# CLAIMS

1. A method of decoding video data, the method comprising:

receiving entropy coded data for a current block of video data, wherein the entropy coded data includes entropy coded data for a syntax element indicating a position of a last significant coefficient in a transform block for the current block;

determining a respective context for each of one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a function of a size of the transform block, wherein the function outputs the respective context such that the same context that is used for 64 sample dimension transform blocks is not used for 32 sample dimension transform blocks; and

decoding the entropy coded data for the syntax element indicating the position of the last significant coefficient using the determined respective contexts.

2. The method of claim 1, wherein the transform block for the current block is a 64 sample dimension transform block, and wherein the function includes a linear operation and a non-linear operation.

3. The method of claim 2, wherein the non-linear operation comprises a size-dependent offset with a bitshift and clipping.

4. The method of claim 1, wherein the transform block for the current block is a 64 sample dimension transform block, and wherein determining the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block comprises:

determining the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a first function for the 64 sample dimension transform block, wherein the first function is different than a second function used to determine respective contexts for each of one or more bins of entropy coded data for a syntax element indicating a position of a last significant coefficient for a 32 sample dimension transform block.

5. The method of claim 1, wherein determining the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block comprises:

determining a respective context offset and a respective context shift using the function of the size of the transform block and a color component index; and

determining the respective context for a respective bin of the one or more bins using a bin index for the respective bin, the respective context offset, and the respective context shift.

6. The method of claim 1, wherein the syntax element is one of a first prefix syntax element indicating an X position of the position of the last significant coefficient or a second prefix syntax element indicating a Y position of the position of the last significant coefficient, and wherein decoding the entropy coded data for the syntax element indicating the position of the last significant coefficient using the determined respective contexts comprises:

decoding the entropy coded data for the first prefix syntax element or the second prefix syntax element using the determined respective contexts.

7. The method of claim 6, further comprising:

decoding a first suffix syntax element using fixed length decoding; and

inverse binarizing the first prefix syntax element and the first suffix syntax element to obtain the position of the last significant coefficient.

8. The method of claim 1, wherein the transform block for the current block is a 128 sample dimension transform block, and wherein determining the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block comprises:

determining the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a first function for the 128 sample dimension transform block, wherein the first function is different than a second function used to determine respective contexts for each of one or more bins of entropy coded data for a syntax element indicating a position of a last significant coefficient for a 64 sample dimension transform block, and wherein the first function is different than a third function used to determine respective contexts for each of one or more bins of entropy coded data for a syntax

element indicating a position of a last significant coefficient for a 32 sample dimension transform block.

9. The method of claim 1, further comprising:

decoding the transform block based on the position of the last significant coefficient to obtain transform coefficients;

applying an inverse transform to the transform coefficients to obtain a residual block;

performing a prediction process for the current block to obtain a prediction block; and

adding the residual block to the prediction block to obtain a decoded block of video data.

10. The method of claim 9, further comprising:

displaying a picture that includes the decoded block of video data.

11. An apparatus configured to decode video data, the apparatus comprising:

a memory configured to store a current block of video data; and

one or more processors in communication with the memory, the one or more processors configured to:

receive entropy coded data for the current block of video data, wherein the entropy coded data includes entropy coded data for a syntax element indicating a position of a last significant coefficient in a transform block for the current block;

determine a respective context for each of one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a function of a size of the transform block, wherein the function outputs the respective context such that the same context that is used for 64 sample dimension transform blocks is not used for 32 sample dimension transform blocks; and

decode the entropy coded data for the syntax element indicating the position of the last significant coefficient using the determined respective contexts.

12. The apparatus of claim 11, wherein the transform block for the current block is a 64 sample dimension transform block, and wherein the function includes a linear operation and a non-linear operation.

13. The apparatus of claim 12, wherein the non-linear operation comprises a size-dependent offset with a bitshift and clipping.

14. The apparatus of claim 11, wherein the transform block for the current block is a 64 sample dimension transform block, and wherein to determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block, the one or more processors are further configured to:

determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a first function for the 64 sample dimension transform block, wherein the first function is different than a second function used to determine respective contexts for each of one or more bins of entropy coded data for a syntax element indicating a position of a last significant coefficient for a 32 sample dimension transform block.

15. The apparatus of claim 11, wherein to determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block, the one or more processors are further configured to:

determine a respective context offset and a respective context shift using the function of the size of the transform block and a color component index; and

determine the respective context for a respective bin of the one or more bins using a bin index for the respective bin, the respective context offset, and the respective context shift.

16. The apparatus of claim 11, wherein the syntax element is one of a first prefix syntax element indicating an X position of the position of the last significant coefficient or a second prefix syntax element indicating a Y position of the position of the last significant coefficient, and wherein to decode the entropy coded data for the syntax element indicating the position of the last significant coefficient using the determined respective contexts, the one or more processors are further configured to:

decode the entropy coded data for the first prefix syntax element or the second prefix syntax element using the determined respective contexts.

