

parallel decoding the WPP substreams in a staggered manner with sequentially commencing the decoding of the WPP substreams in accordance with the slice order.

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10. Decoder according to claim 1, wherein the decoder is configured to split chroma transform blocks differently than luma transform blocks in response to information in the data stream .

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~~10.11.~~ Encoder for encoding a picture into a datastream in units of slices into which the picture is partitioned, wherein the encoder is configured to encode the slices into the datastream in accordance with a slice order and the encoder is configured to

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determine a syntax element portion for, and code same into, a current slice of the slices so that the syntax element portion signals the current slice to be coded in accordance with one of at least two modes, and

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if the current slice is to be coded in accordance with a first of the at least two modes, encode the current slice into the datastream using context adaptive entropy encoding including a derivation of contexts across slice boundaries, a continuous update of symbol probabilities of the contexts and an initialization of the symbol probabilities depending on saved states of symbol probabilities of a previously encoded slice, and

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if the current slice is to be coded in accordance with a second of the at least two modes, encode the current slice into the datastream using context adaptive entropy encoding with restricting the derivation of the contexts so as to not cross the slice boundaries, a continuous update of symbol probabilities of the contexts and an initialization of the symbol probabilities independent on any previously encoded slice,

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wherein the picture is partitioned in coding blocks arranged in rows and columns and having a raster scan order defined among each other, and the encoder is configured to associate each slice with a continuous subset of the coding blocks in the raster scan order so that the subsets follow each other along the raster scan order in accordance with the slice order,

wherein the encoder is configured to save symbol probabilities as obtained in context adaptive entropy encoding the previously encoded slice up to a second coding block in a row in accordance with the raster scan order, and, in initializing the symbol probabilities for the context adaptive entropy encoding of the current slice in accordance with the first mode, check as to

whether a first coding block of the continuous subset of coding blocks associated with the current slice is a first coding block in a row in accordance with the raster scan order, and, if so, initialize the symbol probabilities for the context adaptive entropy encoding of the current slice depending on the saved symbol probabilities as obtained in context adaptive entropy encoding the previously encoded slice up to a second coding block in a row in accordance with the raster scan order, and, if not, initialize the symbol probabilities for the context adaptive entropy encoding of the current slice depending on symbol probabilities as obtained in context adaptive entropy encoding the previously decoded slice up to the end of the previously encoded slice.

112. Encoder according to claim 10, wherein the encoder is configured code the syntax element portion into the current slice of the slices so that the current slice is signaled to be coded thereinto in accordance with one of at least three modes, namely in the one of the first and a third mode or a second mode, wherein the encoder is configured to

in accordance with the first mode, encode the current slice using predictive encoding across the slice boundaries,

in accordance with the second mode, encode the current slice using predictive encoding with restricting the predictive encoding so as to not cross the slice boundaries, and

in accordance with the third mode, encode the current slice into the datastream using context adaptive entropy encoding with restricting the derivation of the contexts so as to not cross the slice boundaries, a continuous update of symbol probabilities of the contexts and an initialization of the symbol probabilities independent on any previously encoded slice, and predictive coding across the slice boundaries,

wherein the encoder distinguishes between the one of the first and third modes using a syntax element.

113. Encoder according to claims ~~1011~~ or 112, wherein the encoder is configured to determine a generic syntax element and write same into the datastream with operating in one of at least two generic operating modes depending on the generic syntax element, namely, with, according to a first generic operating mode,

performing coding the syntax element portion for each slice, and, according to a second generic operating mode, inevitably using a different one of the at least two modes other than the first mode.

- 5 | 14. Encoder according to claim 11, wherein the encoder is configured such that the data stream comprises information in response to which chroma transform blocks are split differently than luma transform blocks.

1315. Method for reconstructing a picture from a datastream into which the picture is coded in units of slices into which the picture is partitioned, wherein the method comprises decoding the slices from the datastream in accordance with a slice order and the method is responsive to a syntax element portion within a current slice of the slices, so as to decode the current slice in accordance with one of at least two modes, wherein

in accordance with a first of the at least two modes, the current slice is decoded from the datastream using context adaptive entropy decoding including a derivation of contexts across slice boundaries, a continuous update of symbol probabilities of the contexts and an initialization of the symbol probabilities depending on saved states of symbol probabilities of a previously decoded slice, and

in accordance with a second of the at least two modes, the current slice is decoded from the datastream using context adaptive entropy decoding with restricting the derivation of the contexts so as to not cross the slice boundaries, a continuous update of symbol probabilities of the contexts and an initialization of the symbol probabilities independent on any previously decoded slice,

wherein the picture is partitioned in coding blocks arranged in rows and columns and having a raster scan order defined among each other, and the method comprises associating each slice with a continuous subset of the coding blocks in the raster scan order so that the subsets follow each other along the raster scan order in accordance with the slice order, and

wherein the method comprises saving symbol probabilities as obtained in context adaptive entropy decoding the previously decoded slice up to a second coding block

in a row in accordance with the raster scan order, and, in initializing the symbol probabilities for the context adaptive entropy decoding of the current slice in accordance with the first mode, checking as to whether a first coding block of the continuous subset of coding blocks associated with the current slice is a first coding block in a row in accordance with the raster scan order, and, if so, initializing the symbol probabilities for the context adaptive entropy decoding of the current slice depending on the saved symbol probabilities as obtained in context adaptive entropy decoding the previously decoded slice up to a second coding block in a row in accordance with the raster scan order, and, if not, initializing the symbol probabilities for the context adaptive entropy decoding of the current slice depending on symbol probabilities as obtained in context adaptive entropy decoding the previously decoded slice up to the end of the previously decoded slice.

1416. Method for encoding a picture into a datastream in units of slices into which the picture is partitioned, wherein the method comprises encoding the slices into the datastream in accordance with a slice order and the method comprises

determining a syntax element portion for, and code same into, a current slice of the slices so that the syntax element portion signals the current slice to be coded in accordance with one of at least two modes, and

if the current slice is to be coded in accordance with a first of the at least two modes, encoding the current slice into the datastream using context adaptive entropy encoding including a derivation of contexts across slice boundaries, a continuous update of symbol probabilities of the contexts and an initialization of the symbol probabilities depending on saved states of symbol probabilities of a previously encoded slice, and

if the current slice is to be coded in accordance with a second of the at least two modes, encoding the current slice into the datastream using context adaptive entropy encoding with restricting the derivation of the contexts so as to not cross the slice boundaries, a continuous update of symbol probabilities of the contexts and an initialization of the symbol probabilities independent on any previously encoded slice,

wherein the picture is partitioned in coding blocks arranged in rows and columns and having a raster scan order defined among each other, and the method comprises associating each slice with a continuous subset of the coding blocks in the raster

~~15~~17. Computer program having a program code for performing, when running on a computer, a method according to claim ~~13~~15 or ~~14~~16.

5     18. Digital storage medium storing a data stream generated by a method according to claim 16.

10     19. Digital storage medium according to claim 18, wherein the data stream comprises information in response to which chroma transform blocks are split differently than luma transform blocks.