

ABSTRACT

Disclosed is a shared bicycle parking management system and method based on Internet of Things. The system includes a back end control system, a user mobile phone control system, and a plurality of locking and parking apparatuses, each of which is provided with at least one dock with built-in lock. The dock with built-in lock includes a dock body, a locking device installed on the dock body, a locking device identification code adhered to the dock body, and a main control circuit board and a first short-range wireless communication module that are arranged in the dock body, where the locking device and the first short-range wireless communication module are both coupled to the main control circuit board, and the back end control system is coupled to the user mobile phone control system via wireless communication. The present disclosure may realize automatic renting and returning of the bicycle on the locking and parking apparatus, avoiding the situation where the user randomly parks the bicycle when returning it. This method may realize the orderly and safe parking of the shared bicycles, as well as efficient and convenient monitoring and supervising of the shared bicycles, with a low management cost. Thus, this method may be widely used in shared bicycles management industry.

FIG. 3