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(57) Abstract :

An electric vehicle charging system is described for use in parking lots. The system includes a driving unit (10) moving along a predetermined route, a recognition unit (20) identifying parked vehicles on this route, and an authentication unit (30) verifying if the recognized vehicle is registered. Once authenticated, a power supply unit (40) charges the vehicle's battery. Additionally, a communication unit (50) conveys vehicle details to a management server and receives authentication signals. Some parking lots feature a marker (60), aiding the recognition unit (20) in its task. This marker (60) can be divided into separate sections along a parking line. The recognition unit (20) can also analyze license plates to retrieve vehicle identification numbers. An additional charging unit (70) can provide external power to the power supply unit (40). The charging approach focuses on automating charging for registered vehicles in designated areas.

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