

(54) Title of the invention : A METHOD FOR ENHANCING EFFICIENCY OF NANOMATERIALS IN SOLAR ENERGY STORAGE SYSTEMS

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(57) Abstract :  
 The present invention provides a method for enhancing the efficiency of nanomaterials in solar energy storage systems. This method involves selecting appropriate nanomaterials, such as metal oxides, carbon-based materials, and quantum dots, and synthesizing them using techniques like sol-gel processing and chemical vapor deposition to control their size and composition. The nanomaterials are then surface-modified through functionalization and doping to improve their electronic properties. These modified nanomaterials are integrated into solar energy storage systems, where their performance is optimized using processing techniques such as thermal annealing and light soaking. The method aims to improve the energy conversion efficiency, durability, and cost-effectiveness of solar energy storage systems, supporting the advancement of renewable energy technologies. Accompanied Drawing [FIGS. 1-2]

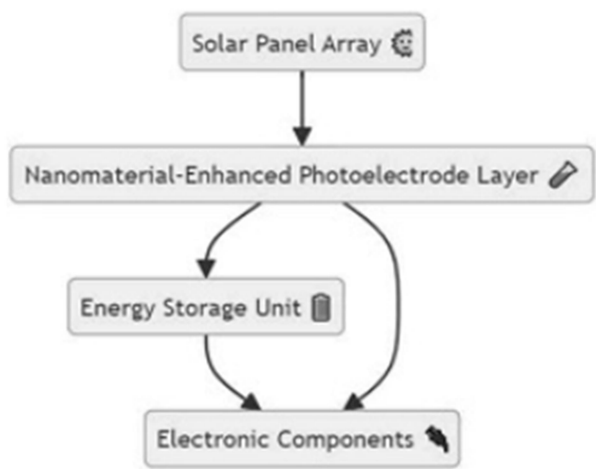


Fig. 1

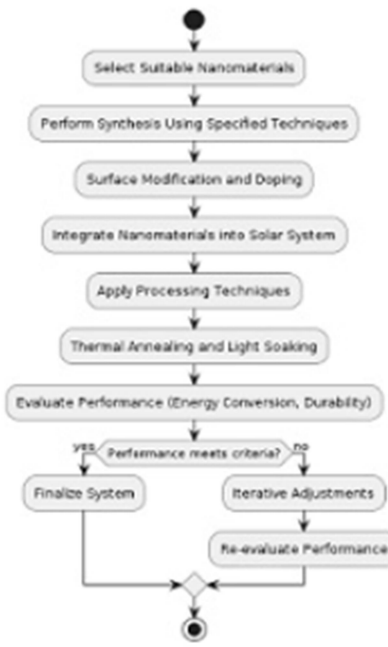


Fig. 2