~~WHAT IS CLAIMED IS~~CLAIMS:

1. A method for video decoding in a decoder, comprising:

determining, by a processor, a parameter based on prediction information decoded from a coded video bitstream~~, the parameter being in a range that depends on a flag indicative of an enable/disable status of subblock based temporal motion vector prediction~~;

calculating, by the processor, a maximum number of candidates in ~~the~~ subblock based merge candidate lists based on the parameter~~;~~, the parameter being in a range from 0 to 5-sps_sbtmvp_enabled_flag, wherein the sps_sbtmvp_enabled_flag equal to 1 specifies that subblock based temporal motion vector predictors are used in decoding of pictures with slices having slice type not equal to I (intra coded) in a coded video, and wherein the sps_sbtmvp_enabled_flag equal to 0 specifies that the subblock based temporal motion vector predictors are not used in the coded video; and

reconstructing, in response to a current block in a subblock based prediction mode, samples of the current block based on a candidate selection from a constructed subblock based merge candidate list of the current block, the constructed subblock based merge candidate list of the current block being constrained by the maximum number of candidates in the subblock based merge candidate lists.

2. The method of claim 1, further comprising:

calculating the maximum number of candidates in the subblock based merge candidate lists by subtracting the parameter from a default number.

3. The method of claim 2, wherein the default number is 5.

4. The method of claim 1, ~~wherein an upper limit of the range depends on the flag indicative of the enable/disable status of subblock based temporal motion vector prediction.~~ further comprising:

~~5. The method of claim 1, further comprising:~~

receiving the parameter that is signaled in the coded video bitstream.

~~6~~5. The method of claim 1, further comprising:

inferring the parameter based on a default number and the ~~flag indicative of the enable/disable status of subblock based temporal motion vector prediction~~sps_sbtmvp_enabled_flag in response to the parameter not being signaled in the coded video bitstream.

~~7~~6. The method of claim 1, wherein the sps_sbtmvp_enabled_flag is ~~indicative of the enable/disable status of subblock based temporal motion vector prediction~~ at a sequence parameter set (SPS) level.

~~8~~7. The method of claim 1, wherein the parameter is in ~~a~~the range that ~~depends on a first flag indicative of the enable/disable status of subblock based temporal motion vector prediction~~ is determined based on the sps_sbtmvp_enabled_flag at a sequence parameter set (SPS) level and a ~~second~~ flag indicative of ~~the~~an enable/disable status of temporal motion vector prediction at a picture header (PH) level.

~~9~~8. The method of claim ~~8~~7, further comprising:

inferring the parameter based on a default number, the ~~first flag indicative of the enable/disable status of subblock based temporal motion vector prediction~~ sps_sbtmvp_enabled_flag at the SPS level, and the ~~second~~ flag indicative of the enable/disable status of temporal motion vector prediction at the PH level in response to the parameter not being signaled in the coded video bitstream.

~~10~~9. An apparatus for video decoding, comprising:

processing circuitry configured to:

determine a parameter based on prediction information decoded from a coded video bitstream~~, the parameter being in a range that depends on a flag indicative of an enable/disable status of subblock based temporal motion vector prediction~~;

calculate a maximum number of candidates in ~~the~~ subblock based merge candidate lists based on the parameter~~;~~, the parameter being in a range from 0 to 5-sps_sbtmvp_enabled_flag, wherein the sps_sbtmvp_enabled_flag equal to 1 specifies that subblock based temporal motion vector predictors are used in decoding of pictures with slices having slice type not equal to I (intra coded) in a coded video, and wherein the sps_sbtmvp_enabled_flag equal to 0 specifies that the subblock based temporal motion vector predictors are not used in the coded video; and

reconstruct, in response to a current block in a subblock based prediction mode, samples of the current block based on a candidate selection from a constructed subblock based merge candidate list of the current block, the constructed subblock based merge candidate list of the current block being constrained by the maximum number of candidates in the subblock based merge candidate lists.

~~11~~10. The apparatus of claim ~~10~~9, wherein the processing circuitry is further configured to:

calculate the maximum number of candidates in the subblock based merge candidate lists by subtracting the parameter from a default number.

~~12~~11. The apparatus of claim ~~11~~10, wherein the default number is 5.

