ADAPTIVE CONTROL POINT SELECTION FOR AFFINE MOTION MODEL BASED VIDEO CODING

ABSTRACT

Systems, methods, and instrumentalities are disclosed for motion vector clipping when affine motion mode is enabled for a video block. A video coding device may determine that an affine mode for a video block is enabled. The video coding device may determine a plurality of control point affine motion vectors associated with the video block. The video coding device may store the plurality of clipped control point affine motion vectors for motion vector prediction of a neighboring control point affine motion vector. The video coding device may derive a sub-block motion vector associated with a sub-block of the video block, clip the derived sub-block motion vector, and store it for spatial motion vector prediction or temporal motion vector prediction. For example, the video coding device may clip the derived sub-block motion vector based on a motion field range that may be based on a bit depth value.

FIG. 15