ONE-TO-MANY-SURFACE PARKING LOT MANAGEMENT SYSTEM USING OMNIDIRECTIONAL CAMERA AND MANAGEMENT METHOD THEREOF

ABSTRACT

[109] The present invention relates to a parking lot management system and a management method thereof, which can detect a vehicle parked on a plurality of parking surfaces using an omnidirectional camera and perform a security function at the same time. In a system for managing a parking lot having a plurality of parking surfaces arranged configuring a plurality of columns, a one-to-many-surface parking lot management system related to an embodiment of the present invention includes: an omnidirectional camera installed on a ceiling of the parking lot between two adjacent columns among the plurality of columns and provided with a fisheye lens to photograph a surveillance image of all directions; a cable connected to the omnidirectional camera to transmit the surveillance image; and a management server connected to the cable to receive the surveillance image, in which the management server includes: a vehicle sensing module for determining whether or not a vehicle is parked on the plurality of parking surfaces; and a security module provided with a memory for storing the surveillance image, and some of parking surfaces arranged in a first column and some of parking surfaces arranged in a second column are photographed in the surveillance image, and the first column and the second column are two adjacent columns where the omnidirectional camera is installed.

[Fig. 1]