

Study on improving electric vehicle drive range using solar energy

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ABSTRACT

With emphasis on a cleaner environment and efficient operation, vehicles today rely more and more heavily on electrical power generation for success. The objective of this project is to propose drive range improvement for electric vehicle using solar energy. First, power consumption modeling based on Proton Savvy using torque analysis to achieve 45mph vehicle top speed when converted to electric vehicle. Second, for continuous battery charger three solar panel (each panel with 125W) controllers had been developed. Finally, calculation, analysis and various tests are performed based on Savvy technical specifications, energy consumption requirement and vehicle movement using this proposed method.

KEYWORDS:

Solar Energy; electrical vehicle; control

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