AMENDED SET OF CLAIMS 1 To 76:

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

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes;

performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determining an intra-prediction mode index based on the modified intra-prediction mode index, an intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode;

selecting an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index; and

decoding the current block using the selected intra-prediction mode.

2. The method of claim 1, further comprising determining the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

3. The method of claim 1, further comprising determining the context for the current block based at least in part on a size of the current block.

4. The method of claim 1, wherein each of the intra-prediction modes corresponds to a respective intra-prediction mode index.

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5. The method of claim 4, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and greater than or equal to the intra-prediction mode index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index that is two greater than the modified intra-prediction mode index.

6. The method of claim 4, wherein when the modified intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index equal to the modified intra-prediction mode index.

7. The method of claim 4, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index.

8. An apparatus for decoding video data, the apparatus comprising a video decoder configured to determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block; select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes; performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index; determine an intra-prediction mode index based on the modified intra-prediction mode index, an intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode; select an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the modified intra-prediction mode index; and decode the current block using the selected intra-prediction mode.

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9. The apparatus of claim 8, wherein the video decoder is further configured to determine the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

10. The apparatus of claim 8, wherein the video decoder is further configured to determine the context for the current block based at least in part on a size of the current block.

11. The apparatus of claim 8, wherein each of the intra-prediction modes corresponds to a respective mode index.

12. The apparatus of claim 11, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and greater than or equal to the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index that is two greater than the modified intra-prediction mode index.

13. The apparatus of claim 11, wherein when the modified intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index equal to the modified intra-prediction mode index.

14. The apparatus of claim 11, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index.

15. The apparatus of claim 8, wherein the apparatus comprises at least one of:
an integrated circuit;
a microprocessor; and
a wireless communication device that includes the video decoder.

16. A method of encoding video data, the method comprising:
determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;
selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes;
encoding the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;
determining an intra-prediction mode index that corresponds to the intra-prediction mode; and
determining a modified intra-prediction mode index based on the determined intra-prediction mode index, and intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode;
encoding a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the modified intra-prediction mode index.

17. The method of claim 16, further comprising determining the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

18. The method of claim 16, further comprising determining the encoding context for the current block based at least in part on a size of the current block.

19. The method of claim 16, wherein each of the intra-prediction modes corresponds to a respective mode index.

20. The method of claim 19, wherein when the intra-prediction mode index is greater than the intra-prediction mode index for the first most probable intra-prediction mode and greater than the intra-prediction mode index for the second most probable intra-prediction mode, determining the modified intra-prediction mode index comprises determining one of the modified intra-prediction mode indexes that is two less than the intra-prediction mode index.

21. The method of claim 19, wherein when the intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, determining the modified intra-prediction mode index comprises determining one of the modified intra-prediction mode indexes that is equal to the intra-prediction mode index.

22. The method of claim 19, wherein when the intra-prediction mode index is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, determining the one of the modified intra-prediction mode indexes comprises determining the modified intra-prediction mode index that is one less than the intra-prediction mode index.

23. An apparatus for encoding video data, the apparatus comprising a video encoder configured to determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block; select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes; encode the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode; determine an intra-prediction mode index that corresponds to the intra-prediction mode; determine a modified intra-prediction mode index based on the determined intra-prediction mode index, and intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode; and encode a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the modified intra-prediction mode index.

24. The apparatus of claim 23, wherein the video encoder is further configured to determine the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

25. The apparatus of claim 23, wherein the video encoder is further configured to determine the encoding context for the current block based at least in part on a size of the current block.

26. The apparatus of claim 23, wherein each of the intra-prediction modes corresponds to a respective mode index.

27. The apparatus of claim 23, wherein when mode index is greater than the intra-prediction mode index for the first most probable intra-prediction mode and greater than the intra-prediction mode index for the second most probable intra-prediction mode, the video encoder is further configured to determine the modified intra-prediction mode index by determining one of the modified intra-prediction mode indexes that is two less than the intra-prediction mode index.

28. The apparatus of claim 23, wherein when the intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video encoder is further configured to determine the modified intra-prediction mode index by determining the modified intra-prediction mode that is equal to the intra-prediction mode index.

