Amended Set of Claims 1 to 72

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

determining context information for a block of video data, wherein determining the context information comprises determining the context information based on a depth of one of a coding unit (CU) and transform unit (TU); and

entropy coding the block using the determined context information.

2. – 10. (Canceled)

11. The method of claim 1, wherein the block comprises a CU, wherein determining the context information comprises determining the context information for inter-predicted residual data of the CU based on the depth of the CU, and wherein entropy coding the data of the block comprises entropy coding the inter-predicted residual data of the CU.

12. The method of claim 11, wherein determining the context information comprises determining the context information for an inter-prediction flag (inter_pred_flag) of the inter-predicted residual data based on the depth of the CU, and wherein entropy coding the inter-predicted residual data of the CU comprises entropy coding the inter-prediction flag.

13. (Canceled)

14. The method of claim 1, wherein the block comprises a TU, wherein determining the context information comprises determining the context information for intra-predicted residual data of the TU based on the depth of the TU, and wherein entropy coding the data of the block comprises entropy coding the intra-predicted residual data of the TU.

15. The method of claim 14, wherein determining the context information comprises determining the context information for one or more syntax elements of a coded block pattern of the TU based on the depth of the TU, and wherein entropy coding the intra-predicted residual data of the TU comprises entropy coding the one or more syntax elements of a coded block pattern.

16. The method of claim 1, wherein entropy coding data of the block using the determined context information comprises determining a probability model based on the determined context information and entropy coding the data using the determined probability model.

17. The method of claim 1, wherein entropy coding the block of video data comprises entropy encoding the block of video data.

18. The method of claim 17, wherein entropy encoding the block of video data comprises context-adaptive binary arithmetic coding the block of video data.

19. The method of claim 17, wherein entropy encoding the block of video data further comprises:

applying a transform to one or more residual values of the block to generate transform coefficients;

quantizing the transform coefficients to generate quantized transform coefficients; and

entropy encoding the quantized transform coefficients.

20. The method of claim 1, wherein entropy coding the block of video data comprises entropy decoding the block of video data.

21. The method of claim 20, wherein entropy decoding the block of video data comprises:

entropy decoding a received bitstream to generate quantized transform coefficients associate with the block of video data;

inverse quantizing the quantized transform coefficients to generate transform coefficients; and

applying an inverse transform to the transform coefficients to generate residual values associated with the block of video data.

22. The method of claim 20, wherein entropy decoding the block of video data comprises context-adaptive binary arithmetic coding the block of video data.

23. An apparatus for coding video data, the apparatus comprising one or more processors configured to:

determine context information for a block of video data based on a depth of one of a coding unit (CU) and transform unit (TU); and

entropy code the block using the determined context information.

24. – 32. (Canceled)

33. The apparatus of claim 23, wherein the block comprises a CU, wherein to determine the context information, the one or more processors are configured to determine the context information for inter-predicted residual data of the CU based on the depth of the CU, and wherein to entropy code the data of the block, the one or more processors are configured to entropy code the inter-predicted residual data of the CU.

34. The apparatus of claim 33, wherein to determine the context information, the one or more processors are configured to determine the context information for an inter-prediction flag (inter_pred_flag) of the inter-predicted residual data based on the depth of the CU, and wherein to entropy code the inter-predicted residual data of the CU, the one or more processors are configured to entropy code the inter-prediction flag.

35. (Canceled)

36. The apparatus of claim 23, wherein the block comprises a TU, wherein to determine the context information, the one or more processors are configured to determine the context information for intra-predicted residual data of the TU based on the depth of the TU, and wherein to entropy coding the data of the block, the one or more processors are configured to entropy code the intra-predicted residual data of the TU.

37. The apparatus of claim 36, wherein to determine the context information, the one or more processors are configured to determine the context information for one or more syntax elements of a coded block pattern of the TU based on the depth of the TU, and wherein to entropy code the intra-predicted residual data of the TU, the one or more processors are configured to entropy code the one or more syntax elements of a coded block pattern.

38. The apparatus of claim 23, wherein to entropy code data of the block using the determined context information, the one or more processors are configured to determine a probability model based on the determined context information and entropy code the data using the determined probability model.

