Claims:

1. A decoder for reconstructing a sample array from an entropy-encoded data stream, comprising:

an entropy decoder comprising a microprocessor and a memory storing a computer program thereupon, characterized in that the following steps are implemented when the processor executes the program: entropy decode a plurality of slice subsets in the entropy-encoded data stream so as to reconstruct different portions of the sample array, each slice subset comprising entropy-encoded data for a corresponding portion of the sample array, and the different portions forming rows of blocks of the sample array, each row having a same number of blocks, wherein the slice subsets are subdivided into chunks and

perform, for each slice subset, entropy decoding along a respective entropy coding path leading in parallel along the rows of the blocks, using a first probability estimation by:

checking whether a current chunk of the respective slice subset corresponds to a, along the respective entropy coding path, first sub-portion of the corresponding portion of the respective slice subset, and

if so, initializing the first probability estimation before decoding a first block of a first row corresponding to the slice subset based on a second probability estimation of a second block of a second row, the second row spatially-neighboring the first row and corresponding to a preceding slice subset, wherein entropy decoding of the preceding slice subset begins before the entropy decoding of the slice subset,

if not, entropy decode the current chunk using probability estimations manifesting themselves at an end of entropy decoding a chunk which corresponds to a sub-portion of the corresponding portion of the respective slice subset, which precedes, along the entropy coding path, the sub-portion corresponding to the current chunk, and

adapting the first probability estimation along the entropy coding path using a previously-decoded part of the slice subset.

2. The decoder according to claim 1, wherein the entropy decoder is configured to entropy decode the plurality of slice subsets in a slice subset order, the slice subset order is chosen such that, along the slice subset order, the different portions follow each other in a direction angled relative to the entropy coding paths of the slice subsets.

3. The decoder according to claim 1, wherein the entropy decoder is configured to store the second probability estimation and use the stored second probability estimation for the initialization of the first probability estimation.

4. The decoder according to claim 1, wherein the entropy decoder is configured to, in entropy decoding a current part of the slice subset, adapt the first probability estimation based on a third probability estimation of a portion of the second row, the portion of the second row spatially-neighboring a portion of the first row corresponding to the current part of the slice subset.

5. The decoder according to claim 4, wherein the entropy decoder is configured to adapt the first probability estimation based on an average of the first probability estimation adapted using the previously-decoded part of the slice subset and the third probability estimation.

6. The decoder according to claim 2, wherein the entropy decoder is configured to steer the entropy decoding of immediately consecutive slice subsets in the slice subset order so that a distance of currently decoded blocks of portions corresponding to the immediately consecutive slice subsets measured in blocks along the entropy coding paths is prevented from becoming lower than two blocks.

7. The decoder according to claim 2, wherein the entropy decoder is configured to steer the entropy decoding of immediately consecutive slice subsets in the slice subset order so that a distance of currently decoded blocks of portions corresponding to the immediately consecutive slice subsets measured in blocks along the entropy coding paths remains two blocks.

8. The decoder according to claim 1, wherein the slice subsets are sub-divided into chunks, and the decoder further comprises a de-interleaver to de-interleave the chunks and the entropy decoder is configured to start the entropy decoding of the slice subsets in parallel along the entropy coding paths even before a reception of any of the slice subsets as a whole.

9. The decoder according to claim 1, wherein the sample array is a current sample array of a sequence of sample arrays and the entropy decoder is configured to entropy-decode a slice subset based on the first probability estimation as adapted using the second probability estimation, the previously-decoded part of the slice subset, and a fourth probability estimation used in entropy decoding a previously decoded frame of the entropy-encoded data stream relating to one of the sample arrays other than the current sample array.

10. The decoder according to claim 1, wherein the decoder is at least a portion of a programmable logic device, programmable gate array, microprocessor, computer or hardware apparatus.

