

ABSTRACT

POINT CLOUD ENCODING METHOD, POINT CLOUD DECODING METHOD, ENCODER, AND DECODER

5 Embodiments of this application relate to the field of coding technologies, and disclose a point cloud encoding method, a point cloud decoding method, an encoder, and a decoder, to provide technical solutions to effectively encoding and decoding point cloud data. The point cloud encoding method may include: acquiring a normal axis of a to-be-encoded patch in a to-be-encoded point cloud and description information of a minimum bounding rectangle corresponding to the to-be-encoded patch, where the normal axis of the to-be-encoded patch and the description information of the minimum bounding rectangle corresponding to the to-be-encoded patch are used to determine a
10 tangent axis of the to-be-encoded patch and a bitangent axis of the to-be-encoded patch; and encoding a syntax element into a bitstream, where the syntax element is used to indicate the tangent axis of the to-be-encoded patch and the bitangent axis of the to-be-encoded patch, and the syntax element includes an index of the normal axis of the to-be-encoded patch and information used to indicate the description information of the minimum bounding rectangle
15 corresponding to the to-be-encoded patch.

Fig. 9