

An Electronic Sundial Compass and A Measurement Method Using the Compass

ABSTRACT

A compass device comprises a housing, a positioning needle (101), a sundial needle (102), a sensor (304), and a circuit device; wherein the sundial needle (102) is a straight needle-shaped object which is secured at the rotation centre of the positioning needle (101) and is perpendicular to the plane of rotation of the positioning needle (101); the sensor (304) is secured on the housing, when the positioning needle (101) is rotated to a position that the positioning needle (101) overlaps with the sun shadow of the sundial needle (102), the sensor (304) detects the measured angle value of the object under measurement; the circuit device installed in the compass device compares the aforesaid measured value with the inherent sun shadow angle, and output the difference value through a display device to indicate the azimuth of the object under measurement.

Fig. 6