CLAIMS

1. A method for processing video data, comprising:

determining, for a conversion between a current video block of a current picture of a video and a bitstream of the video, that at least one coding tool is disabled for the current video block due to using a reference picture for performing the conversion, wherein the reference picture has a precision different from a precision of the current picture; and

performing the conversion based on the determining.

2. The method of claim 1, wherein the at least one coding tool comprises a decoder side motion vector refinement (DMVR) tool.

3. The method of claim 1 or 2, wherein the at least one coding tool comprises a bi-directional optical flow (BDOF) tool.

4. The method of any one of claims 1-3, wherein the at least one coding tool comprises a prediction refinement with optical flow (PROF) tool.

5. The method of any one of claims 1-4, wherein the precision of the current picture is indicated by at least one of a width or a height of the current picture.

6. The method of any one of claims 1-5, wherein the at least one coding tool comprises a sub-block based temporal motion vector prediction tool, wherein in the sub-block based temporal motion vector prediction tool, a block is divided into at least one subblock, and motion information of the at least one subblock is derived based on a video region in a collocated picture, and wherein a position of the video region is derived based on an available specific neighboring block.

7. The method of any one of claims 1-6, wherein the at least one coding tool comprises a temporal motion vector prediction tool.

8. The method of any one of claims 1-7, wherein the performing the conversion based on the determining comprises:

calculating predictors of the current video block; and

applying an interpolation processing to the predictors once without a resampling processing.

9. The method of any one of claims 1-8, wherein the at least one coding tool comprises at least one of an affine prediction, a triangular prediction mode, a symmetric motion vector difference (SMVD), a merge mode with motion vector differences (MMVD), an inter-intra prediction, a local illumination compensation (LIC), a history-based motion vector prediction (HMVP), a multiple Transform Set (MTS), a sub-block transform (SBT), a prediction refinement with optical flow (PROF), a low frequency non-square transform (LFNST), or a filtering tool.

10. The method of any one of claims 1-9, wherein information related to the coding tool is not included in a case that the use of the coding tool is disabled.

11. The method of any one of claims 1-10, wherein the performing of the conversion includes decoding the current video block from the bitstream.

12. The method of any one of claims 1-10, wherein the performing of the conversion includes encoding the current video block into the bitstream.

13. An apparatus for processing video data comprising a processor and a non-transitory memory with instructions thereon, wherein the instructions upon execution by the processor, cause the processor to:

determine, for a conversion between a current video block of a current picture of a video and a bitstream of the video, that at least one coding tool is disabled for the current video block due to using a reference picture for performing the conversion, wherein the reference picture has a precision different from a precision of the current picture; and

perform the conversion based on the determining.

14. The apparatus of claim 13, wherein the at least one coding tool comprises at least one of:

a decoder side motion vector refinement (DMVR) tool;

a bi-directional optical flow (BDOF) tool;

a prediction refinement with optical flow (PROF) tool;

a temporal motion vector prediction tool; or

a sub-block based temporal motion vector prediction tool, wherein in the sub-block based temporal motion vector prediction tool, a block is divided into at least one sub-block, and motion information of the at least one sub-block is derived based on a video region in a collocated picture, and wherein a position of the video region is derived based on an available specific neighboring block.

15. The apparatus of claim 13, wherein performing the conversion based on the determining comprises:

calculating predictors of the current video block; and

applying an interpolation processing to the predictors without a resampling processing.

16. The apparatus of claim 13, wherein the performing of the conversion includes decoding the current video block from the bitstream.

17. The apparatus of claim 13, wherein the performing of the conversion includes encoding the current video block into the bitstream.

18. A non-transitory computer-readable storage medium storing instructions that cause a processor to:

determine, for a conversion between a current video block of a current picture of a video and a bitstream of the video, that at least one coding tool is disabled for the current video block due to using a reference picture for performing the conversion, wherein the reference picture has a precision different from a precision of the current picture; and

perform the conversion based on the determining.

19. The non-transitory computer-readable storage medium of claim 18, wherein the at least one coding tool comprises at least one of:

a decoder side motion vector refinement (DMVR) tool;

a bi-directional optical flow (BDOF) tool;

a prediction refinement with optical flow (PROF) tool;

a temporal motion vector prediction tool; or

a sub-block based temporal motion vector prediction tool, wherein in the sub-block based temporal motion vector prediction tool, a block is divided into at least one subblock, and motion information of the at least one subblock is derived based on a video region in a collocated picture, and wherein a position of the video region is derived based on an available specific neighboring block.

20. A non-transitory computer-readable recording medium storing a bitstream which is generated by a method performed by a video processing apparatus, wherein the method comprises:

determining, for a current video block of a current picture of the video, that at least one coding tool is disabled for the current video block due to using a reference picture for performing the conversion, wherein the reference picture has a precision different from a precision of the current picture; and

generating the bitstream based on the determining.