ABSTRACT

The present disclosure relates to a method of decoding a video picture, by means of motion compensated temporal bi-prediction of an inter coded block using two reference video pictures in two separate reference video picture lists, and two affine motion fields defined by at least two control point motion vectors (CPMVs) associated to each reference picture. The method includes: for each CPMV, performing a bilateral matching being performed for a block centred on the CPMV to derive at least two refined CPMVs at an integer precision, and selecting a set of CPMVs comprising non-refined or refined CPMVs at an integer precision to lead to an overall predicted block with a minimum bilateral matching cost; for each successive CPMV of the selected set of CPMVs that is associated with a block, refining each CPMV at a sub-sample precision to minimize a bilateral matching cost of the block, where the refining is bypassed according to a comparison between a bilateral matching cost associated with the CPMV for which the bilateral matching is performed and a threshold.

Fig. 15