Development of Monitoring Device for Battery Charge/Discharge Control as Electrical Energy Storage in Mini-Generating Systems

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ABSTRACT

The battery is one of the crucial elements in an electrical system. In electric vehicles, the batteries used are Li-Ion batteries. Most Li-Ion batteries are also reusable. In addition, waste Li-Ion batteries can be used as electrical energy storage devices, such as in mini-power generation systems. With the existence of several power plants that do not use fossil energy as a means of the production process, it will automatically reduce the impact of environmental pollution. This study uses electric vehicle batteries to be used as storage of electrical energy in a mini-generating system. In its implementation, a control monitoring tool is also made and developed to determine the charging and discharging of the battery. This monitoring system is useful for keeping the battery in great condition.

Kata Kunci: *Battery, Control Monitoring, Energy Storage System, Electric Vehicle, Lithium-Ion, Mini-Generating System*