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(54) Title: FRAGMENTED REFERENCE IN TEMPORAL COMPRESSION FOR VIDEO CODING

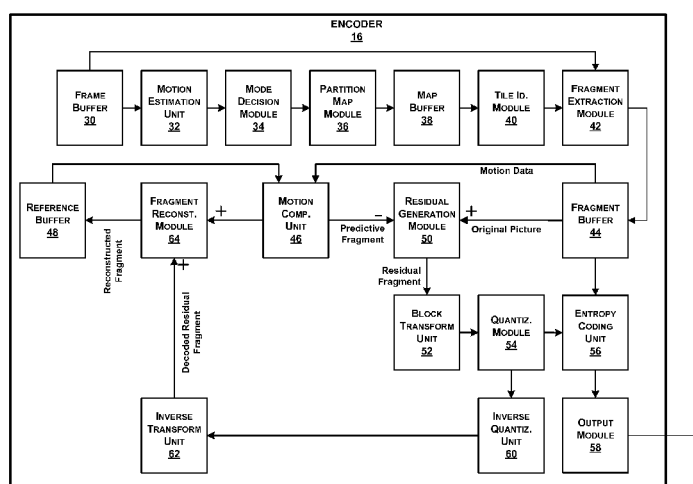


FIG. 2

(57) Abstract: In general, this disclosure describes techniques for encoding and decoding sequences of video frames using fragmentary reference pictures. The disclosure presents video encoding and decoding techniques for modified temporal compression based on fragmented references rather than complete reference pictures. In a typical sequence of video frames, only a portion (i.e., a tile) of each frame includes moving objects. Moreover, in each frame, the moving objects tend to be confined to specific areas that are common among each frame in the sequence of video frames. As described herein, such common areas of motion are identified. Pictures are then extracted from the identified areas of the video frames. Because these pictures may represent only portions of the frames, this disclosure refers to these pictures as "fragments." It is then these fragments that are used as reference pictures for generating predicted frames during a motion compensation process, rather than the entire frame.