

CLAIMS

1. A method of processing video data, comprising:
 - determining, for a conversion between a current video block of a video and a bitstream of the video, that a first prediction flag is included in the bitstream, wherein the current video block is not skipped, and wherein the first prediction flag indicates whether an inter prediction mode or an intra prediction mode is applied;
 - determining a second prediction flag or a third prediction flag is further included in the bitstream at least based on a value of the first prediction flag, wherein the second prediction flag indicates whether a first prediction mode is applied, and wherein in the first prediction mode, prediction samples are derived from reconstructed sample values of the same picture containing the current video block, and wherein the third prediction flag indicates whether a second prediction mode is applied, and wherein in the second prediction mode, reconstructed samples are represented by a set of representative color values, and the set of representative color values comprises at least one of 1) palette predictors, 2) escaped samples, or 3) palette information included in the bitstream; and
 - performing the conversion between the first video block and the bitstream.
2. The method of claim 1, wherein the second prediction flag is further included in the bitstream in a case that the first prediction flag indicating the inter prediction mode is applied.
3. The method of claim 1 or 2, wherein the third prediction flag is further included in the bitstream in a case that the first prediction flag indicating the intra prediction mode is applied.
4. The method of any one of claims 1-3, wherein the third prediction flag is context coded with a single context.
5. The method of any one of claims 1-4, wherein whether the second prediction flag and the third prediction flag are included in the bitstream is based on a size of the current video block.

6. The method of any one of claims 1-5, wherein whether the second prediction flag is included in the bitstream is further based on an enable flag related to the first prediction mode in a higher level, and whether the third prediction flag is included in the bitstream is further based on an enable flag related to the second prediction mode in the higher level, and
wherein the higher level includes sequence level, picture level, tile group level or tile group.
7. The method of any one of claims 1-6, wherein a first bin and a second bin are used to indicate which one of the intra prediction mode, the inter prediction mode, the first prediction mode, and the second prediction mode is applied for the current video block, and
wherein M is equal to a value of the first bin and N is equal to a value of the second bin, and
wherein in a case that $(M, N) = (0, 0)$, the inter prediction mode is applied for the current video block.
8. The method of claim 7, wherein in a case that $(M, N) = (0, 1)$, the first prediction mode is applied for the current video block.
9. The method of claim 7 or 8, wherein in a case that $(M, N) = (0, 0)$ or $(0, 1)$, the first bin is corresponding to the first prediction flag and the second bin is corresponding to the second prediction flag, and wherein the third prediction flag is not included in the bitstream.
10. The method of any one of claims 7-9, wherein in a case that $(M, N) = (1, 0)$, the intra prediction mode is applied for the current video block.
11. The method of any one of claims 7-10, wherein in a case that $(M, N) = (1, 1)$, the second prediction mode is applied for the current video block
12. The method of any one of claims 7-11, wherein in a case that $(M, N) = (1, 0)$ or $(1, 1)$, the first bin is corresponding to the first prediction flag and the second bin is corresponding to the third prediction flag, and wherein the second prediction flag is not included in the bitstream.

13. The method of any one of claims 7-12, wherein in a case that $(M, N) = (0, 0)$, $(0, 1)$ or $(1, 1)$, a third bin indicating whether to apply a third prediction mode is excluded from the bitstream, and wherein in the third prediction mode, a difference between a quantized residual and a prediction of the quantized residual is represented in the bitstream using a pulse coding modulation representation.

14. The method of any one of claims 7-13, wherein a third bin indicating whether to apply a third prediction mode is included in the bitstream in a case that $(M, N) = (1, 0)$, and wherein in the third prediction mode, a difference between a quantized residual and a prediction of the quantized residual is represented in the bitstream using a pulse coding modulation representation.

15. The method of any one of claims 1-14, wherein the conversion includes encoding the current video block into the bitstream.

16. The method of any one of claims 1-14, wherein the conversion includes decoding the current video block from the bitstream.

17. An apparatus for processing video data comprising a processor and a non-transitory memory with instructions thereon, wherein the instructions upon execution by the processor, cause the processor to:

determine, for a conversion between a current video block of a video and a bitstream of the video, that a first prediction flag is included in the bitstream, wherein the current video block is not skipped, and wherein the first prediction flag indicates whether an inter prediction mode or an intra prediction mode is applied;

determine a second prediction flag or a third prediction flag is further included in the bitstream at least based on a value of the first prediction flag, wherein the second prediction flag indicates whether a first prediction mode is applied, and wherein in the first prediction mode, prediction samples are derived from reconstructed sample values of the same picture containing the current video block, and wherein the third prediction flag indicates whether a second prediction mode is applied, and wherein in the second prediction mode, reconstructed samples

are represented by a set of representative color values, and the set of representative color values comprises at least one of 1) palette predictors, 2) escaped samples, or 3) palette information included in the bitstream; and

perform the conversion between the first video block and the bitstream.

18. The apparatus of claim 17, wherein the second prediction flag is further included in the bitstream in a case that the first prediction flag indicating the inter prediction mode is applied.

19. A non-transitory computer-readable storage medium storing instructions that cause a processor to:

determine, for a conversion between a current video block of a video and a bitstream of the video, that a first prediction flag is included in the bitstream, wherein the current video block is not skipped, and wherein the first prediction flag indicates whether an inter prediction mode or an intra prediction mode is applied;

determine a second prediction flag or a third prediction flag is further included in the bitstream at least based on a value of the first prediction flag, wherein the second prediction flag indicates whether a first prediction mode is applied, and wherein in the first prediction mode, prediction samples are derived from reconstructed sample values of the same picture containing the current video block, and wherein the third prediction flag indicates whether a second prediction mode is applied, and wherein in the second prediction mode, reconstructed samples are represented by a set of representative color values, and the set of representative color values comprises at least one of 1) palette predictors, 2) escaped samples, or 3) palette information included in the bitstream; and

perform the conversion between the first video block and the bitstream.

20. A non-transitory computer-readable recording medium storing a bitstream of a video which is generated by a method performed by a video processing apparatus, wherein the method comprises:

determining, for a current video block of the video, that a first prediction flag is included in the bitstream, wherein the current video block is not skipped, and wherein the first prediction flag indicates whether an inter prediction mode or an intra prediction mode is applied;

determining a second prediction flag or a third prediction flag is further included in the bitstream at least based on a value of the first prediction flag, wherein the second prediction flag indicates whether a first prediction mode is applied, and wherein in the first prediction mode, prediction samples are derived from reconstructed sample values of the same picture containing the current video block, and wherein the third prediction flag indicates whether a second prediction mode is applied, and wherein in the second prediction mode, reconstructed samples are represented by a set of representative color values, and the set of representative color values comprises at least one of 1) palette predictors, 2) escaped samples, or 3) palette information included in the bitstream; and

generating the bitstream for the current video block.