

ABSTRACT

The present invention relates to an unmanned vehicle charging system and a control method thereof, the unmanned vehicle charging system comprising: a vehicle charging station, one side of which is connected to a vehicle charging port while a vehicle is parked, and the other side of which has a docking port that is electrically connected to the vehicle charging port; a mobile robot onto which a battery is loaded at a battery charging station and which transports the battery to the vehicle charging station; and a controller that controls the vehicle charging station and the mobile robot to transport the battery from the battery charging station to the vehicle charging station when a preset charging entry condition is satisfied, and charges the vehicle by connecting the battery to the docking part.

FIG. 6