39. The apparatus of claim 23, wherein to entropy code the block of video data, the one or more processors are configured to encode the block of video data.

40. The apparatus of claim 39, wherein to entropy encoding the block of video data, the one or more processors are configured to context-adaptive binary arithmetic code the block of video data.

41. The apparatus of claim 39, wherein to entropy encode the block of video data, the one or more processors are configured to:

apply a transform to one or more residual values of the block to generate transform coefficients;

quantize the transform coefficients to generate quantized transform coefficients; and

entropy encode the quantized transform coefficients.

42. The apparatus of claim 23, wherein to entropy code the block of video data, the one or more processors are configured to decode the block of video data.

43. The apparatus of claim 42, wherein to entropy decode the block of video data, the one or more processors are configured to:

entropy decode a received bitstream to generate quantized transform coefficients associate with the block of video data;

inverse quantize the quantized transform coefficients to generate transform coefficients; and

apply an inverse transform to the transform coefficients to generate residual values associated with the block of video data.

44. The apparatus of claim 42, wherein to entropy decode the block of video data, the one or more processors are configured to context-adaptive binary arithmetic code the block of video data.

45. An apparatus for coding video data, the apparatus comprising:

means for determining context information for a block of video data, wherein the means for determining the context information comprises means for determining the context information based on a depth of one of a coding unit (CU) and transform unit (TU); and

means for entropy coding the block using the determined context information.

46 – 53. (Canceled)

54. The apparatus of claim 45, wherein the block comprises a CU, wherein the means for determining the context information comprises means for determining the context information for inter-predicted residual data of the CU based on the depth of the CU, and wherein means for entropy coding the data of the block comprises means for entropy coding the inter-predicted residual data of the CU.

55. The apparatus of claim 54, wherein the means for determining the context information comprises means for determining the context information for an inter-prediction flag (inter_pred_flag) of the inter-predicted residual data based on the depth of the CU, and wherein the means for entropy coding the inter-predicted residual data of the CU comprises means for entropy coding the inter-prediction flag.

56. (Canceled)

57. The apparatus of claim 45, wherein the block comprises a TU, wherein the means for determining the context information comprises means determining the context information for intra-predicted residual data of the TU based on the depth of the TU, and wherein means for entropy coding the data of the block comprises means for entropy coding the intra-predicted residual data of the TU.

58. The apparatus of claim 57, wherein the means for determining the context information comprises means for determining the context information for one or more syntax elements of a coded block pattern of the TU based on the depth of the TU, and wherein the means for entropy coding the intra-predicted residual data of the TU comprises means for entropy coding the one or more syntax elements of a coded block pattern.

59. A computer-readable storage medium having stored thereon instructions that, when executed, cause one or more processors to:

determine context information for a block of video data, based on a depth of one of a coding unit (CU) and transform unit (TU); and

entropy code the block using the determined context information.

60 – 67. (Canceled)

68. The computer-readable storage medium of claim 59, wherein the block comprises a CU, wherein the instructions cause the one or more processors to determine the context information by determining the context information for inter-predicted residual data of the CU based on the depth of the CU, and wherein the instructions cause the one or more processors to entropy code the inter-predicted residual data of the CU.

69. The computer-readable storage medium of claim 68, wherein the instructions cause the one or more processors to determine the context information by determining the context information for an inter-prediction flag (inter_pred_flag) of the inter-predicted residual data based on the depth of the CU, and wherein the instructions further cause the one or more processors to entropy code the inter-predicted residual data of the CU by entropy coding the inter-prediction flag.

70. (Canceled)

71. The computer-readable storage medium of claim 59, wherein the block comprises a TU, wherein the instructions cause the one or more processors to determine the context information for intra-predicted residual data of the TU by determining the context information based on the depth of the TU, and wherein the instructions further cause the one or more processors to entropy code the data of the block by entropy coding the intra-predicted residual data of the TU.

72. The computer-readable storage medium of claim 71, wherein the instructions cause the one or more processors to determine the context information by determining the context information for one or more syntax elements of a coded block pattern of the TU based on the depth of the TU, and wherein the instructions further cause the one or more processors to entropy code the intra-predicted residual data of the TU by entropy coding the one or more syntax elements of a coded block pattern.

