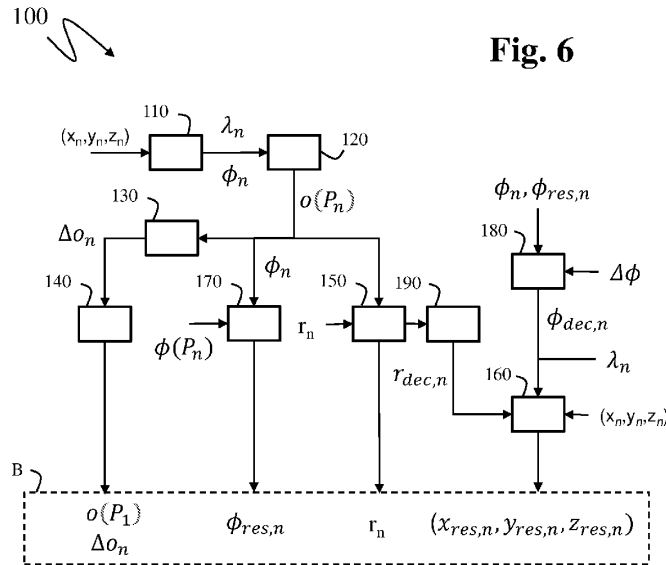


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NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,(54) Title: METHOD AND APPARATUS OF ENCODING/DECODING POINT CLOUD GEOMETRY DATA CAPTURED BY A
SPINNING SENSORS HEAD**Fig. 6**(57) **Abstract:** There is provided methods and apparatus of encoding/decoding a point cloud representing a physical object. Points are captured by a spinning sensors head and are represented by sensor indices associated with sensors that captured the points, azimuthal angles representing capture angles of said sensors, and radius values of spherical coordinates of the point. Points are ordered based on order indices obtained from the azimuthal angles and the sensor indices. Order index differences are encoded. An order index difference represents a difference between order indices associated with two consecutive ordered points. Optionally, the method encodes radius values, residual azimuthal angles associated with ordered points and residuals of three-dimensional cartesian coordinates of ordered points based on their three-dimensional cartesian coordinates, decoded azimuthal angles based on azimuthal angles, decoded radius values and sensor indices.

[Continued on next page]

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