

ABSTRACT

A mid-engine extended range electric vehicle includes a vehicle body, a turbo shaft engine, a battery pack, an electric generator, a vehicle control unit, drive motors, a gas controller, a battery controller, a gas storage tank and an intake box. Wherein the vehicle body includes a main body, bottom structure thereof forms frames of the vehicle; the engine is arranged on the frames between front and rear axles and near to the rear axle; an output shaft axis of the engine is located on a symmetry plane of the vehicle body, and an air inlet thereof faces tail of the vehicle; the intake box is communicated with the air inlet and is communicated with intake grilles on a covering piece of the vehicle body via pipelines. The vehicle has features of high effective energy conversion, good operating performance, long endurance mileage and high strength body.

Fig. 1