

ABSTRACT

INTEGRATED PERCEPTUAL POSITIONING SYSTEM BASED ON 3-DIMENSIONAL INFORMATION MODEL

An integrated perceptual positioning system based on 3-dimensional information model comprises a building information model and facility instrument database and a mobile device. The database has at least one building drawing, a cursor unit, and a plurality of instrument information display units. The mobile device has a transmission unit, a record unit, a display monitor, a photographing unit, and an integrated perceptual positioning module. The positioning module continuously positions the moving track of the real location and coordinate of the mobile device shown in the building drawing and on the display monitor, and the cursor unit is moved corresponding to the movement of the mobile unit shown on the display monitor. The building drawing on the display monitor is compared with the structures, the instruments, and facilities, and the high efficient management of checking and verifying the instrument element of the building drawing and the reality structure may be achieved.

Fig. 2