CLAIMS

1. A method of coding video data, the method comprising:

responsive to determining to predict a current block of a current picture of video data using intra block copy (IBC), generating a motion vector (MV) candidate list for the current block,

wherein the current block is a first block of the current picture; and

wherein generating the MV candidate list comprises:

determining one or more history-based motion vector prediction (HMVP) candidates; and

including, as a last candidate in the MV candidate list, an HMVP candidate of the one or more HMVP candidates;

selecting, from the MV candidate list, a particular MV candidate that identifies a predictor block in the current picture;

reconstructing pixels of the current block based on pixels of the predictor block;

responsive to determining to predict a second block of the current picture of video data using inter prediction, generating a MV candidate list for the second block, wherein generating the MV candidate list for the second block comprises:

determining a maximum number of candidates to be included in the MV candidate list for the second block; and

responsive to determining that a quantity of candidates in the MV candidate list for the second block is equal to the maximum number of candidates to be included in the MV candidate list for the second block minus one, refraining from including additional HMVP candidates for the second block in the MV candidate list for the second block such that the last candidate in the MV candidate list for the second block is not an HMVP candidate;

selecting, from the MV candidate list for the second block, a particular MV candidate that identifies a predictor block for the second block in a picture of the video data that is not the same as the current picture; and

reconstructing pixels of the second block based on pixels of the predictor block for the second block.

2. The method of claim 1, wherein generating the MV candidate list for the first block comprises not evaluating any pairwise candidates for inclusion in the MV candidate list for the first block.

3. The method of claim 2, wherein generating the MV candidate list for the second block comprises evaluating one or more pairwise candidates for inclusion in the MV candidate list for the second block.

4. The method of claim 3, wherein generating the MV candidate list for the first block further comprises:

evaluating an above-left neighboring B2 candidate for inclusion in the MV candidate list for the first block where a current number of candidates included in the MV candidate list for the first block is greater than or equal to four.

5. The method of claim 3, wherein the MV candidate list for the first block comprises an IBC merge/skip list.

6. A device for coding video data, the device comprising:

a memory configured to store the video data; and

one or more processors that are implemented in circuitry and configured to:

generate, responsive to determining to predict a current block of a current picture of video data using intra block copy (IBC), a motion vector (MV) candidate list for the current block,

wherein the current block is a first block of the current picture; and

wherein, to generate the MV candidate list, the one or more processors are configured to:

determine one or more history-based motion vector prediction (HMVP) candidates; and

include, as a last candidate in the MV candidate list, an HMVP candidate of the one or more HMVP candidates;

select, from the MV candidate list, a particular MV candidate that identifies a predictor block in the current picture;

reconstruct pixels of the current block based on pixels of the predictor block;

generate, responsive to determining to predict a second block of the current picture of video data using inter prediction, a MV candidate list for the second block, wherein, to generate the MV candidate list for the second block, the one or more processors are configured to:

determine a maximum number of candidates to be included in the MV candidate list for the second block; and

refrain, responsive to determining that a quantity of candidates in the MV candidate list for the second block is equal to the maximum number of candidates to be included in the MV candidate list for the second block minus one, from including additional HMVP candidates for the second block in the MV candidate list for the second block such that the last candidate in the MV candidate list for the second block is not an HMVP candidate;

select, from the MV candidate list for the second block, a particular MV candidate that identifies a predictor block for the second block in a picture of the video data that is not the same as the current picture; and

reconstruct pixels of the second block based on pixels of the predictor block for the second block.

7. The device of claim 6, wherein, to generate the MV candidate list for the first block, the one or more processors are configured to not evaluate any pairwise candidates for inclusion in the MV candidate list for the first block.

8. The device of claim 7, wherein, to generate the MV candidate list for the second block, the one or more processors are configured to evaluate one or more pairwise candidates for inclusion in the MV candidate list for the second block.

9. The device of claim 8, wherein, to generate the MV candidate list for the first block, the one or more processors are configured to:

evaluate a B2 candidate for inclusion in the MV candidate list for the first block where a current number of candidates included in the MV candidate list for the first block is greater than or equal to four.

10. The device of claim 8, wherein the MV candidate list for the first block comprises an IBC merge/skip list.

11. The device of claim 6, wherein the video coder comprises a video decoder.

12. The device of claim 11, further comprising a display configured to display decoded video data.

13. The device of claim 11, wherein the device comprises one or more of a camera, a computer, a mobile device, a broadcast receiver device, or a set-top box.

14. The device of claim 6, wherein the device comprises a video encoder.

15. A computer-readable storage medium storing instructions that, when executed, cause one or more processors of a video coder to:

generate, responsive to determining to predict a current block of a current picture of video data using intra block copy (IBC), a motion vector (MV) candidate list for the current block,

wherein the current block is a first block of the current picture; and

wherein the instructions that cause the one or more processors to generate the MV candidate list comprise instructions that cause the one or more processors to:

determine one or more history-based motion vector prediction (HMVP) candidates; and

include, as a last candidate in the MV candidate list, an HMVP candidate of the one or more HMVP candidates;

select, from the MV candidate list, a particular MV candidate that identifies a predictor block in the current picture;

reconstruct pixels of the current block based on pixels of the predictor block;

generate, responsive to determining to predict a second block of the current picture of video data using inter prediction, a MV candidate list for the second block, wherein the instructions that cause the one or more processors to generate the MV candidate list for the second block comprise instructions that cause the one or more processors to:

determine a maximum number of candidates to be included in the MV candidate list for the second block; and

refrain, responsive to determining that a quantity of candidates in the MV candidate list for the second block is equal to the maximum number of candidates to be included in the MV candidate list for the second block minus one, from including additional HMVP candidates for the second block in the MV candidate list for the second block such that the last candidate in the MV candidate list for the second block is not an HMVP candidate;

select, from the MV candidate list for the second block, a particular MV candidate that identifies a predictor block for the second block in a picture of the video data that is not the same as the current picture; and

reconstruct pixels of the second block based on pixels of the predictor block for the second block.

16. The computer-readable storage medium of claim 15, wherein the instructions that cause the one or more processors to generate the MV candidate list for the first block comprise instructions that cause the one or more processors to not evaluate any pairwise candidates for inclusion in the MV candidate list for the first block.

17. The computer-readable storage medium of claim 16, wherein the instructions that cause the one or more processors to generate the MV candidate list for the second block comprise instructions that cause the one or more processors to evaluate one or more pairwise candidates for inclusion in the MV candidate list for the second block.