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(54) BIT STREAM STRUCTURE FOR COMPRESSED POINT CLOUD DATA

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(57) **ABSTRACT**

A system comprises an encoder configured to compress attribute information and/or spatial information for a point cloud and/or a decoder configured to decompress compressed attribute and/or spatial information for the point cloud. To compress the attribute and/or spatial information, the encoder is configured to convert a point cloud into an image based representation. Also, the decoder is configured to generate a decompressed point cloud based on an image based representation of a point cloud. In some embodiments, a bit stream structure may be used to communicate compressed point cloud data. The bit stream structure may include point cloud compression network abstraction layer (PCCNAL) units that enable use of groups of frames (GOFs), frame, and sub-frame signaling of patch information. Such a bit stream structure may permit low delay streaming and random access reconstruction of point clouds amongst other applications.