

Energy Efficiency Evaluation of Fuel cells and Batteries Hybrid Railway Test Vehicles

Takamitsu YAMAMOTO Hitoshi HASEGAWA

Takemasa FURUYA Kenichi OGAWA

Fuel cells have been receiving attention as a clean and high efficiency power-supply system. We have been developing a new type of railway vehicle powered by fuel cells in order to replace conventional diesel vehicle in non-electrified areas. We have installed a hybrid system using fuel cells and batteries in our test vehicles and carried out test running in our test track using these vehicles. This paper describes the development of fuel cells and batteries hybrid test vehicles and an evaluation of energy efficiency and fuel consumption rate in this hybrid system.