

COORDINATES DETERMINATION METHOD AND APPARATUS FOR NAVIGATION AND SITUATIONAL APPLICATIONS

ABSTRACT

The present invention provides an apparatus for determining coordinates, especially spherical coordinates. The coordinates determination apparatus in accordance with one embodiment of the present invention comprises an inner sphere having a first surface, a second surface and an inner space surrounded by the second surface; wherein disposed within the inner space are at least a light source 1 and a light source 2, a magnet and a weight; and a fixed shell having a first surface and a second surface; wherein the second surface of the fixed shell is spaced from the first surface of the inner sphere to form an interspace that is filled with a liquid so that the inner sphere can freely rotate in relation to the fixed shell; wherein the first surface of the fixed shell is with grids with photo-sensitive cells so that when the inner sphere freely rotates, the coordinates can be determined at any point.

FIG 1