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(57) Abstract :
[060] This invention relates to a novel solar-powered electric vehicle (SPEV) system, offering a sustainable solution to conventional fossil fuel-powered transportation. The SPEV integrates advanced photovoltaic technology onto the vehicle's surface, allowing for the direct conversion of sunlight into electricity to power its electric drivetrain. Through strategic placement of lightweight and flexible solar panels, the SPEV maximizes energy capture efficiency while minimizing aerodynamic drag. Advanced energy storage and management systems optimize the utilization of solar-generated electricity, ensuring reliable and efficient operation under various driving conditions. The SPEV system offers environmental benefits by reducing greenhouse gas emissions and promoting energy independence. Additionally, it presents economic advantages through lower operating costs and potential savings on fuel expenses. Furthermore, the SPEV contributes to technological innovation, societal progress, and the transition towards a more sustainable transportation ecosystem. Accompanied Drawing [FIGS. 1-2]

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