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(54) **Title:** ADAPTIVE BILATERAL MATCHING FOR DECODER SIDE MOTION VECTOR REFINEMENT

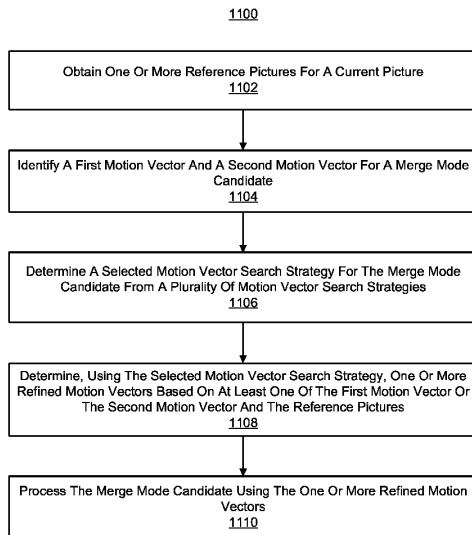


FIG. 11

(57) **Abstract:** Systems and techniques are provided for processing video data. For example, the systems and techniques can include obtaining a current picture of video data and obtaining reference pictures for the current picture from the video data. A merge mode candidate can be determined for the current picture. First and second motion vectors can be identified for the merge mode candidate. A motion vector search strategy can be selected for the merge mode candidate from a plurality of motion vector search strategies. The selected motion vector search strategy can be associated with one or more constraints corresponding to at least one of the first motion vector or the second motion vector. The selected motion vector search strategy can be used to determine refined motion vectors based on the first motion vector, the second motion vector, and the reference pictures. The merge mode candidate can be processed using the refined motion vectors.

[Continued on next page]

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