IC-024 ENERGY FLOW CONTROL FOR SOLAR CAR

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Solar car driving system uses energy from PV as main supplying source and in case of energy is not enough, the energy from batteries is used as substitution source. If energy from batteries is used over minimum state of charge, the time life will be short. This paper presents a method for energy control in batteries, which maintains the state of charge in higher level than minimum state. In this method, using three factors as following uses fuzzy controller to control appropriate speed of solar car. The first one is the power and energy consumption of solar car. The second one is charge of batteries and the last one is derivative of battery charge. The result of model simulation for efficiency evaluation showed this controller system could maintain the state of charge higher than the minimum state.