

WHAT IS CLAIMED IS:

1. A method of video processing, comprising:
performing a conversion between a video comprising one or more pictures comprising one or more subpictures comprising one or more slices and a bitstream representation of the video according to a rule, and
wherein the bitstream representation includes a number of coded units,
wherein the rule specifies that a decoding order of coded units within a subpicture is in an increasing order of subpicture level slice index values of the coded units.
2. The method of claim 1, wherein the coded units correspond to video coded layer (VCL) network abstraction layer (NAL) units.
3. The method of claim 1, wherein the rule is applied in a case that a slice mode is a rectangular slice mode.
4. The method of claim 1, wherein a subpicture-level slice index value is a value of a slice_address syntax element in a slice header that specifies a slice address of a slice.
5. The method of any of claims 1 to 4, wherein a value of a slice_subpic_id parameter is inferred upon a determination that the bitstream representation excludes the slice_subpic_id parameter.
6. The method of claim 5, wherein the slice_subpic_id parameter specifies a subpicture identification (ID) of the subpicture that contains the slice.
7. The method of claim 5, wherein the value of the slice_subpic_id parameter is inferred to be equal to 0 upon the determination.

8. The method of any of claims 1-7, wherein subpicture ID values of subpictures comprising the plurality of the coded units monotonically increase with the subpicture index values of subpictures comprising the plurality of the coded units.
9. The method of any of claims 5 to 7, wherein the decoding order of the coded units within a picture including a first slice network abstraction layer (NAL) unit and a second slice NAL unit is specified such that the first slice NAL unit precedes the second slice NAL unit in a case that i) a subpicture-level slice index value of the first slice NAL unit is less than a subpicture-level slice index value of the second slice NAL unit, or ii) the subpicture-level slice index value of the first slice NAL unit is equal to the subpicture-level slice index value of the second slice NAL unit and a value of a slice_address syntax element of the first slice NAL unit is less than a value of a slice_address syntax element of the second slice NAL unit.
10. A method of video processing, comprising:
performing a conversion between a video comprising one or more pictures comprising one or more subpictures comprising one or more slices and a bitstream representation of the video according to a rule, and
wherein the bitstream representation includes a number of coded units,
wherein the rule specifies that a decoding order of coded units is in an increasing order of subpicture related values of subpictures from the one or more subpictures that include the coded units.
11. The method of claim 10, wherein the coded units correspond to video coded layer (VCL) network abstraction layer (NAL) units.
12. The method of claim 10, wherein the rule is applied in a case that a slice mode is a rectangular slice mode.
13. The method of claim 10, wherein the subpicture related values correspond to identification (ID) values of subpictures comprising the coded units.

14. The method of claim 10, wherein the subpicture related values correspond to subpicture index values of subpictures comprising the coded units.
15. The method of any of claims 10 to 14, wherein a value of a slice_subpic_id parameter is inferred upon a determination that the bitstream representation excludes the slice_subpic_id parameter.
16. The method of claim 15, wherein the value of the slice_subpic_id parameter is inferred to be equal to 0 upon the determination.
17. The method of any of claims 10 to 16, wherein subpicture ID values of subpictures comprising the coded units monotonically increase with the subpicture index values of subpictures comprising the plurality of the coded units.
18. The method of any of claims 10 to 16, wherein the conversion includes encoding the video into the bitstream representation.
19. The method of any of claims 10 to 16, wherein the conversion includes decoding the video from the bitstream representation.
20. A video processing apparatus comprising a processor configured to implement a method recited in any one or more of claims 1 to 19.
21. A computer readable medium storing program code that, when executed, causes a processor to implement a method recited in any one or more of claims 1 to 19.
22. A computer readable medium that stores a coded representation or a bitstream representation generated according to any of the above described methods.

23. A video processing apparatus for storing a bitstream representation, wherein the video processing apparatus is configured to implement a method recited in any one or more of claims 1 to 19.