CLAIMS

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

determining context information for one or more syntax elements associated with a block of video data, wherein the block is included within a coding unit (CU) of video data, wherein the video data defines a quadtree structure and the coding unit is a node of the quadtree structure, and wherein determining the context information comprises determining the context information based on a depth in the quadtree structure; and

entropy coding the one or more syntax elements using the determined context information, wherein entropy coding the one or more syntax elements comprises context-adaptive binary arithmetic coding the one or more syntax elements, and wherein context-adaptive binary arithmetic coding the one or more syntax elements comprises selecting a probability model from a plurality of probability models for coding the one or more syntax elements using the determined context information.

2. The method of claim 1, wherein determining the context information for the one or more syntax elements comprises determining first context information for a first set of syntax elements, the method further comprising:

determining second context information for a second set of syntax elements based on at least a portion of the context information from a block that neighbors the block.

3. The method of claim 2, wherein the block comprises one or more blocks of a largest coding unit LCU that is positioned below a row of blocks belonging to one or more other LCUs, and wherein determining context information for the second set of syntax elements comprises determining context information using information associated with one or more blocks of the LCU and excluding information outside of the LCU.

4. The method of claim **1**, wherein determining the context information for the one or more syntax elements comprises determining context information for inter-prediction data of the CU based on the depth of the CU.

5. The method of claim **4**, wherein determining the context information for the inter-prediction data of the CU comprises determining context information for one or more syntax elements that indicate whether the CU is split based on the depth of the CU.

6. The method of claim **4**, wherein determining the context information for the inter-prediction data of the CU comprises determining context information for an inter-prediction flag (inter_pred_flag) based on the depth of the CU.

7. The method of claim **1**, wherein the CU comprises a transform unit (TU), and wherein determining the context information for the one or more syntax elements comprises determining context information for one or more syntax elements associated with the TU based on the depth of the TU.

8. The method of claim **7**, wherein determining the context information for the one or more syntax elements associated with the TU comprises determining context information for intra-predicted residual data of the TU based on the depth of the TU.

9. The method of claim **8**, wherein determining the context information for the intra-predicted residual data of the TU comprises determining context information for one or more syntax elements that indicate whether the TU contains non-zero transform coefficient levels based on the depth of the TU.

10. The method of claim **1**, further comprising generating the one or more syntax elements, and wherein entropy coding the one or more syntax elements comprises entropy encoding the one or more syntax elements.

11. The method of claim **10**, further comprising encoding the block of video data comprising:

applying a transform to one or more residual values of the block to generate transform coefficients;

quantizing the transform coefficients to generate quantized transform coefficients; and

entropy encoding the quantized transform coefficients.

12. The method of claim **1**, further comprising receiving the one or more syntax elements from an encoded bitstream, and wherein entropy coding the one or more syntax elements comprises entropy decoding the one or more syntax elements block of video data.

13. The method of claim **12**, further comprising decoding the block of video data comprising:

entropy decoding a received bitstream to generate quantized transform coefficients associate with the block of video data;

inverse quantizing the quantized transform coefficients to generate transform coefficients; and

applying an inverse transform to the transform coefficients to generate residual values associated with the block of video data.

14. An apparatus for coding video data, the apparatus comprising:

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

one or more processors configured to:

determine context information for one or more syntax elements associated with a block of video data, wherein the block is included within a coding unit (CU) of video data, wherein the video data defines a quadtree structure and the CU is a node of the quadtree structure, and wherein determining the context information comprises determining the context information based on a depth in the quadtree structure; and

entropy code the one or more syntax elements using the determined context information, wherein to entropy code the one or more syntax elements, the one or more processors are configured to context-adaptive binary arithmetic code the one or more syntax elements, and wherein to context-adaptive binary arithmetic code the one or more syntax elements, the one or more processors are configured to select a probability model from a plurality of probability models for coding the one or more syntax elements using the determined context information.

