

WHAT IS CLAIMED IS:

1. A decoder, the decoder comprising circuitry configured to:
 - receive a bitstream, including coded picture data for a sequence of coded pictures including a current picture, the current picture comprising a plurality of $n \times n$ coding units including a first contiguous plurality of coding units with common motion and a second contiguous plurality of coding units with local motion, and motion vector difference information for three control point motion vectors for 6- parameter affine motion compensation;
 - combine the motion vector difference information from the bitstream with a prediction of three control point motion vectors determined from three previously utilized motion vectors to form three current control point motion vectors; and
 - utilize the three current control point motion vectors and 6-parameter affine motion compensation to decode the coded picture data of the current picture in the sequence of coded pictures.
2. The decoder of claim 1, 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;
 - a deblocking filter; a frame buffer; and
 - an intra prediction processor.
3. The decoder of claim 1, wherein the first contiguous plurality of coding units and the second contiguous plurality of units comprise the entire picture.
4. The decoder of claim 1, wherein the prediction of three control point motion vectors is obtained from motion vectors utilized to decode a temporally prior picture in the sequence to the current picture.
5. The decoder of claim 1, wherein the value of n is one of 16, 32, 64 or 128.

6. A decoder configured to:

receive a bit stream, the bitstream including coded picture data for a sequence of coded pictures and motion vector difference information for three control point motion vectors for 6-parameter affine motion compensation;

combine the motion vector difference information from the bitstream with a prediction of three control point motion vectors to form three current control point motion vectors, said prediction of three control point motion vectors being obtained from motion vectors utilized to decode a temporally prior picture in the sequence to the current picture; and

utilize the three current control point motion vectors and 6-parameter affine motion compensation to decode coded picture data of the current picture in the sequence of coded pictures.

7. The decoder of claim 6, wherein the coded picture data further comprises a first contiguous plurality of coding units with common motion and a second contiguous plurality of coding units with local motion.

8. The decoder of claim 7, wherein the first contiguous plurality of coding units and the second contiguous plurality of units comprise the entire picture.