Usage of DCT based interpolation filter and enhanced bilinear interpolation filter in affine motion compensation

~~CROSS-REFERENCE TO RELATED APPLICATION~~

~~This patent application claims the benefit of priority to U.S. Provisional Patent Application No. 62/908,594, filed September 30, 2019, U.S. Provisional Patent Application No. US62/912,049, filed October 7, 2019, PCT/RU2019/000690, filed September 30, 2019, and PCT/RU2019/000691, filed September 30, 2019. The aforementioned patent applications are hereby incorporated by reference in their entireties.~~

TECHNICAL FIELD

Embodiments of the present application (disclosure) generally relate to the field of picture processing and more particularly to inter prediction, i.e. adaptive usage of discrete cosine transform based interpolation filter and enhanced bilinear interpolation filter in affine motion compensation.

BACKGROUND

Video coding (video encoding and decoding) is used in a wide range of digital video applications, for example broadcast digital TV, video transmission over internet and mobile networks, real-time conversational applications such as video chat, video conferencing, DVD and Blu-ray discs, video content acquisition and editing systems, and camcorders of security applications.

The amount of video data needed to depict even a relatively short video can be substantial, which may result in difficulties when the data is to be streamed or otherwise communicated across a communications network with limited bandwidth capacity. Thus, video data is generally compressed before being communicated across modern day telecommunications networks. The size of a video could also be an issue when the video is stored on a storage device because memory resources may be limited. Video compression devices often use software and/or hardware at the source to code the video data prior to transmission or storage, thereby decreasing the quantity of data needed to represent digital video images. The compressed data is then received at the destination by a video decompression device that decodes the video data. With limited network resources and ever increasing demands of