29. The apparatus of claim 23, wherein when the intra-prediction mode index is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video encoder is further configured to determine the modified intra-prediction mode index by determining the modified intra-prediction mode index that is one less than the intra-prediction mode index.

30. The apparatus of claim 23, wherein the apparatus comprises at least one of:
an integrated circuit;
a microprocessor; and
a wireless communication device that includes the video decoder.

31. An apparatus for decoding video comprising:
means for determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;
means for selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes;
means for performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;
means for determining an intra-prediction mode index based on the modified intra-prediction mode index, an intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode;
means for selecting an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index; and
means for decoding the current block using the selected intra-prediction mode.

32. The apparatus of claim 31, further comprising:
means for determining the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

33. The apparatus of claim 31, further comprising:
means for determining the context for the current block based at least in part on a size of the current block.

34. An apparatus for encoding video data, the apparatus comprising:

means for determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

means for selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes;

means for encoding the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

means for determining an intra-prediction mode index that corresponds to the intra-prediction mode; and

means for determining a modified intra-prediction mode index based on the determined intra-prediction mode index, and intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode;

means for encoding a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the modified intra-prediction mode index.

35. The apparatus of claim 34, further comprising:

means for determining the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

36. The apparatus of claim 34, further comprising:

means for determining the encoding context for the current block based at least in part on a size of the current block.

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

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes;

perform a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determine an intra-prediction mode index based on the modified intra-prediction mode index, an intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode;

select an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index; and

decode the current block using the selected intra-prediction mode.

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

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified intra-prediction mode indexes;

encode the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determine an intra-prediction mode index that corresponds to the intra-prediction mode; and

determining a modified intra-prediction mode index based on the determined intra-prediction mode index, and intra-prediction mode index for the first most probable mode, and an intra-prediction mode index for the second most probable mode;

encode a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the modified intra-prediction mode index.

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

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified codeword indexes;

performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified codeword index;

determining a codeword index based on the modified codeword index, a codeword index for the first most probable mode, and a codeword index for the second most probable mode;

selecting an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the codeword index; and

decoding the current block using the selected intra-prediction mode.

40. The method of claim 39, further comprising determining the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

41. The method of claim 39, further comprising determining the context for the current block based at least in part on a size of the current block.

42. The method of claim 39, wherein when the modified codeword index plus one is greater than or equal to the codeword index for the first most probable intra-prediction mode and greater than or equal to the codeword index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode corresponding to a codeword index that is two greater than the modified codeword index.

43. The method of claim 39, wherein when the modified codeword index is less than the codeword index for the first most probable intra-prediction mode and less than the codeword index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having a codeword index equal to the modified codeword index.

44. The method of claim 39, wherein when the modified codeword index plus one is greater than or equal to the codeword index for the first most probable intra-prediction mode and less than the codeword index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode corresponding to a codeword index that is one greater than the modified codeword index.

45. The method of claim 39, further comprising:

dynamically adjusting a mapping of the codeword indexes to intra-prediction modes.

46. An apparatus for decoding video data, the apparatus comprising a video decoder configured to determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block; select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to a codeword indexes; perform a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified codeword index; determine a codeword index based on the modified codeword index, a codeword index for the first most probable mode, and a codeword index for the second most probable mode; select an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the codeword index; and decode the current block using the selected intra-prediction mode.

47. The apparatus of claim 46, wherein the video decoder is further configured to determine the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

48. The apparatus of claim 46 wherein the video decoder is further configured to determine the context for the current block based at least in part on a size of the current block.

49. The apparatus of claim 46, wherein when the modified codeword index plus one is greater than or equal to the codeword index for the first most probable intra-prediction mode and greater than or equal to the codeword index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode corresponding to a codeword index that is two greater than the modified codeword index.

50. The apparatus of claim 46, wherein when the modified codeword index is less than the codeword index for the first most probable intra-prediction mode and less than the codeword index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having a codeword index equal to the modified codeword index.

51. The apparatus of claim 46, wherein when the modified codeword index plus one is greater than or equal to the codeword index for the first most probable intra-prediction mode and less than the codeword index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode corresponding to a codeword index that is one greater than the modified codeword index.