15. The apparatus of claim **14**, wherein, to determine the context information for the one or more syntax elements comprises determining first context information for a first set of syntax elements, the method further comprising, the one or more processors are configured to:

determine second context information for a second set of syntax elements based on at least a portion of the context information from a block that neighbors the block.

16. The apparatus of claim **15**, wherein the block comprises one or more blocks of a largest coding unit LCU that is positioned below a row of blocks belonging to one or more other LCUs, and wherein, to determine context information for the second set of syntax elements, the one or more processors are configured to determine context information using information associated with one or more blocks of the LCU and exclude information outside of the LCU.

17. The apparatus of claim **14**, wherein to determine the context information for the one or more syntax elements, the one or more processors are configured to determine context information for inter-prediction data of the CU based on the depth of the CU.

18. The apparatus of claim **17**, wherein to determine the context information for the inter-prediction data of the CU, the one or more processors are configured to determine context information for one or more syntax elements that indicate whether the CU is split based on the depth of the CU.

19. The apparatus of claim **18**, wherein to determine the context information for the inter-prediction data of the CU, the one or more processors are configured to determine context information for an inter-prediction flag (inter_pred_flag) based on the CU depth of the CU.

20. The apparatus of claim **14**, wherein the CU comprises a transform unit (TU), and wherein to determine the context information for the one or more syntax elements, the one or more processors are configured to determine context information for one or more syntax elements associated with the TU based on the depth of the TU.

21. The apparatus of claim **20**, wherein to determine the context information for the one or more syntax elements associated with the TU, the one or more processors are configured to determine context information for intra-predicted residual data of the TU based on the depth of the TU.

22. The apparatus of claim **21**, wherein to determine the context information for the intra-predicted residual data of the TU, the one or more processors are configured to determine context information for one or more syntax elements that indicate whether the TU contains non-zero transform coefficient levels based on the depth of the TU.

23. The apparatus of claim **14**, wherein the one or more processors are further configured to generate the one or more syntax elements and wherein to entropy code the one or more syntax elements, the one or more processors are configured to entropy encode the one or more syntax elements.

24. The apparatus of claim **23**, wherein the one or more processors are further configured to encode the block of video data, and to encode the block of video data, the one or more processors are configured to:

apply a transform to one or more residual values of the block to generate transform coefficients;

quantize the transform coefficients to generate quantized transform coefficients; and

entropy encode the quantized transform coefficients.

25. The apparatus of claim **14**, wherein the one or more processors are configured to receive the one or more syntax elements from an encoded bitstream, and wherein to entropy code the one or more syntax elements, the one or more processors are configured to entropy decode the one or more syntax elements.

26. The apparatus of claim **25**, wherein the one or more processors are further configured to decode the block of video data, and to decode the block of video data, the one or more processors are configured to:

entropy decode a received bitstream to generate quantized transform coefficients associate with the block of video data;

inverse quantize the quantized transform coefficients to generate transform coefficients; and

apply an inverse transform to the transform coefficients to generate residual values associated with the block of video data.

27. An apparatus for coding video data, the apparatus comprising:

means for determining context information for one or more syntax elements associated with a block of video data, wherein the block is included within a coding unit (CU)

of video data, wherein the video data defines a quadtree structure and the CU is a node of the quadtree structure, and wherein determining the context information comprises determining the context information based on a depth in the quadtree structure; and

means for entropy coding the one or more syntax elements using the determined context information, wherein the means for entropy coding the one or more syntax elements comprises means for context-adaptive binary arithmetic coding the one or more syntax elements, and wherein the means for context-adaptive binary arithmetic coding the one or more syntax elements comprises means for selecting a probability model from a plurality of probability models for coding the one or more syntax elements using the determined context information.

28. The apparatus of claim **27**, wherein the means for determining the context information for the one or more syntax elements comprises determining first context information for a first set of syntax elements, the method further comprising:

means for determining second context information for a second set of syntax elements based on at least a portion of the context information from a block that neighbors the block.

29. The apparatus of claim **28**, wherein the block comprises one or more blocks of a lamest coding unit (LCU) that is positioned below a row of blocks belonging to one or more other LCUs, and wherein the means for determining the context information for the second set of syntax elements comprises means for determining the context information using information associated with one or more blocks of the LCU and excluding information outside of the LCU.