11. A method for reconstructing a sample array from an entropy-encoded data stream, comprising:

entropy decoding a plurality of slice subsets in the entropy-encoded data stream so as to reconstruct different portions of the sample array, each slice subset comprising entropy-encoded data for a corresponding portion of the sample array, and the different portions forming rows of blocks of the sample array, each row having a same number of blocks, wherein the slice subsets are subdivided into chunks and the entropy decoding comprises:

entropy decoding, for each slice subset, along a respective entropy coding path leading in parallel along the rows of the blocks, using a first probability estimation by:

checking whether a current chunk of the respective slice subset corresponds to a, along the respective entropy coding path, first sub-portion of the corresponding portion of the respective slice subset, and

if so, initializing the first probability estimation before decoding a first block of a first row corresponding to the slice subset based on a second probability estimation of a second block of a second row, the second row spatially-neighboring the first row and corresponding to a preceding slice subset, wherein entropy decoding of the preceding slice subset begins before the entropy decoding of the slice subset,

if not, entropy decoding the current chunk using probability estimations manifesting itself at an end of entropy decoding a chunk which corresponds to a sub-portion of the corresponding portion of the respective slice subset, which precedes, along the entropy coding path, the sub-portion corresponding to the current chunk, and

adapting the first probability estimation along the entropy coding path using a previously-decoded part of the slice subset.

12. The method according to claim 11, wherein the entropy decoding of the plurality of slice subsets is performed in a slice subset order, the slice subset order is chosen such that, along the slice subset order, the different portions follow each other in a direction angled relative to the entropy coding paths of the slice subsets.

13. The method according to claim 11, further comprising storing the second probability estimation and using the stored second probability estimation for the initialization of the first probability estimation.

14. The method according to claim 11, further comprising, for entropy decoding a current part of the slice subset, adapting the first probability estimation based on a third probability estimation of a portion of the second row, the portion of the second row spatially-neighboring a portion of the first row corresponding to the current part of the slice subset.

15. The method according to claim 14, wherein the adapting comprises adapting the first probability estimation based on an average of the first probability estimation adapted using the previously-decoded part of the slice subset and the third probability estimation.

16. The method according to claim 12, further comprising steering the entropy decoding of immediately consecutive slice subsets in the slice subset order so that a distance of currently decoded blocks of portions corresponding to the immediately consecutive slice subsets measured in blocks along the entropy coding paths is prevented from becoming lower than two blocks.

17. The method according to claim 12, further comprising steering the entropy decoding of immediately consecutive slice subsets in the slice subset order so that a distance of currently decoded blocks of portions corresponding to the immediately consecutive slice subsets measured in blocks along the entropy coding paths remains two blocks.

18. The method according to claim 11, wherein the slice subsets are sub-divided into chunks, the method further comprising de-interleaving the chunks and starting the entropy decoding of the slice subsets in parallel along the entropy coding paths even before a reception of any of the slice subsets as a whole.

19. The method according to claim 11, wherein the sample array is a current sample array of a sequence of sample arrays, the method comprising entropy-decoding a slice subset based on the first probability estimation as adapted using the second probability estimation, the previously-decoded part of the slice subset, and a fourth probability estimation used in entropy decoding a previously decoded frame of the entropy-encoded data stream relating to one of the sample arrays other than the current sample array.

20. A method for encoding a sample array into an entropy-encoded data stream, comprising:

entropy encoding a plurality of slice subsets into the entropy-encoded data stream, each slice subset comprising entropy-encoded data for a corresponding different portion of the sample array, and the different portions forming rows of blocks of the sample array, each row having a same number of blocks, wherein the slice subsets are subdivided into chunks and the entropy encoding comprises:

entropy encoding, for each slice subset, along a respective entropy coding path leading in parallel along the rows of the blocks, using a first probability estimation by:

checking whether a current chunk of the respective slice subset corresponds to a, along the respective entropy coding path, first sub-portion of the corresponding portion of the respective slice subset, and

if so, initializing the first probability estimation before encoding a first block of a first row corresponding to the slice subset based on a second probability estimation of a second block of a second row, the second row spatially-neighboring the first row and corresponding to a preceding slice subset, wherein entropy encoding of the preceding slice subset begins before the entropy encoding of the slice subset,

if not, entropy encoding the current chunk using probability estimations manifesting themselves at an end of entropy encoding a chunk, which corresponds to a sub-portion of the corresponding portion of the respective slice subset, which precedes, along the entropy coding path, the first sub-portion corresponding to the current chunk, and

adapting the first probability estimation along the entropy coding path using a previously-encoded part of the slice subset.