52. The apparatus of claim 46 wherein the video decoder is further configured to dynamically adjust a mapping of the codeword indexes to intra-prediction modes.

53. The apparatus of claim 46, wherein the apparatus comprises at least one of:
an integrated circuit;
a microprocessor; and
a wireless communication device that includes the video decoder.

54. An apparatus for decoding video comprising:

means for determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

means for selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified codeword indexes;

means for performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified codeword index;

means for determining a codeword index based on the modified codeword index, a codeword index for the first most probable mode, and a codeword index for the second most probable mode;

means for selecting an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the codeword index; and

means for decoding the current block using the selected intra-prediction mode.

55. The apparatus of claim 54, further comprising means for determining the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

56. The apparatus of claim 54, further comprising means for determining the context for the current block based at least in part on a size of the current block.

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

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to modified codeword indexes;

perform a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified codeword index;

determine a codeword index based on the modified codeword index, a codeword index for the first most probable mode, and a codeword index for the second most probable mode;

select an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the codeword index; and

decode the current block using the selected intra-prediction mode.

58. A method of encoding video data, the method comprising:

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to codeword indexes, wherein the codeword indexes are mapped to intra-prediction modes;

encoding the current block using one of the intra-prediction modes other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determining a modified codeword index based on the codeword index of the one of the intra-prediction modes used to encode the current block, a codeword index mapped to the first most probable mode, and a codeword index mapped to the second most probable mode; and

encoding a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the one of the modified intra-prediction mode indexes.

59. The method of claim 58, further comprising determining the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

60. The method of claim 58, further comprising determining the encoding context for the current block based at least in part on a size of the current block.

61. The method of claim 58, wherein when the codeword index of the intra-prediction mode used to encode the current block is greater than a codeword index mapped to the first most probable intra-prediction mode and greater than a codeword index mapped to the second most probable intra-prediction mode, determining the modified codeword index comprises determining the modified codeword index that is two less than the codeword index.

62. The method of claim 58, wherein when the codeword index of the intra-prediction mode used to encode the current block is less than a codeword index mapped to the first most probable intra-prediction mode and less than a codeword index mapped to the second most probable intra-prediction mode, determining the modified codeword index comprises determining the modified codeword index that is equal to the codeword index.

63. The method of claim 58, wherein when the codeword index of the intra-prediction mode used to encode the current block is greater than or equal to a codeword index mapped to the first most probable intra-prediction mode and less than a codeword index mapped to the second most probable intra-prediction mode, determining the modified codeword index comprises determining the modified codeword index that is one less than the codeword index.

64. The method of claim 58, further comprising:
dynamically adjusting a mapping of the codeword indexes to intra-prediction modes.

65. An apparatus for encoding video data, the apparatus comprising a video encoder configured to determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block; select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to codeword indexes, wherein the codeword indexes are mapped to intra-prediction modes; encode the current block using one of the intra-prediction modes other than the first most probable intra-prediction mode and the second most probable intra-prediction mode; determine a modified codeword index based on the codeword index of the one of the intra-prediction modes used to encode the current block, a codeword index mapped to the first most probable mode, and a codeword index mapped to the second most probable mode; and encode a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the one of the modified intra-prediction mode indexes.

66. The apparatus of claim 65, wherein the video encoder is further configured to determine the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

67. The apparatus of claim 65, wherein the video encoder is further configured to determine the encoding context for the current block based at least in part on a size of the current block.

68. The apparatus of claim 65, wherein when the codeword index of the intra-prediction mode used to encode the current block is greater than a codeword index mapped to the first most probable intra-prediction mode and greater than a codeword index mapped to the second most probable intra-prediction mode, determining the modified codeword index comprises determining the modified codeword index that is two less than the codeword index.

69. The apparatus of claim 65, wherein when the codeword index of the intra-prediction mode used to encode the current block is less than a codeword index mapped to the first most probable intra-prediction mode and less than a codeword index mapped to the second most probable intra-prediction mode, determining the modified codeword index comprises determining the modified codeword index that is equal to the codeword index.

70. The apparatus of claim 65, wherein when the codeword index of the intra-prediction mode used to encode the current block is greater than or equal to a codeword index mapped to the first most probable intra-prediction mode and less than a codeword index mapped to the second most probable intra-prediction mode, determining the modified codeword index comprises determining the modified codeword index that is one less than the codeword index.

