video unit comprises a subregion of a coding tree unit, a virtual pipeline data unit, one or more coding tree units, a coding tree block, one or more coding units, a coding tree unit row, a tile, a brick, a sub-picture, or a view of the video.

26. The method of claim 24 or 25, wherein the rule specifies that resetting or re-initializing the predictor palette is applicable to the video unit regardless of whether wavefront parallel processing of multiple video units is enabled or not.

27. The method of claim 25, wherein the video unit comprises a coding tree unit row corresponding to a chroma component.

28. The method of claim 27, wherein the first block comprises a first coding tree block corresponding to the chroma component in the coding tree unit row.

29. The method of claim 27 or 28, wherein the rule specifies that resetting or re-initializing the predictor palette is applicable to the video unit in case a dual tree partition is applied and a current partition tree is a coding tree corresponding to the chroma component.

30. The method of any of claims 24 to 29, wherein a size of the predictor palette is reset or re-initialized to 0.

31. The method of any of claims 24 to 29, wherein a size of the predictor palette is reset or re-initialized to a number of entries in a sequence palette predictor initializer or a maximum number of entries allowed in a predictor palette that is signaled in the coded representation.

32. The method of any of claims 24 to 31, wherein the predictor palette is further reset or re-initialized prior to converting a new video unit.
33. The method of any of claims 24 to 32, wherein, in case wavefront parallel processing of multiple video units is enabled, the predictor palette used for the conversion of a current coding tree block or a current coding tree unit is determined based on a coding tree block or a coding tree unit that has been converted.
34. A method of video processing, comprising:
performing a conversion between a video unit of a video and a coded representation of the video using a palette mode, wherein the video unit comprises multiple blocks, and wherein, during the conversion, a shared predictor palette is used by all of the multiple blocks for predicting a palette of representative sample values for each of the multiple blocks in the palette mode.
35. The method of claim 34, wherein a tertiary tree partitioning is applied to the video unit, and wherein the shared predictor palette is used for video unit that has a dimension of 16×4 or 4×16 .
36. The method of claim 34, wherein a binary tree partitioning is applied to the video unit, and wherein the shared predictor palette is used for video unit that has a dimension of 8×4 or 4×8 .
37. The method of claim 34, wherein a quad tree partitioning is applied to the video unit, and wherein the shared predictor palette is used for video unit that has a dimension of 8×8 .
38. The method of any of claims 34 to 37, wherein the shared predictor palette is constructed one prior to conversions of all the multiple blocks within the video unit.
39. The method of any of claims 34 to 38, wherein an indication of a predicted entry in the shared predictor palette is signaled in the coded representation with a first coded block of the multiple blocks in the region.

40. The method of claim 39, wherein an indication of a predicted entry in the shared predictor palette is omitted in the coded representation for remaining of the multiple blocks in the region.
41. The method of any of claims 34 to 40, wherein updating of the shared predictor palette is skipped after a conversion of one of the multiple blocks in the region.
42. A method of video processing, comprising:
performing a conversion between a current block of a video and a coded representation of the video using a palette mode in which a palette of representative sample values is used for coding the current block, wherein, during the conversion, a predictor palette is used for predicting the palette of representative sample values, and wherein a counter is maintained for each entry of the predictor palette indicating how often the corresponding entry is used.
43. The method of claim 42, wherein the counter is set to K for a new entry to be added to the predictor palette, K being an integer.
44. The method of claim 43, wherein $K = 0$.
45. The method of any of claims 42 to 44, wherein the counter is incremented by N every time the corresponding entry is reused during the conversion of the current block, N being a positive integer.
46. The method of claim 45, wherein $N = 1$.
47. The method of any of claims 42 to 46, wherein entries of the predictor palette are re-ordered according to a rule prior to the predictor palette being used for the conversion.
48. The method of claim 47, wherein the rule specifies that the entries of the predictor palette are re-ordered according to coded information of a current sample.

49. The method of claim 47, wherein the rule specifies that the entries of the predictor palette are re-ordered according to the counter for each corresponding entry of the entries in the predictor palette.

50. The method of any of claims 47 to 49, wherein a second counter is used to indicate a frequency of occurrence of a sample.

51. The method of claim 50, wherein a first sample that has a higher frequency of occurrence is positioned prior to a second sample that has lower frequency of occurrence in the predictor palette.

52. The method of any of claims 43 to 51, wherein the predictor palette is updated using escaped samples in the current block according to a rule.

53. The method of claim 52, wherein the rule specifies that the predictor palette is updated using the escaped samples in case a condition is satisfied.

54. The method of claim 53, wherein the condition is satisfied in case the predictor palette is not full after inserting a current block of the current block.

55. A method of video processing, comprising:
performing a conversion between a current block of a video and a coded representation of the video using a palette mode in which a palette of representative sample values is used for coding the current block for predicting a palette of representative sample values for the current block, wherein a number of entries of the palette signaled in the coded representation is within a range of [0, a maximum allowed size of a palette - a number of palette entries derived during the conversion].

56. The method of claim 55, wherein the number of entries of the palette signaled in the coded representation is binarized based on the range.

57. The method of claim 56, wherein the number of entries signaled in the coded representation is binarized using a truncated binarize coding process.

58. The method of claim 56, wherein the number of entries signaled in the coded representation is binarized based on a characteristic of the current block.

59. The method of claim 58, wherein the characteristic includes a dimension of the current block.

60. The method of any of claims 1 to 59, wherein applicability of which is based on a characteristic of the video.

61. The method of claim 60, wherein the characteristic of the video comprises a content of the video.

62. The method of claim 60, wherein the characteristic of the video comprises information signaled in a decoder parameter set, a slice parameter set, a video parameter set, a picture parameter set, an adaptation parameter set, a picture header, a slice header, a tile group header, a largest coding unit (LCU), a coding unit, a LCU row, a group of LCUs, a transform unit, a picture unit, or a video coding unit in the coded representation.

63. The method of claim 60, wherein the characteristic of the video comprises a position of a coding unit, a picture unit, a transform unit, a block, or a video coding unit within the video.

64. The method of claim 60, wherein the characteristic of the video comprises a characteristic of a current block or a neighboring block of the current block.

65. The method of claim 64, wherein the characteristic of a current block or neighboring blocks of the current block comprises a dimension of the current block or a dimension of the neighboring block of the current block.

66. The method of claim 60, wherein the characteristic of the video comprises an indication of a color format of the video.

67. The method of claim 60, wherein the characteristic of the video comprises a coding tree structure applicable to the video.
68. The method of claim 60, wherein the characteristic of the video comprises a slice type, a tile group type, or a picture type of the video.
69. The method of claim 60, wherein the characteristic of the video comprises color component of the video.
70. The method of claim 60, wherein the characteristic of the video comprises a temporal layer identifier of the video.
71. The method of claim 60, wherein the characteristic of the video comprises a profile, a level, or a tier of a video standard.
72. The method of any of claims 1 to 71, wherein the conversion comprises encoding the video into the coded representation.
73. The method of any of claims 1 to 71, wherein the conversion comprises decoding the coded representation to generate pixel values of the video.
74. A video processing apparatus comprising a processor configured to implement a method recited in one or more of claims 1 to 73.
75. A computer program product having computer code stored thereon, the code, upon executed by a processor, causes the processor to implement a method recited in any of claims 1 to 73.
76. A computer readable medium that stores a coded representation generated according to any of claims to 1 to 73.