30. The apparatus of claim **27**, wherein the means for determining the context information for the one or more syntax elements comprises means for determining context information for inter-prediction data of the CU based on the depth of the CU.

31. The apparatus of claim **30**, wherein the means for determining the context information for the inter-prediction data of the CU comprises means for determining context information for one or more syntax elements that indicate whether the CU is split based on the depth of the CU.

32. The apparatus of claim **31**, wherein the means for determining the context information for the inter-prediction data of the CU comprises means for determining context information for an inter-prediction flag (inter_pred_flag) based on the CU depth of the CU.

33. The apparatus of claim **27**, wherein the CU comprises a transform unit (TU), and wherein the means for determining the context information for the one or more syntax elements comprises means for determining context information for one or more syntax elements associated with the TU based on the depth of the TU.

34. The apparatus of claim **33**, wherein the means for determining the context information for the one or more syntax elements associated with the TU comprises means for determining context information for intra-predicted residual data of the TU based on the depth of the TU.

35. The apparatus of claim **34**, wherein the means for determining the context information for the intra-predicted residual data of the TU comprises means for determining context information for one or more syntax elements that indicate whether the TU contains non-zero transform coefficient levels based on the depth of the TU.

36. A non-transitory computer-readable storage medium having stored thereon instructions that, when executed, cause one or more processors to:

determine context information for one or more syntax elements associated with a block of video data, wherein the block is included within a coding unit (CU) of video data, wherein the video data defines a quadtree structure and the CU is a node of the quadtree structure, and wherein determining the context information comprises determining the context information based on a depth in the quadtree structure; and

entropy code the one or more syntax elements using the determined context information, wherein to entropy code the one or more syntax elements, the instructions cause the one or more processors to context-adaptive binary arithmetic code the one or more syntax elements, and wherein to context-adaptive binary arithmetic code the one or more syntax elements, the instructions cause the one or more processors to select a probability model from a plurality of probability models for coding the one or more syntax elements using the determined context information.

37. The non-transitory computer-readable storage medium of claim **36**, wherein to determine the context information for the one or more syntax elements the instructions further cause the one or more processors to determine first context information for a first set of syntax elements, and wherein the instructions further cause the one or more processors to:

determine second context information for a second set of syntax elements based on at least a portion of the context information from a block that neighbors the block.

38. The non-transitory computer-readable storage medium of claim **36**, wherein the block comprises one or more blocks of a lamest coding unit (LCU) that is positioned below a row of blocks belonging to one or more other LCUs, and wherein the instructions further cause the one or more processors to determine context information for the second set of syntax elements using information associated with one or more blocks of the LCU and excluding information outside of the LCU.

39. The non-transitory computer-readable storage medium of claim **36**, wherein to determine the context information for the one or more syntax elements, the instructions cause the one or more processors to determine context information for inter-prediction data of the CU based on the depth of the CU.

40. The non-transitory computer-readable storage medium of claim **39**, wherein to determine the context information for the inter-prediction data of the CU, the instructions cause the one or more processors to determine context information for one or more syntax elements that indicate whether the CU is split based on the depth of the CU.

41. The non-transitory computer-readable storage medium of claim **40**, wherein to determine the context information for the inter-prediction data of the CU, the instructions cause the one or more processors to determine context information for an inter-prediction flag (inter_pred_flag) based on the CU depth of the CU.

42. The non-transitory computer-readable storage medium of claim **36**, wherein the CU comprises a transform unit (TU), wherein to determine the context information for the one or more syntax elements, the instructions cause the one or more processors to determine context information for one or more syntax elements associated with the TU based on the depth of the TU.

43. The non-transitory computer-readable storage medium of claim **42**, wherein to determine the context information for the one or more syntax elements associated with the TU, the instructions cause the one or more processors to determine context information for intra-predicted residual data of the TU based on the depth of the TU.

44. The non-transitory computer-readable storage medium of claim **43**, wherein to determine the context information for the intra-predicted residual data of the TU, the instructions cause the one or more processors to determine context information for one or more syntax elements that indicate whether the TU contains non-zero transform coefficient levels based on the depth of the TU.