71. The apparatus of claim 65, further comprising:
dynamically adjusting a mapping of the codeword indexes to intra-prediction modes.

72. The apparatus of claim 65, wherein the apparatus comprises at least one of:
an integrated circuit;
a microprocessor; and
a wireless communication device that includes the video decoder.

73. An apparatus for encoding video comprising:

means for determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

means for selecting a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to codeword indexes, wherein the codeword indexes are mapped to intra-prediction modes;

means for encoding the current block using one of the intra-prediction modes other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

means for determining a modified codeword index based on the codeword index of the one of the intra-prediction modes used to encode the current block, a codeword index mapped to the first most probable mode, and a codeword index mapped to the second most probable mode; and

means for encoding a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the one of the modified intra-prediction mode indexes.

74. The apparatus of claim 73, further comprising means for determining the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

75. The apparatus of claim 73, further comprising means for determining the encoding context for the current block based at least in part on a size of the current block.

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

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

select a table of codewords, wherein the table of codewords comprises a plurality of codewords corresponding to codeword indexes, wherein the codeword indexes are mapped to intra-prediction modes;

encode the current block using one of the intra-prediction modes other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determine a modified codeword index based on the codeword index of the one of the intra-prediction modes used to encode the current block, a codeword index mapped to the first most probable mode, and a codeword index mapped to the second most probable mode; and

encode a codeword from the selected table of codewords by performing a context-based adaptive binary arithmetic coding (CABAC) process, wherein the codeword corresponds to the one of the modified intra-prediction mode indexes.

CLAIMS

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

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determining an intra-prediction mode index, wherein determining the intra-prediction mode index comprises comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

selecting, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and greater than or equal to the intra-prediction mode index

for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index that is two greater than the modified intra-prediction mode index; and

decoding the current block using the selected intra-prediction mode.

2. The method of claim **1**, further comprising:

determining the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

3. The method of claim **1**, further comprising:

determining a third most probable intra-prediction mode for the current block.

4. The method of claim **1**, wherein when the modified intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index equal to the modified intra-prediction mode index.

5. The method of claim **1**, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index.

6. An apparatus for decoding video data, the apparatus comprising a video decoder configured to:

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

perform a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determine an intra-prediction mode index by comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

select, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the modified intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and greater than or equal to the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index that is two greater than the modified intra-prediction mode index; and

decode the current block using the selected intra-prediction mode.

7. The apparatus of claim **6**, wherein the video decoder is further configured to determine the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

8. The apparatus of claim **6**, wherein the video decoder is further configured to determine the context for the current block based at least in part on a size of the current block.

9. The apparatus of claim **6**, wherein when the modified intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index equal to the modified intra-prediction mode index.

10. The apparatus of claim **6**, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index.

11. The apparatus of claim **6**, wherein the apparatus comprises at least one of:

an integrated circuit;

a microprocessor; and

a wireless communication device that includes the video decoder.

12. A method of encoding video data, the method comprising:

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a

current block of video data based on an encoding context for the current block;

encoding the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determining, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode index that corresponds to the intra-prediction mode;

determining a modified intra-prediction mode index, wherein determining the modified intra-prediction mode comprises comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, and wherein when the intra-prediction mode index is greater than the intra-prediction mode index for the first most probable intra-prediction mode and greater than the intra-prediction mode index for the second most probable intra-prediction mode, determining the modified intra-prediction mode index comprises determining one of the modified intra-prediction mode indexes that is two less than the intra-prediction mode index;

encoding a codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.

13. The method of claim **12**, further comprising:

determining the encoding context for the current block based at least in part on modes for at least one of a

left-neighboring block to the current block and an above-neighboring block to the current block.

14. The method of claim **12**, further comprising:

determining a third most probable intra-prediction mode for the current block.

15. The method of claim **12**, wherein when the intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, determining the modified intra-prediction mode index comprises determining one of the modified intra-prediction mode indexes that is equal to the intra-prediction mode index.

16. The method of claim **12**, wherein when the intra-prediction mode index is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, determining the one of the modified intra-prediction mode indexes comprises determining the modified intra-prediction mode index that is one less than the intra-prediction mode index.