~~13. The apparatus of claim 10, wherein an upper limit of the range depends on the flag indicative of the enable/disable status of subblock based temporal motion vector prediction.~~

~~14~~12. The apparatus of claim ~~10~~9, wherein the processing circuitry is configured to receive the parameter that is signaled in the coded video bitstream.

~~15~~13. The apparatus of claim ~~10~~9, wherein the processing circuitry is configured to:

infer the parameter based on a default number and the ~~flag indicative of the enable/disable status of subblock based temporal motion vector predictions~~sps_sbtmvp_enabled_flag in response to the parameter not being signaled in the coded video bitstream.

~~16~~14. The apparatus of claim ~~10~~9, wherein the sps_sbtmvp_enabled_flag is ~~indicative of the enable/disable status of subblock based temporal motion vector prediction~~ at a sequence parameter set (SPS) level.

~~17~~15. The apparatus of claim ~~10~~9, wherein the parameter is in ~~a~~the range that ~~depends on a first flag indicative of the enable/disable status of subblock based temporal motion vector prediction~~ is determined based on the sps_sbtmvp_enabled_flag at a sequence parameter set (SPS) level and a ~~second~~ flag indicative of ~~the~~an enable/disable status of temporal motion vector prediction at a picture header (PH) level.

~~18~~16. The apparatus of claim ~~17~~15, wherein the processing circuitry is configured to:

infer the parameter based on a default number, the ~~first flag indicative of the enable/disable status of subblock based temporal motion vector prediction~~ sps_sbfmvp_enabled_flag at the SPS level, and the second flag indicative of the enable/disable status of temporal motion vector prediction at the PH level in response to the parameter not being signaled in the coded video bitstream.

17. A method for video encoding, comprising:

calculating, by processing circuitry of a video encoder, a maximum number of candidates in subblock based merge candidate lists for coding a video bitstream,

determining a parameter corresponding to the coded video bitstream based on the calculated maximum number of candidates, the parameter being in a range from 0 to 5-sps_sbtmvp_enabled_flag, wherein the sps_sbtmvp_enabled_flag equal to 1 specifies that

subblock based temporal motion vector predictors are used in encoding of pictures with slices having slice type not equal to I (intra coded) in the video bitstream, and wherein the sps_sbtmvp_enabled_flag equal to 0 specifies that the subblock based temporal motion vector predictors are not used in coding the video bitstream; and

in response to a current block being in a subblock based prediction mode, encoding samples of the current block based on a candidate selection from a constructed subblock based merge candidate list of the current block, the constructed subblock based merge candidate list of the current block being constrained by the maximum number of candidates in the subblock based merge candidate lists.

18. An apparatus for video encoding, comprising:

processing circuitry configured to:

calculate a maximum number of candidates in subblock based merge candidate lists for coding a video bitstream,

determine a parameter corresponding to the coded video bitstream based on the calculated maximum number of candidates, the parameter being in a range from 0 to 5-sps_sbtmvp_enabled_flag, wherein the sps_sbtmvp_enabled_flag equal to 1 specifies that subblock based temporal motion vector predictors are used in encoding of pictures with slices having slice type not equal to I (intra coded) in the video bitstream, and wherein the sps_sbtmvp_enabled_flag equal to 0 specifies that the subblock based temporal motion vector predictors are not used in coding the video bitstream; and

in response to a current block being in a subblock based prediction mode, encode samples of the current block based on a candidate selection from a constructed subblock based merge candidate list of the current block, the constructed subblock based merge candidate list of the current block being constrained by the maximum number of candidates in the subblock based merge candidate lists.

19. A non-transitory computer-readable medium storing instructions which when executed by a computer for video decoding cause the computer to perform the method according to any one of claims 1 to 8, and 17.~~:~~

~~determining a parameter based on prediction information decoded from a coded video bitstream, the parameter being in a range that depends on a flag indicative of an enable/disable status of subblock based temporal motion vector prediction;~~

~~calculating a maximum number of candidates in the subblock based merge candidate lists based on the parameter; and~~

~~reconstructing, in response to a current block in a subblock based prediction mode, samples of the current block based on a candidate selection from a constructed subblock based merge candidate list of the current block, the constructed subblock based merge candidate list of the current block being constrained by the maximum number of candidates in the subblock based merge candidate lists.~~

~~20. The non-transitory computer-readable medium of claim 19, wherein an upper limit of the range depends on the flag indicative of the enable/disable status of subblock based temporal motion vector prediction.~~