

ABSTRACT

Embodiments of this application relate to the field of encoding and decoding technologies, and disclose a point cloud encoding method, a point cloud decoding method, an encoder, and a decoder, to provide technical solutions for effectively encoding and decoding point cloud data. The point cloud encoding method includes: obtaining description
5 information of a bounding box size of a to-be-encoded point cloud and a normal axis of a to-be-encoded patch patch in the to-be-encoded point cloud, where the description information of the bounding box size of the to-be-encoded point cloud and the normal axis of the to-be-encoded patch are used to determine a 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 includes an index of the normal axis of the to-be-encoded patch and information used to indicate the
10 description information of the bounding box size of the to-be-encoded point cloud, and 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.

FIGURE 9