

ABSTRACT

Methods and apparatuses of encoding a video stream using video point cloud coding include obtaining a source point cloud; generating a geometry map and a texture map based on the source point cloud; generating a reconstructed geometry map and a reconstructed texture map using lossy coding without using recoloring, wherein a resolution of the reconstructed geometry map is same as a resolution of the reconstructed texture map; obtaining a point of the source point cloud corresponding to a geometry pixel of the geometry map and a texture pixel of the texture map; selecting a color of the texture pixel based on a color of the obtained point; and generating an encoded video stream based on the selected color, the geometry map, and the texture map.