BATTERY CHARGER SYSTEM USING MAXIMUM POWER POINT TRACKER (MPPT)

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ABSTRACT

Photovoltaic (PV) Solar present nonlinear I-V characteristics for battery charger system. This paper presents a development on the solar battery charger control system using Maximum Power Point Tracker (MPPT). MPPT technique is used in the system to detect the real maximum power deliver from the PV solar panel to charge the battery. Buck Chopper works as an electronic device in the control system to step down the voltage depend on current to get a maximum power. By using Microcontroller (PIC) in the system as a main controller that use to control the duty cycle of the buck converter, this solar battery charger operate at optimum level when the modules are able to deliver maximum available power.

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