

ABSTRACT

This method for diagnosing a battery pack having a configuration in which a plurality of cells are connected in series, using a system for obtaining detected data including the current and temperature of the battery pack and the voltage of each cell, includes: a step of calculating an electric charge capacity and a state of charge (SOC) of each cell, using the current and the temperature, the voltage of each cell, an open circuit voltage (OCV) - SOC function, and an OCV - resistance table, and calculating an amount of unbalance, which is an estimated value of the SOC, and the resistance for each cell when the battery pack is fully charged; and a step of calculating the energy capacity of the battery pack using the electric charge capacity, the amount of unbalance, and the resistances. As a result, the energy capacity of the battery pack can be calculated accurately, even in an unbalanced state.

[Figure 1]