

WHAT IS CLAIMED IS:

1. A decoder, the decoder comprising circuitry configured to:
receive a bitstream;
5 construct, for a current block, a motion vector candidate list including a motion vector
candidate having motion information that characterizes a global motion vector;
reorder the motion vector candidate list such that the motion vector candidate having the
motion information that characterizes the global motion vector is first in the
reordered motion vector candidate list; and
10 reconstruct pixel data of the current block and using the reordered motion vector
candidate list.
2. The decoder of claim 1, the decoder configured to determine global motion is indicated
for a current frame that includes the current block.
3. The decoder of claim 1, wherein the reordering includes inserting a first global motion
15 vector candidate into the merge candidate list.
4. The decoder of claim 1, wherein the constructing of the motion vector candidate list
includes the reordering.
5. The decoder of claim 1, wherein the global motion vector includes a control point motion
vector.
- 20 6. The decoder of claim 5, wherein the control point motion vector is a translational motion
vector.
7. The decoder of claim 5, wherein the control point motion vector is a vector of a four
parameter affine motion model
8. The decoder of claim 5, wherein the control point motion vector is a vector of a six
25 parameter affine motion model.
9. The decoder of claim 1, the decoder further comprising:
an entropy decoder processor configured to receive the bit stream and decode the
bitstream into quantized coefficients;
an inverse quantization and inverse transformation processor configured to process the
30 quantized coefficients including performing an inverse discrete cosine;
a deblocking filter;

- a frame buffer; and
an intra prediction processor.
10. The decoder of claim 1, wherein the current block forms part of a quadtree plus binary decision tree.
- 5 11. The decoder of claim 1, wherein the current block is a coding tree unit
12. The decoder of claim 1, wherein the current block is a coding unit.
13. The decoder of claim 1, wherein the current block is a prediction unit.
14. A method comprising:
receiving, by a decoder, a bitstream;
- 10 constructing, for a current block, a motion vector candidate list including a motion vector candidate having motion information that characterizes a global motion vector;
reordering the motion vector candidate list such that the motion vector candidate having the motion information that characterizes the global motion vector is first in the reordered motion vector candidate list; and
- 15 reconstructing pixel data of the current block and using the reordered motion vector candidate list.
15. The method of claim 14, the decoder configured to determine global motion is indicated for a current frame that includes the current block.
16. The method of claim 14, wherein the reordering includes inserting a first global motion vector candidate into the merge candidate list.
- 20 17. The method of claim 14, wherein the constructing of the motion vector candidate list includes the reordering.
18. The method of claim 14, wherein the global motion vector includes a control point motion vector.
- 25 19. The method of claim 18, wherein the control point motion vector is a translational motion vector.
20. The method of claim 18, wherein the control point motion vector is a vector of a four parameter affine motion model;
21. The method of claim 18, wherein the control point motion vector is a vector of a six parameter affine motion model.
- 30 22. The method of claim 14, the decoder further comprising:

- an entropy decoder processor configured to receive the bit stream and decode the
bitstream into quantized coefficients;
an inverse quantization and inverse transformation processor configured to process the
quantized coefficients including performing an inverse discrete cosine;
5 a deblocking filter;
a frame buffer; and
an intra prediction processor.
23. The method of claim 14, wherein the current block forms part of a quadtree plus binary
decision tree.
- 10 24. The method of claim 14, wherein the current block is a coding tree unit;
25. The method of claim 14, wherein the current block is a coding unit;
26. The method of claim 14, wherein the current block is a prediction unit.
27. The method of claim 14, wherein the global motion vector is characterized by a header of
the bitstream, the header including a picture parameter set (PPS) or a sequence parameter
15 set (SPS).
28. The method of claim 14, wherein the motion vector candidate list is a merge vector
candidate list.