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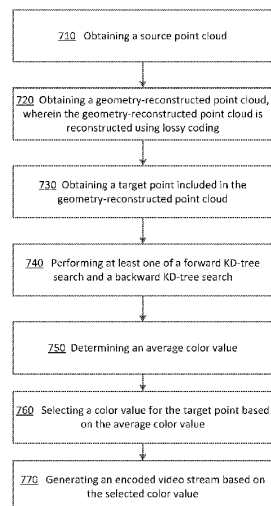
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(54) **Title:** FAST RECOLOR FOR VIDEO BASED POINT CLOUD CODING

FIG. 7 700



(57) **Abstract:** Methods and apparatuses of encoding a video stream using video point cloud coding include obtaining a source point cloud; obtaining a geometry-reconstructed point cloud; obtaining a target point included in the geometry-reconstructed point cloud; performing at least one of a forward K-dimensional (KD)-tree search to determine a first plurality of points of the source point cloud which are nearest neighbors to the target point, and a backward KDtree search to determine a second plurality of points of the source point cloud for which the target point is a nearest neighbor; determining an average color value; selecting a color value for the target point based on the average color value; and generating an encoded video stream based on the selected color value.

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