CLAIMS

What is claimed is:

1. A method implemented in a decoder, the method comprising:

receiving, by a receiver of a decoder, an extracted bitstream that is a result of a sub-bitstream extraction process from an input bitstream, wherein when the extracted bitstream comprises a subset of slices originally included in pictures, a value of a first flag has to be set equal to 1 for a picture parameter set (PPS);

wherein the first flag equal to 1 specifies that slice identifiers (IDs) for each of the subset of slices are signaled in the PPS; the first flag equal to 0 specifies that the slice IDs for the subset of slices are not signaled in the PPS;

decoding, by the processor of the decoder, the first flag from the extracted bitstream and decoding the subset of slices based on the first flag.

2. A method implemented in an encoder, the method comprising:

encoding, by a processor of the encoder, an input bitstream;

performing, by the processor, a sub-bitstream extraction process on the input bitstream to create an extracted bitstream; wherein when the extracted bitstream comprises a subset of slices originally included in pictures, a value of a first flag has to be set equal to 1 for a picture parameter set (PPS);

encoding into the extracted bitstream, by the processor, the first flag, wherein the first flag equal to 1 specifies that slice identifiers (IDs) for each of the subset of slices are signaled in the PPS; the first flag equal to 0 specifies that the slice IDs for the subset of slices are not signaled in the PPS.

3. A video coding device comprising:

a processor, a receiver coupled to the processor, a memory coupled to the processor, and a transmitter coupled to the processor, wherein the processor, receiver, memory, and transmitter are configured to perform the method of claims 1 or 2.

4. A non-transitory computer readable medium comprising a computer program product for use by a video coding device, the computer program product comprising computer executable instructions stored on the non-transitory computer readable medium such that when executed by a processor cause the video coding device to perform the method of claims 1 or 2.

5. A decoder comprising:

a receiving means for receiving an extracted bitstream that is a result of a sub-bitstream extraction process from an input bitstream wherein when the extracted bitstream comprises a subset of slices originally included in pictures, a value of a first flag has to be set equal to 1 for a picture parameter set (PPS);

wherein the first flag equal to 1 specifies that slice identifiers (IDs) for each of the subset of slices are signaled in the PPS; the first flag equal to 0 specifies that the slice IDs for the subset of slices are not signaled in the PPS;

a decoding means for decoding the first flag from the extracted bitstream and decoding the subset of slices based on the first flag.

6. An encoder comprising:

an encoding means for encoding an input bitstream;

a bitstream extraction means for performing a sub-bitstream extraction process on the input bitstream to create an extracted bitstream; wherein when the extracted bitstream comprises a subset of slices originally included in pictures, a value of a first flag has to be set equal to 1 for a picture parameter set (PPS) ;

the encoding means further for encoding into the extracted bitstream the first flag, wherein the first flag equal to 1 specifies that slice identifiers (IDs) for each of the subset of slices are signaled in the PPS; the first flag equal to 0 specifies that the slice IDs for the subset of slices are not signaled in the PPS.

7. A computer program product comprising computer executable instructions, wherein when the computer executable instructions are executed by a processor, cause a video coding device to perform the method of claim 1 or 2.