

DETECTION SYSTEM OF BUILDING SPACE STATE BASED ON LIDAR POINT CLOUD FEATURES AND DETECTION METHOD THEREOF

ABSTRACT OF THE DISCLOSURE

A detection system of a building space state based on LiDAR point cloud features and a detection method thereof are disclosure. The detection estimation system includes a point cloud filtering and segmentation module, a building space feature analysis module, a building space state recognition module and an obstacle detection module. Base on the LiDAR point cloud feature, the detection method allows to find the reference coordinates, the space state of an entrance and the space state of an bordered space in the building space, detect human/obstacle inside/entrance the bordered space and determine their location, and further perform exception state recognition. It facilitates to realize autonomous perception of the building space state and landmark positioning for AMR.

FIG. 1