CLAIMS

1. An encoder configured to:

encode a picture of a video into a data stream, the picture comprising a plurality of subpictures,

wherein

the encoding of the picture comprises encoding, into the data stream, a first subpicture of the plurality of subpictures such that BinCountsInNalUnits for the first subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

2. The encoder of claim 1, wherein the encoding of the picture comprises encoding into the data stream, a second subpicture of the plurality of subpictures such that BinCountsInNalUnits for the second subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

3. The encoder of claim 1, wherein the encoding of the first subpicture comprises encoding a value of 1 for a subpic_treated_as_pic_flag associated with the first subpicture.

4. The encoder of claim 3, wherein the encoding of the first subpicture comprises

determining that BinCountsInNalUnits for the first subpicture is greater than (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32,

where

RawMinCuBits = MinCbSizeY * MinCbSizeY * (BitDepth + 2 * BitDepth / (SubWidthC * SubHeightC));

based on the value of 1 for the subpic_treated_as_pic_flag associated with the first subpicture and the determination that BinCountsInNalUnits for the first subpicture is greater than (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32,

adding one or more cabac_zero_words to the bitstream until BinCountsInNalUnits for the first subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

5. The encoder of claim 4, wherein the encoding of the picture comprises encoding into the data stream, a second subpicture of the plurality of subpictures such that BinCountsInNalUnits for the second subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

6. The encoder of claim 5, wherein the encoding of the second subpicture comprises encoding a value of 1 for a subpic_treated_as_pic_flag associated with the second subpicture.

7. The encoder of claim 6, wherein the encoding of the second subpicture comprises

determining that BinCountsInNalUnits for the second subpicture is greater than (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32,

where

RawMinCuBits = MinCbSizeY * MinCbSizeY * (BitDepth + 2 * BitDepth / (SubWidthC * SubHeightC));

based on the value of 1 for the subpic_treated_as_pic_flag associated with the second subpicture and the determination that BinCountsInNalUnits for the second subpicture is greater than (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32,

adding one or more cabac_zero_words to the bitstream until BinCountsInNalUnits for the second subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

8. A video bitstream comprising an encoded picture, the encoded picture comprising a plurality of subpictures, the plurality of subpictures comprising a first subpicture such that BinCountsInNalUnits for the first subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

9. The video bitstream of claim 8, wherein the plurality of subpictures comprises a second subpicture such that BinCountsInNalUnits for the second subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

10. A decoder configured to decode a picture from a video bitstream, the picture comprising a plurality of subpictures, the plurality of subpictures comprising a first subpicture such that BinCountsInNalUnits for the first subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

11. The decoder of claim 10, wherein the plurality of subpictures comprises a second subpicture such that BinCountsInNalUnits for the second subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

12. An encoding method comprising the steps of:

encoding a picture of a video into a data stream, the picture comprising a plurality of subpictures,

wherein

the step of encoding the picture of the video into the data stream comprises encoding, into the data stream, a first subpicture of the plurality of subpictures such that BinCountsInNalUnits for the first subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

13. The encoding method of claim 12, wherein the step of encoding the picture of the video into the data stream comprises encoding into the data stream, a second subpicture of the plurality of subpictures such that BinCountsInNalUnits for the second subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

14. A decoding method comprising the steps of:

decoding a picture from a video bitstream, the picture comprising a plurality of subpictures, the plurality of subpictures comprising a first subpicture such that BinCountsInNalUnits for the first subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.

15. The decoder method claim 14, wherein the plurality of subpictures comprises a second subpicture such that BinCountsInNalUnits for the second subpicture is less than or equal to (32 ÷ 3) * NumBytesInVclNalUnits + (RawMinCuBits * PicSizeInMinCbsY) ÷ 32.