Claims

1. A video decoder comprising at least one processor, the at least one processor configured to:

decode a supplemental enhancement information (SEI) message from a data stream, the SEI message indicating that coding of all random access skipped leading (RASL) pictures within a sequence of pictures is constrained in a manner excluding a predetermined set of one or more coding tools, the predetermined set including

a wrap-around motion compensation tool,

the sequence of pictures comprising at least one RASL picture and a clean random access (CRA) picture associated with the at least one RASL picture.

2. The video decoder of claim 1, wherein the wrap-around motion compensation tool is a horizontal wrap-around motion compensation tool.

3. The video decoder of claim 1, wherein, according to the wrap-around motion compensation tool, if a portion of a reference block indicated by a motion vector for motion compensated temporal inter-prediction exceeds a picture content boundary of a reference picture, the portion of the reference block exceeding the picture content boundary is mapped to a portion of the reference picture which is positioned at an opposite picture content boundary, and/or a portion of the motion vector exceeding the picture content boundary is continued at the opposite picture content boundary.

4. The video decoder of claim 1, wherein the at least one processor is configured to support reference picture resampling.

5. The video decoder of claim 4, wherein, according to the reference picture resampling, a reference picture of an inter-predicted block is subject to sample re-sampling so as to bridge a scaling window size deviation or sample resolution deviation between the reference picture and a picture in which the inter-predicted block is contained to provide an inter-prediction signal for the inter-predicted block.

6. The video decoder of claim 1, wherein the sequence of pictures comprises pictures which are consecutive in coding order, and wherein the sequence of pictures starts, in coding order, with the CRA picture.

7. The video decoder of claim 1, wherein the predetermined set of one or more coding tools further comprises a cross-component linear-model based prediction tool and a decoder-side motion vector refinement tool.

8. A video encoder comprising at least one processor, the at least one processor configured to:

encode a supplemental enhancement information (SEI) message into a data stream, the SEI message indicating that coding of all random access skipped leading (RASL) pictures within a sequence of pictures is constrained in a manner excluding a predetermined set of one or more coding tools, the predetermined set including

a wrap-around motion compensation tool,

the sequence of pictures comprising at least one RASL picture and a clean random access (CRA) picture associated with the at least one RASL picture.

9. The video encoder of claim 8, wherein the wrap-around motion compensation tool is a horizontal wrap-around motion compensation tool.

10. The video encoder of claim 8, wherein, according to the wrap-around motion compensation tool, if a portion of a reference block indicated by a motion vector for motion compensated temporal inter-prediction exceeds a picture content boundary of a reference picture, the portion of the reference block exceeding the picture content boundary is mapped to a portion of the reference picture which is positioned at an opposite picture content boundary, and/or a portion of the motion vector exceeding the picture content boundary is continued at the opposite picture content boundary.

11. The video encoder of claim 8, wherein the at least one processor is configured to support reference picture resampling.

12. The video encoder of claim 11, wherein, according to the reference picture resampling, a reference picture of an inter-predicted block is subject to sample re-sampling so as to bridge a scaling window size deviation or sample resolution deviation between the reference picture and a picture in which the inter-predicted block is contained to provide an inter-prediction signal for the inter-predicted block.

13. The video encoder of claim 8, wherein the sequence of pictures comprises pictures which are consecutive in coding order, and wherein the sequence of pictures starts, in coding order, with the CRA picture.

14. The video encoder of claim 8, wherein the set of one or more coding tools further comprises a cross-component linear-model based prediction tool and a decoder-side motion vector refinement tool.

15. A method of video decoding, the method comprising:

decoding a supplemental enhancement information (SEI) message from a data stream, the SEI message indicating that coding of all random access skipped leading (RASL) pictures within a sequence of pictures is constrained in a manner excluding a predetermined set of one or more coding tools, the predetermined set including

a wrap-around motion compensation tool,

the sequence of pictures comprising at least one RASL picture and a clean random access (CRA) picture associated with the at least one RASL picture.

16. A method of video encoding, the method comprising:

encoding a supplemental enhancement information (SEI) message into a data stream, the SEI message indicating that coding of all random access skipped leading (RASL) pictures within a sequence of pictures is constrained in a manner excluding a predetermined set of one or more coding tools, the predetermined set comprising

a wrap-around motion compensation tool,

the sequence of pictures comprising at least one RASL picture and a clean random access (CRA) picture associated with the at least one RASL picture.