17. An apparatus for encoding video data, the apparatus comprising a video encoder configured to:

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

encode the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode; determine an intra-prediction mode index that corresponds to intra-prediction mode;

determine, based on a mapping of intra-prediction mode indexes to intra-prediction modes, a modified intra-pre-

diction mode index by comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, and wherein when the intra-prediction mode index is greater than the intra-prediction mode index for the first most probable intra-prediction mode and greater than the intra-prediction mode index for the second most probable intra-prediction mode, and wherein the video encoder determines the modified intra-prediction mode index by determining one of the modified intra-prediction mode indexes that is two less than the intra-prediction mode index; and

encode a codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.

18. The apparatus of claim **17**, wherein the video encoder is further configured to determine the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

19. The apparatus of claim **17**, wherein the video encoder is further configured to determine a third most probable intra-prediction mode for the current block.

20. The apparatus of claim **17**, wherein when the intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video encoder is further

configured to determine the modified intra-prediction mode index by determining the modified intra-prediction mode that is equal to the intra-prediction mode index.

21. The apparatus of claim **17**, wherein when the intra-prediction mode index is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video encoder is further configured to determine the modified intra-prediction mode index by determining the modified intra-prediction mode index that is one less than the intra-prediction mode index.

22. The apparatus of claim **17**, wherein the apparatus comprises at least one of:

an integrated circuit;

a microprocessor; and

a wireless communication device that includes the video encoder.

23. An apparatus for decoding video data, the apparatus comprising:

means for determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

means for performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

means for determining an intra-prediction mode index, wherein the means for determining the intra-prediction mode index comprises means for comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

means for selecting, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and greater than or equal to the intra-prediction mode index for the second most probable intra-prediction mode, and wherein the means for selecting the intra-prediction mode comprises means for selecting the intra-prediction mode having an intra-prediction mode index that is two greater than the modified intra-prediction mode index; and

means for decoding the current block using the selected intra-prediction mode.

24. The apparatus of claim **23**, further comprising:

means for determining the context for the current block based at least in part on intra-prediction modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

25. The apparatus of claim **23**, further comprising:

means for determining a third most probable intra-prediction mode for the current block.

26. An apparatus for encoding video data, the apparatus comprising:

means for determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

means for encoding the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

means for determining, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode index that corresponds to the intra-prediction mode; and

means for determining a modified intra-prediction mode index by comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, and wherein when the intra-prediction mode index is greater than the intra-prediction mode index for the first most probable intra-prediction mode and greater than the intra-prediction mode index for the second most probable intra-prediction mode, the means for determining the modified intra-prediction mode index comprises means for determining one of the modified intra-prediction mode indexes that is two less than the intra-prediction mode index; and

means for encoding a codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.

27. The apparatus of claim **26**, further comprising:

means for determining the encoding context for the current block based at least in part on modes for at least one of a left-neighboring block to the current block and an above-neighboring block to the current block.

28. The apparatus of claim **26**, further comprising:

means for determining a third most probable intra-prediction mode for the current block.

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

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

perform a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determine an intra-prediction mode index by comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

select, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, wherein when

the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and greater than or equal to the intra-prediction mode index for the second most probable intra-prediction mode, and wherein the one or more processors select the intra-prediction mode by selecting the intra-prediction mode having an intra-prediction mode index that is two greater than the modified intra-prediction mode index; and

decode the current block using the selected intra-prediction mode.

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

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

encode the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determine, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode index that corresponds to the intra-prediction mode; and

determine a modified intra-prediction mode index by comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-pre-

diction mode index, and wherein when the intra-prediction mode index is greater than the intra-prediction mode index for the first most probable intra-prediction mode and greater than the intra-prediction mode index for the second most probable intra-prediction mode, the one or more processors determine the modified intra-prediction mode index comprises determining one of the modified intra-prediction mode indexes that is two less than the intra-prediction mode index;

encode a codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.

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

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determining an intra-prediction mode index wherein determining the intra-prediction mode index comprises comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

selecting, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode

to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, wherein when the modified intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index equal to the modified intra-prediction mode index; and

decoding the current block using the selected intra-prediction mode.