21. The method according to claim 20, wherein the entropy encoding of the plurality of slice subsets is performed in a slice subset order, the slice subset order is chosen such that, along the slice subset order, the different portions follow each other in a direction angled relative to the entropy coding paths of the slice subsets.

22. The method according to claim 20, further comprising storing the second probability estimation and using the stored second probability estimation for the initialization of the first probability estimation.

23. The method according to claim 20, further comprising, for entropy encoding a current part of the slice subset, adapting the first probability estimation based on a third probability estimation of a portion of the second row, the portion of the second row spatially-neighboring a portion of the first row corresponding to the current part of the slice subset.

24. The method according to claim 23, wherein the adapting comprises adapting the first probability estimation based on an average of the first probability estimation adapted using the previously-encoded part of the slice subset and the third probability estimation.

25. The method according to claim 21, further comprising steering the entropy encoding of immediately consecutive slice subsets in the slice subset order so that a distance of currently encoded blocks of portions corresponding to the immediately consecutive slice subsets measured in blocks along the entropy coding paths is prevented from becoming lower than two blocks.

26. The method according to claim 21, further comprising steering the entropy encoding of immediately consecutive slice subsets in the slice subset order so that a distance of

currently encoded blocks of portions corresponding to the immediately consecutive slice subsets measured in blocks along the entropy coding paths remains two blocks.

27. The method according to claim 20, wherein the sample array is a current sample array of a sequence of sample arrays, the method comprising entropy-encoding a slice subset based on the first probability estimation as adapted using the second probability estimation, the previously-encoded part of the slice subset, and a fourth probability estimation used in entropy encoding a previously encoded frame relating to one of the sample arrays other than the current sample array.

28. A non-transitory computer-readable medium for storing data associated with a video, comprising:

a data stream stored in the non-transitory computer-readable medium, the data stream comprising entropy-encoded information associated with a sample array, the entropy-encoded information including a plurality of slice subsets, each slice subset comprising entropy-encoded data for a corresponding different portion of the sample array, and the different portions forming rows of blocks of the sample array, each row having a same number of blocks, wherein the slice subsets are subdivided into chunks, wherein the entropy-encoded information is coded into the data stream for storing in the non-transitory computer-readable medium by operations including:

entropy encoding, for each slice subset, along a respective entropy coding path leading in parallel along the rows of the blocks, using a first probability estimation by:

checking whether a current chunk of the respective slice subset corresponds to a, along the respective entropy coding path, first sub-portion of the corresponding portion of the respective slice subset, and

if so, initializing the first probability estimation before encoding a first block of a first row corresponding to the slice subset based on a second probability estimation of a second block of a second row, the second row spatially-neighboring the first row and corresponding to a preceding slice subset, wherein entropy encoding of the preceding slice subset begins before the entropy encoding of the slice subset,

if not, entropy encoding the current chunk using probability estimations manifesting themselves at an end of entropy encoding a chunk, which corresponds to a sub-portion of the corresponding portion of the respective slice subset, which precedes, along the entropy coding path, the first sub-portion corresponding to the current chunk, and

adapting the first probability estimation along the entropy coding path using a previously-encoded part of the slice subset.

29. The non-transitory computer-readable medium 28, wherein the entropy encoding of the plurality of slice subsets is performed in a slice subset order, the slice subset order is chosen such that, along the slice subset order, the different portions follow each other in a direction angled relative to the entropy coding paths of the slice subsets.

30. The non-transitory computer-readable medium 28, wherein the operations further comprise storing the second probability estimation and using the stored second probability estimation for the initialization of the first probability estimation.

31. Computer program having a program code configured to perform, when running on a computer, a method according to any of claims 11 to 27.