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(54) Title: METHOD AND APPARATUS OF ENCODING/DECODING POINT CLOUD GEOMETRY DATA USING AZIMUTHAL CODING MODE

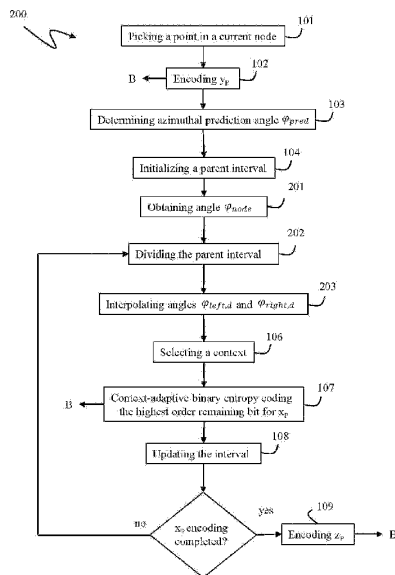


Fig. 10

(57) Abstract: There is provided methods and apparatus of encoding/decoding points of a point cloud into/from a bitstream of encoded point cloud data representing a physical object. The methods comprise an azimuthal coding mode providing a series of bits for encoding/decoding a coordinate of a point of a point cloud along an azimuthal coding direction. Contexts of a context-based entropy encoding/decoding are selected for encoding/decoding the bits of the series of bits. Context selection is based on an apparent angle (AA_d) associated with an interval along the azimuthal coding direction representing the coordinate of the point. The apparent angle (AA_d) estimates an interval angle seen from a sensor that captured the point at a particular depth. Selected contexts exhibit more accurate statistics for the probability of bits b_d to be 0 or 1 and context-based entropy coding of coordinates of points of a point cloud is improved.