32. The method of claim **31**, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index.

33. An apparatus for decoding video data, the apparatus comprising a video decoder configured to:

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

perform a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword

corresponding to a modified intra-prediction mode index;

determine an intra-prediction mode index by comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

select, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the modified intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, wherein when the modified intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index equal to the modified intra-prediction mode index; and

decode the current block using the selected intra-prediction mode.

34. The apparatus of claim **33**, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, to select the intra-prediction mode, the decoder is configured to

select the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index.

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

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

performing a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determining an intra-prediction mode index wherein determining the intra-prediction mode index comprises comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

selecting, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most

probable intra-prediction mode, selecting the intra-prediction mode comprises selecting the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index; and

decoding the current block using the selected intra-prediction mode.

36. An apparatus for decoding video data, the apparatus comprising a video decoder configured to:

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on a context for the current block;

perform a context-based adaptive binary arithmetic coding (CABAC) process to determine a received codeword corresponding to a modified intra-prediction mode index;

determine an intra-prediction mode index wherein determining the intra-prediction mode index comprises comparing the modified intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode;

select, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode other than the first most probable intra-prediction mode and second most probable intra-prediction mode to use to decode the current block, wherein the selected intra-prediction mode corresponds to the determined intra-prediction mode index, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a

respective intra-prediction mode index, wherein when the modified intra-prediction mode index plus one is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, the video decoder is configured to select the intra-prediction mode having an intra-prediction mode index that is one greater than the modified intra-prediction mode index; and

decode the current block using the selected intra-prediction mode.

37. A method of encoding video data, the method comprising:

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

encoding the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determining, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode index that corresponds to the intra-prediction mode;

determining a modified intra-prediction mode index, wherein determining the modified intra-prediction mode comprises comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, and wherein

when the intra-prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, determining the modified intra-prediction mode index comprises determining one of the modified intra-prediction mode indexes that is equal to the intra-prediction mode index;

encoding a codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.

38. An apparatus for encoding video data, the apparatus comprising a video encoder configured to:

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

encode the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determine, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode index that corresponds to the intra-prediction mode;

determine a modified intra-prediction mode index by comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, and wherein when the intra-

prediction mode index is less than the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, to determine the modified intra-prediction mode index, the encoder is further configured to determine one of the modified intra-prediction mode indexes that is equal to the intra-prediction mode index; and

encode the codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.

39. A method of encoding video data, the method comprising:

determining a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

encoding the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determining, based on a mapping of intra-prediction mode indexes to intra-prediction modes, an intra-prediction mode index that corresponds to the intra-prediction mode;

determining a modified intra-prediction mode index, wherein determining the modified intra-prediction mode index comprises comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, and wherein

when the intra-prediction mode index is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, determining the one of the modified intra-prediction mode indexes comprises determining the modified intra-prediction mode index that is one less than the intra-prediction mode index; and

encoding a codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.

40. An apparatus for encoding video data, the apparatus comprising a video encoder configured to:

determine a first most probable intra-prediction mode and a second most probable intra-prediction mode for a current block of video data based on an encoding context for the current block;

encode the current block using an intra-prediction mode other than the first most probable intra-prediction mode and the second most probable intra-prediction mode;

determine, based on a mapping of intra-prediction mode indexes to intra-prediction modes an intra-prediction mode index that corresponds to the intra-prediction mode; determine a modified intra-prediction mode index, wherein determining the modified intra-prediction mode index comprises comparing the determined intra-prediction mode index to an intra-prediction mode index for the first most probable intra-prediction mode and an intra-prediction mode index for the second most probable intra-prediction mode, wherein each of the first most probable intra-prediction mode and the second most probable intra-prediction mode corresponds to a respective intra-prediction mode index, and wherein

when the intra-prediction mode index is greater than or equal to the intra-prediction mode index for the first most probable intra-prediction mode and less than the intra-prediction mode index for the second most probable intra-prediction mode, to determine the one of the modified intra-prediction mode indexes, the video encoder is further configured to determine the modified intra-prediction mode index that is one less than the intra-prediction mode index; and

encode a codeword corresponding to the modified intra-prediction mode index by performing a context-based adaptive binary arithmetic coding (CABAC) process.