

CLAIMS

What is claimed is:

1. A video processing method, comprising:
maintaining a set of tables, wherein each table includes motion candidates and each motion candidate is associated with corresponding motion information;
updating a candidate list based on motion candidates in one or more tables using a pruning operation on the motion candidates; and
performing a conversion between a first video block and a bitstream representation of a video including the first video block using the constructed candidate list.
2. A method for video processing, comprising:
receiving a bitstream representation of a video including a first video block;
applying a pruning operation to motion candidates in one or more tables to update a candidate list, wherein each table includes motion candidates and each motion candidate is associated with corresponding motion information; and
performing a conversion between the bitstream representation and the first video block using the constructed candidate list.
3. The method of claim 1 or 2, wherein at least one of the tables includes motion candidates derived from previously decoded video blocks that are decoded prior to the first video block.
4. The method of claim 1 or 2, wherein the pruning operation is performed before adding a motion candidate from a table to the candidate list.
5. The method of claim 4, wherein the candidate list corresponds to a merge candidate list.
6. The method of claim 1 or 2, wherein the pruning operation includes comparing a motion candidate from a table to at least a part of available spatial or temporal merge candidates.

7. The method of claim 1 or 2, wherein the pruning operation includes comparing a motion candidate from a table to all available merge candidates.
8. The method of claims 1, 2, or 4, wherein the pruning operation is performed without a motion candidate from a table to a sub-block based motion candidate.
9. The method of claim 1 or 2, wherein the pruning operation includes comparing a motion candidate from a table to at least a part of available motion candidates in a merge candidate list before adding the motion candidate.
10. The method of claim 1 or 2, wherein the pruning operation includes a number of operations, the number being a function of a number of spatial or temporal merge candidates.
11. The method of claim 10, wherein the number of operations is such that in case that M candidates are available in a merge candidate list, then the pruning is applied only to K merge candidates where $K \leq M$ and where K and M are integers.
12. The method of claim 11, wherein K is set to $\min(K, 2)$.
13. The method of claim 1 or 2, wherein the pruning operation includes comparing a motion candidate from a table with first N candidates in the candidate list before adding the motion candidate to the candidate list, N being an integer.
14. The method of claim 1 or 2, wherein the pruning operation includes comparing a motion candidate from a table to be checked with last N candidates in the candidate list before adding the motion candidate to the candidate list, N being an integer.
15. The method of claim 13 or 14, further comprising signaling a value of N.

16. The method of claim 1, wherein the pruning operation includes comparing a motion candidate from a table with a certain candidate in the candidate list based on how the candidate were derived.
17. The method of claim 16, wherein the pruning operation includes comparing the motion candidate from a table with candidates derived from a given temporal or spatial neighboring block.
18. The method of claim 16, wherein different entries of motion candidates in a table are compared with different previously added candidates that were derived from different locations.
19. The method of claim 1 or 2, further comprising wherein the pruning operation is not invoked when adding a motion candidate from a table to the candidate list.
20. The method of any one of claims 1-19, wherein the performing of the conversion includes generating the bitstream representation from the video block.
21. The method of any one of claims 1-19, wherein the performing of the conversion includes generating the video block from the bitstream representation.
22. The method of any one of claims 1-21, wherein a motion candidate is associated with motion information including at least one of: a prediction direction, a reference picture index, motion vector values, an intensity compensation flag, an affine flag, a motion vector difference precision, or motion vector difference value.
23. The method of any one of claims 1-22, wherein the motion candidates correspond to motion candidates for intra prediction modes for intra mode coding.
24. The method of any one of claims 1-22, wherein the motion candidates correspond to motion candidates that include illumination compensation parameters for IC parameter coding.

25. The method of any one of claims 1-24, further comprising updating, based on the conversion, one or more tables.
26. The method of claim 25, wherein the updating of one or more tables includes updating one or more tables based on the motion information of the first video block after performing the conversion.
27. The method of claim 26, further comprising:
performing a conversion between a subsequent video block of the video and the bitstream representation of the video based on the updated tables.
28. An apparatus comprising a processor and a non-transitory memory with instructions thereon, wherein the instructions upon execution by the processor, cause the processor to implement the method recited in one or more of claims 1 to 27.
29. A computer program product stored on a non-transitory computer readable media, the computer program product including program code for carrying out the method recited in one or more of claims 1 to 27.