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(54) Title: POINT CLOUD ATTRIBUTE COMPRESSION

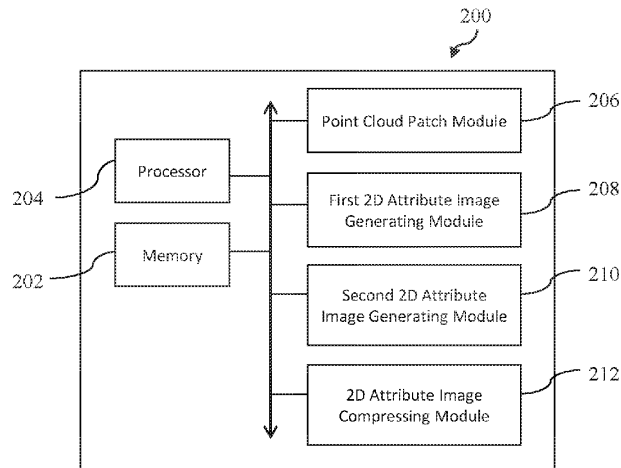


FIG. 2

(57) Abstract: There is provided a method of point cloud attribute compression. The method includes: obtaining a plurality of 3D patches of a point cloud, each 3D patch including a set of 3D points; generating, for each of the plurality of 3D patches, a 2D attribute image of the 3D patch, to obtain a plurality of 2D attribute images of the plurality of 3D patches, whereby for at least a first 3D patch of the plurality of 3D patches, the 2D attribute image of the first 3D patch is generated based on a first attribute image generation process; generating a 2D attribute image of the point cloud based on the plurality of 2D attribute images of the plurality of 3D patches; and compressing the 2D attribute image of the point cloud based on a 2D image codec to obtain a compressed 2D attribute image of the point cloud. In particular, the first attribute image generation process includes: a point linearization stage configured to transform a set of 3D points of an input 3D patch inputted thereto into a 1D point sequence of the input 3D patch; and a first 2D space filling stage configured to map the 1D point sequence of the input 3D patch to a first 2D image pixel grid to generate a 2D attribute image of the input 3D patch. There is also provided a corresponding system for point cloud attribute compression.

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