

CLAIMS

1. A video processing method, comprising:

maintaining, prior to a conversion between a current video block of a video and a bitstream of the video, at least one history-based motion vector prediction (HMVP) table that includes one or more entries corresponding to motion information of one or more previously processed blocks, and wherein each entry is further configured to include interpolation filter information for the one or more previously processed blocks, wherein the interpolation filter information indicates at least one interpolation filter used for prediction blocks of the one or more previously processed blocks;

constructing, for the conversion, a motion candidate list which includes an HMVP candidate, wherein the HMVP candidate is derived by inheriting one entry from the HMVP table, wherein the inheriting comprises inheriting the interpolation filter information associated with the one entry; and performing the conversion based on the motion candidate list.

2. The method of claim 1, wherein maintaining the at least one HMVP table comprises:

selectively updating the at least one HMVP table by inserting a new candidate into the at least one HMVP table,

wherein the new candidate is determined based on the motion information without considering the interpolation filter information to be a same candidate as one candidate corresponding to one entry from the HMVP table.

3. The method of claim 2, in response to the new candidate and the one candidate being of same motion information but different interpolation filter information, the new candidate is determined to be a same candidate as the one candidate.

4. The method of any of claims 1-3, wherein the motion candidate list includes one or more first motion candidates and a second motion candidate which is derived from the one or more first motion candidates that have been added into the motion candidate list,

wherein a second interpolation filter information assigned to the second motion candidate is generated based on one or more first interpolation filter information assigned to the one or more first motion candidates.

5. The method of claim 4, wherein the second motion candidate is a pairwise-average merging candidate.

6. The method of claim 4, wherein the second motion candidate is added into the motion candidate list after the one or more first motion candidates.

7. The method of claim 4, wherein the one or more first motion candidates comprises the HMVP candidate.

8. The method of claim 4, wherein the one or more first interpolation filter information and the second interpolation filter information are associated with half-sample interpolation filter indices.

9. The method of claim 8, wherein in response to the one or more first motion candidates comprising two first motion candidates and two half-sample interpolation filter indices associated with the two first motion candidates being equal, the half-sample interpolation filter index associated with the second interpolation filter is set to be equal to the half-sample interpolation filter indices associated with the two first motion candidates.

10. The method of claim 8, wherein in response to the one or more first motion candidates comprising two first motion candidates and two half-sample interpolation filter indices associated with the two first motion candidates being not equal, the half-sample interpolation filter index associated with the second interpolation filter is set to be 0.

11. The method of any of claims 1-10, wherein the conversion comprises encoding the current video block into the bitstream.

12. The method of any of claims 1-10, wherein the conversion comprises decoding the current video block from 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:

maintain, prior to a conversion between a current video block of a video and a bitstream of the video, at least one history-based motion vector prediction (HMVP) table that includes one or more entries corresponding to motion information of one or more previously processed blocks, and wherein each entry is further configured to include interpolation filter information for the one or more previously processed blocks, wherein the interpolation filter information indicates at least one interpolation filter used for prediction blocks of the one or more previously processed blocks;

construct, for the conversion, a motion candidate list which includes an HMVP candidate, wherein the HMVP candidate is derived by inheriting one entry from the HMVP table, wherein the inheriting comprises inheriting the interpolation filter information associated with the one entry; and perform the conversion based on the motion candidate list.

14. The apparatus of claim 13, wherein the instructions upon execution by the processor, cause the processor to:

selectively update the at least one HMVP table by inserting a new candidate into the at least one HMVP table,

wherein the new candidate is determined based on the motion information without considering the interpolation filter information to be a same candidate as one candidate corresponding to one entry from the HMVP table.

15. The apparatus of claim 13 or 14, wherein the motion candidate list includes one or more first motion candidates and a second motion candidate which is derived from the one or more first motion candidates that have been added into the motion candidate list,

wherein a second interpolation filter assigned to the second motion candidate is generated based on one or more first interpolation filters assigned to the one or more first motion candidates.

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

maintain, prior to a conversion between a current video block of a video and a bitstream of the video, at least one history-based motion vector prediction (HMVP) table that includes one or more entries corresponding to motion information of one or more previously processed blocks, and wherein each entry is further configured to include interpolation filter information for the one or more previously processed blocks, wherein the interpolation filter information indicates at least one interpolation filter used for prediction blocks of the one or more previously processed blocks;

construct, for the conversion, a motion candidate list which includes an HMVP candidate, wherein the HMVP candidate is derived by inheriting one entry from the HMVP table, wherein the inheriting comprises inheriting the interpolation filter information associated with the one entry; and perform the conversion based on the motion candidate list.

17. The non-transitory computer-readable storage medium of claim 16, wherein the instructions cause the processor to:

selectively update the at least one HMVP table by inserting a new candidate into the at least one HMVP table,

wherein the new candidate is determined based on the motion information without considering the interpolation filter information to be a same candidate as one candidate corresponding to one entry from the HMVP table.

18. The non-transitory computer-readable storage medium of claim 16 or 17, wherein the motion candidate list includes one or more first motion candidates and a second motion candidate which is derived from the one or more first motion candidates that have been added into the motion candidate list,

wherein a second interpolation filter assigned to the second motion candidate is generated based on one or more first interpolation filters assigned to the one or more first motion candidates.

19. 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:

maintaining at least one history-based motion vector prediction (HMVP) table that includes one or more entries corresponding to motion information of one or more previously processed blocks, and wherein each entry is further configured to include interpolation filter information for the one or

more previously processed blocks, wherein the interpolation filter information indicates at least one interpolation filter used for prediction blocks of the one or more previously processed blocks;

constructing a motion candidate list which includes an HMVP candidate, wherein the HMVP candidate is derived by inheriting one entry from the HMVP table wherein the inheriting comprises inheriting the interpolation filter information associated with the one entry; and

generating the bitstream based on based on the motion candidate list.

20. The non-transitory computer-readable recording medium of claim 19, wherein the motion candidate list includes one or more first motion candidates and a second motion candidate which is derived from the one or more first motion candidates that have been added into the motion candidate list,

wherein a second interpolation filter assigned to the second motion candidate is generated based on one or more first interpolation filters assigned to the one or more first motion candidates.