

WHAT IS CLAIMED IS:

1. A decoder, the decoder comprising circuitry configured to:

receive a coded bitstream including a Sequence Parameter Set, and a sequence of coded pictures, including a current coded picture, the current coded picture including a first region comprising a first contiguous plurality of coding units and a second region comprising a second contiguous plurality of coding units, the first region having global motion and the second region having local motion, wherein the Sequence Parameter Set allows three global motion modes for a sequence of coded pictures, and wherein the three global motion modes include translational motion, 4-parameter affine motion, and 6-parameter affine motion;

detect in the Sequence Parameter Set that only translational global motion model is enabled, and that the affine global motion modes are disabled for the sequence of coded pictures; decode the first contiguous plurality of coding units in the first region of the current coded picture using translational motion to reconstruct the global motion; and decode the second contiguous plurality of coding units in the second region to reconstruct the local motion.

2. A method comprising:

receiving, by a decoder, a coded bitstream including a Sequence Parameter Set and a sequence of coded pictures, including a current coded picture, the current coded picture including a first region comprising a first contiguous plurality of coding units and a second region comprising a second contiguous plurality of coding units, the first region having global motion and the second region having local motion, wherein the Sequence Parameter Set allows three global motion modes for a sequence of coded pictures, and wherein the three global motion modes include translational motion, 4-parameter affine motion, and 6-parameter affine motion;

detecting in the Sequence Parameter Set that only translational global motion model is enabled, and that the affine global motion modes are disabled for the sequence of coded pictures;

decoding the first contiguous plurality of coding units in the first region of the current coded picture using translational motion to reconstruct the global motion; and

decoding the second contiguous plurality of coding units in the second region to reconstruct the local motion.