17. The apparatus of claim 16, wherein the one or more processors are further configured to:

decode a first suffix syntax element using fixed length decoding; and

inverse binarize the first prefix syntax element and the first suffix syntax element to obtain the position of the last significant coefficient.

18. The apparatus of claim 11, wherein the transform block for the current block is a 128 sample dimension transform block, and wherein to determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block, the one or more processors are further configured to:

determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a first function for the 128 sample dimension transform block, wherein the first function is different than a second function used to determine respective contexts for each of one or more bins of entropy coded data for a syntax element indicating a position of a last significant coefficient for a 64 sample dimension transform block, and wherein the first function is different than a third function used to determine respective contexts for each of one or more bins of entropy coded data for a syntax element indicating a position of a last significant coefficient for a 32 sample dimension transform block.

19. The apparatus of claim 11, wherein the one or more processors are further configured to:

decode the transform block based on the position of the last significant coefficient to obtain transform coefficients;

apply an inverse transform to the transform coefficients to obtain a residual block;

perform a prediction process for the current block to obtain a prediction block; and

add the residual block to the prediction block to obtain a decoded block of video data.

20. The apparatus of claim 19, further comprising:

a display configured to display a picture that includes the decoded block of video data.

21. The apparatus of claim 11, wherein the apparatus is a wireless communication device.

22. A non-transitory computer-readable storage medium storing instructions that, when executed, causes one or more processors of a device configured to decode video data to:

receive entropy coded data for the current block of video data, wherein the entropy coded data includes entropy coded data for a syntax element indicating a position of a last significant coefficient in a transform block for the current block;

determine a respective context for each of one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a function of a size of the transform block, wherein the function outputs the respective context such that the same context that is used for 64 sample dimension transform blocks is not used for 32 sample dimension transform blocks; and

decode the entropy coded data for the syntax element indicating the position of the last significant coefficient using the determined respective contexts.

23. The non-transitory computer-readable storage medium of claim 22, wherein the transform block for the current block is a 64 sample dimension transform block, and wherein the function includes a linear operation and a non-linear operation.

24. The non-transitory computer-readable storage medium of claim 23, wherein the non-linear operation comprises a size-dependent offset with a bitshift and clipping.

25. The non-transitory computer-readable storage medium of claim 22, wherein the transform block for the current block is a 64 sample dimension transform block, and wherein to determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block, the instructions further cause the one or more processors to:

determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using a first function for the 64 sample dimension transform block, wherein the first function is different than a second function used to determine respective contexts for each of one or more bins of entropy coded data for a syntax element indicating a position of a last significant coefficient for a 32 sample dimension transform block.

26. The non-transitory computer-readable storage medium of claim 22, wherein to determine the respective context for each of the one or more bins of the entropy coded data for the syntax element indicating the position of the last significant coefficient using the function of a size of the transform block, the instructions further cause the one or more processors to:

determine a respective context offset and a respective context shift using the function of the size of the transform block and a color component index; and

determine the respective context for a respective bin of the one or more bins using a bin index for the respective bin, the respective context offset, and the respective context shift.

27. The non-transitory computer-readable storage medium of claim 22, wherein the syntax element is one of a first prefix syntax element indicating an X position of the position of the last significant coefficient or a second prefix syntax element indicating a Y position of the position of the last significant coefficient, and wherein to decode the entropy coded data for the syntax element indicating the position of the last significant coefficient using the determined respective contexts, the instructions further cause the one or more processors to:

decode the entropy coded data for the first prefix syntax element or the second prefix syntax element using the determined respective contexts.

28. The non-transitory computer-readable storage medium of claim 27, wherein the instructions further cause the one or more processors to:

decode a first suffix syntax element using fixed length decoding; and

inverse binarize the first prefix syntax element and the first suffix syntax element to obtain the position of the last significant coefficient.

29. The method of claim 1, wherein:

when a variable (log2TrafoSize) specifying a log base 2 of a transform size (TrafoSize) is greater than 5, the function comprises setting a context offset (ctxOffset) equal to 3 * (log2TrafoSize - 2) + ((log2TrafoSize - 1) >> 2) + ((TrafoSize >> 6) << 1) + (TrafoSize >> 7); and

when the variable is less than or equal to 5, the function comprises setting the context offset equal to 3 * ( log2TrafoSize - 2 ) + ((log2TrafoSize - 1) >> 2).

30. The apparatus of claim 11, wherein:

when a variable (log2TrafoSize) specifying a log base 2 of a transform size (TrafoSize) is greater than 5, the function sets a context offset (ctxOffset) equal to 3 * (log2TrafoSize − 2) + ((log2TrafoSize - 1) >> 2) + ((TrafoSize >> 6) << 1) + (TrafoSize >> 7); and

when the variable is less than or equal to 5, the function sets the context offset equal to 3 * ( log2TrafoSize - 2 ) + ((log2TrafoSize - 1) >> 2).