Thermoelectric Dry Energy

ALNAWAFLEH, YOUSEF

This study aimed to generate electricity from dry ice. The main objective of this study was generating electricity through the conversion of temperature difference resulting from the dry ice by using Seebeck effect. By using a clean source of energy, Dry ice was used in small applications such as: the electrical bicycle, using it in camps and in electrical vehicles. The used design allowed to make use out of the heat that was generated by the equipment for increasing the voltage, as for the inverter fan was directed to the heat sink leading to heat the upper side, which accomplish what is needed, depending on it the generated electricity depends on the usage (the more the usage the more the output), and thus increased the efficiency of the method. Findings indicated that the average output power that was generated from the Peltier was 72W DC. This number was converted through a series of processes to be 220V AC, so it can match the common voltage used in Jordan, 1 Peltier generates 2V at 1000 mA, 40 Peltier generates 12V at 6A, 60 Peltier generate 12V at 10A, it was also selected a battery input voltage of 12V, also the inverter voltage capacity was chosen to be 12V and its output power capacity to be 1KW. As a conclusion, this study provides a clean and cheap power source that could be used in many sectors

Awards Won: