

CLAIMS

1. A method of coding video data, the method comprising:
 - constructing a history-based motion vector prediction (HMVP) candidate history table that includes motion vector information of previously coded blocks that extend beyond adjacent neighboring blocks of a current block of the video data;
 - constructing a motion vector predictor list;
 - adding a first subset of one or more HMVP candidates from the HMVP candidate history table to the motion vector predictor list, wherein adding the first subset of one or more HMVP candidates from the HMVP candidate history table comprises:
 - comparing a first HMVP candidate from the first subset from the HMVP candidate history table to two entries in the motion vector predictor list and no other entries in the motion vector predictor list, wherein the two entries in the motion vector predictor list comprise an entry for a left neighboring block of the current block and an entry for an above neighboring block of the current block; and
 - adding the first HMVP candidate to the motion vector predictor list when the first HMVP candidate is different than both of the two entries in the motion vector predictor list; and
 - coding the current block of video data using the motion vector predictor list.
2. The method of claim 1, wherein adding the first subset of one or more HMVP candidates further comprises:
 - comparing a second HMVP candidate from the first subset from the HMVP candidate history table to the two entries in the motion vector predictor list and no other entries in the motion vector predictor list; and
 - adding the second HMVP candidate to the motion vector predictor list when the second HMVP candidate is different than both of the two entries in the motion vector predictor list.
3. The method of claim 1, wherein the adding the first subset of the one or more HMVP candidates comprises adding the first subset of the one or more HMVP candidates for the current block that is coded in one of a merge mode, an advanced motion vector prediction (AMVP)

mode, or an intra block copy (IBC) merge mode.

4. The method of claim 1, wherein constructing the motion vector predictor list comprises constructing the motion vector predictor list with motion information of one or more spatially neighboring blocks or collocated blocks.

5. The method of claim 1, wherein coding the current block comprises decoding the current block, and wherein decoding the current block comprises:

- retrieving motion vector information from an entry of the motion vector predictor list;
- determining a motion vector for the current block based on the retrieved motion vector information;

- determining a prediction block based on the motion vector; and

- adding the prediction block to received residual information indicative of a difference between the prediction block and the current block to reconstruct the current block.

6. The method of claim 1, wherein coding the current block comprises encoding the current block, and wherein encoding the current block comprises:

- determining a motion vector for the current block used for identifying a prediction block;
- signaling information indicative of an entry into the motion vector predictor list based on the determined motion vector for the current block; and

- signaling residual information indicative of a difference between the prediction block and the current block.

7. A device for coding video data, the device comprising:
memory configured to store:

- a history-based motion vector prediction (HMVP) candidate history table that includes motion vector information of previously coded blocks that extend beyond adjacent neighboring blocks of a current block of the video data, and

- a motion vector predictor list; and

processing circuitry configured to:

- construct the HMVP candidate history table for storage in the memory;

construct the motion vector predictor list for storage in the memory;

add a first subset of one or more HMVP candidates from the HMVP candidate history table to the motion vector predictor list, wherein to add the first subset of one or more HMVP candidates from the HMVP candidate history table, the processing circuitry is configured to:

compare a first HMVP candidate from the first subset from the HMVP candidate history table to two entries in the motion vector predictor list and no other entries in the motion vector predictor list, wherein the two entries in the motion vector predictor list comprise an entry for a left neighboring block of the current block and an entry for an above neighboring block of the current block; and

add the first HMVP candidate to the motion vector predictor list when the first HMVP candidate is different than both of the two entries in the motion vector predictor list; and

code the current block of video data using the motion vector predictor list stored in the memory.

8. The device of claim 7, wherein to add the first subset of one or more HMVP candidates, the processing circuitry is configured to:

compare a second HMVP candidate from the first subset from the HMVP candidate history table to the two entries in the motion vector predictor list and no other entries in the motion vector predictor list; and

add the second HMVP candidate to the motion vector predictor list when the second HMVP candidate is different than both of the two entries in the motion vector predictor list.

9. The device of claim 7, wherein to add the first subset of the one or more HMVP candidates, the processing circuitry is configured to add the first subset of the one or more HMVP candidates for the current block that is coded in one of a merge mode, an advanced motion vector prediction (AMVP) mode, or an intra block copy (IBC) merge mode.

10. The device of claim 7, wherein to construct the motion vector predictor list, the processing circuitry is configured to construct the motion vector predictor list with motion information of one or more spatially neighboring blocks or collocated blocks.

11. The device of claim 7, wherein to code the current block, the processing circuitry is configured to decode the current block, and wherein to decode the current block, the processing circuitry is configured to:

- retrieve motion vector information from an entry of the motion vector predictor list;
- determine a motion vector for the current block based on the retrieved motion vector information;
- determine a prediction block based on the motion vector; and
- add the prediction block to received residual information indicative of a difference between the prediction block and the current block to reconstruct the current block.

12. The device of claim 7, wherein to code the current block, the processing circuitry is configured to encode the current block, and wherein to encode the current block, the processing circuitry is configured to:

- determine a motion vector for the current block used for identifying a prediction block;
- signal information indicative of an entry into the motion vector predictor list based on the determined motion vector for the current block; and
- signal residual information indicative of a difference between the prediction block and the current block.

13. The device of claim 7, wherein the device is a wireless communication device.

14. A non-transitory computer-readable storage medium storing instructions thereon that when executed cause one or more processors to:

- construct a history-based motion vector prediction (HMVP) candidate history table that includes motion vector information of previously coded blocks that extend beyond adjacent neighboring blocks of a current block of the video data;
- construct a motion vector predictor list;
- add a first subset of one or more HMVP candidates from the HMVP candidate history table to the motion vector predictor list, wherein the instructions that cause the one or more processors to add the first subset of one or more HMVP candidates from the HMVP candidate

history table comprise instructions that cause the one or more processors to:

compare a first HMVP candidate from the first subset from the HMVP candidate history table to two entries in the motion vector predictor list and no other entries in the motion vector predictor list, wherein the two entries in the motion vector predictor list comprise an entry for a left neighboring block of the current block and an entry for an above neighboring block of the current block; and

add the first HMVP candidate to the motion vector predictor list when the first HMVP candidate is different than both of the two entries in the motion vector predictor list; and

code the current block of video data using the motion vector predictor list.

15. The computer-readable storage medium of claim 14, wherein the instructions that cause the one or more processors to add the first subset of one or more HMVP candidates comprise instructions that cause the one or more processors to:

compare a second HMVP candidate from the first subset from the HMVP candidate history table to the two entries in the motion vector predictor list and no other entries in the motion vector predictor list; and

add the second HMVP candidate to the motion vector predictor list when the second HMVP candidate is different than both of the two entries in the motion vector predictor list.

16. The computer-readable storage medium of claim 14, wherein the instructions that cause the one or more processors to add the first subset of the one or more HMVP candidates comprise instructions that cause the one or more processors to add the first subset of the one or more HMVP candidates for the current block that is coded in one of a merge mode, an advanced motion vector prediction (AMVP) mode, or an intra block copy (IBC) merge mode.

17. The computer-readable storage medium of claim 14, wherein the instructions that cause the one or more processors to construct the motion vector predictor list comprise instructions that cause the one or more processors to construct the motion vector predictor list with motion information of one or more spatially neighboring blocks or collocated blocks.

18. The computer-readable storage medium of claim 14, wherein the instructions that cause the one or more processors to code the current block comprise instructions that cause the one or more processors to decode the current block, and wherein the instructions that cause the one or more processors to decode the current block comprise instructions that cause the one or more processors to:

- retrieve motion vector information from an entry of the motion vector predictor list;
- determine a motion vector for the current block based on the retrieved motion vector information;
- determine a prediction block based on the motion vector; and
- add the prediction block to received residual information indicative of a difference between the prediction block and the current block to reconstruct the current block.

19. The computer-readable storage medium of claim 14, wherein the instructions that cause the one or more processors to code the current block comprise instructions that cause the one or more processors to encode the current block, and wherein the instructions that cause the one or more processors to encode the current block comprise instructions that cause the one or more processors to:

- determine a motion vector for the current block used for identifying a prediction block;
- signal information indicative of an entry into the motion vector predictor list based on the determined motion vector for the current block; and
- signal residual information indicative of a difference between the prediction block and the current block.