CONTROLLER, ELECTRIC POWER SYSTEM COMPRISING THE CONTROLLER, METHOD OF OPERATING THE SYSTEM, AND VEHICLE COMPRISING THE SYSTEM

ABSTRACT

An electric power system (10) for an electric vehicle (300), including: first charging and discharging current paths (101C, 101D) connected to a first battery unit (20); second charging and discharging current paths (102C, 102D) connected to a second battery unit (30); third charging and discharging current paths (103C, 103D) for a connection with an electric control system (40) of the vehicle (300); a first power switch (111) between the first discharging current path (101D) and the third discharging current path (103D); a second power switch (112) between the second discharging current path (102D) and the third discharging current path (103D); a controlling unit (120) to set the first and second power switches (111, 112) based on states of the accumulators, at least one of the first and second battery units (20, 30) being swappable. A controller (100), a method, and a vehicle (300) comprising the system (10) are also disclosed.

FIG. 1