

SOLAR HEATING SYSTEM TO MAINTAIN BATTERIES CHARGED

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The invention relates to a solar heating system, integrable in the constructive structure of a vehicle, intended to maintain the temperature and/or charge level of the batteries. It disposes of, so that the phenomenon is controlled through the specific constructive form that facilitates the conversion of solar energy, both in thermal energy as well as in electrical energy and because the system involves thermo-mechanical actuators with autonomous operation, suitable in the automatic regulation of this process.

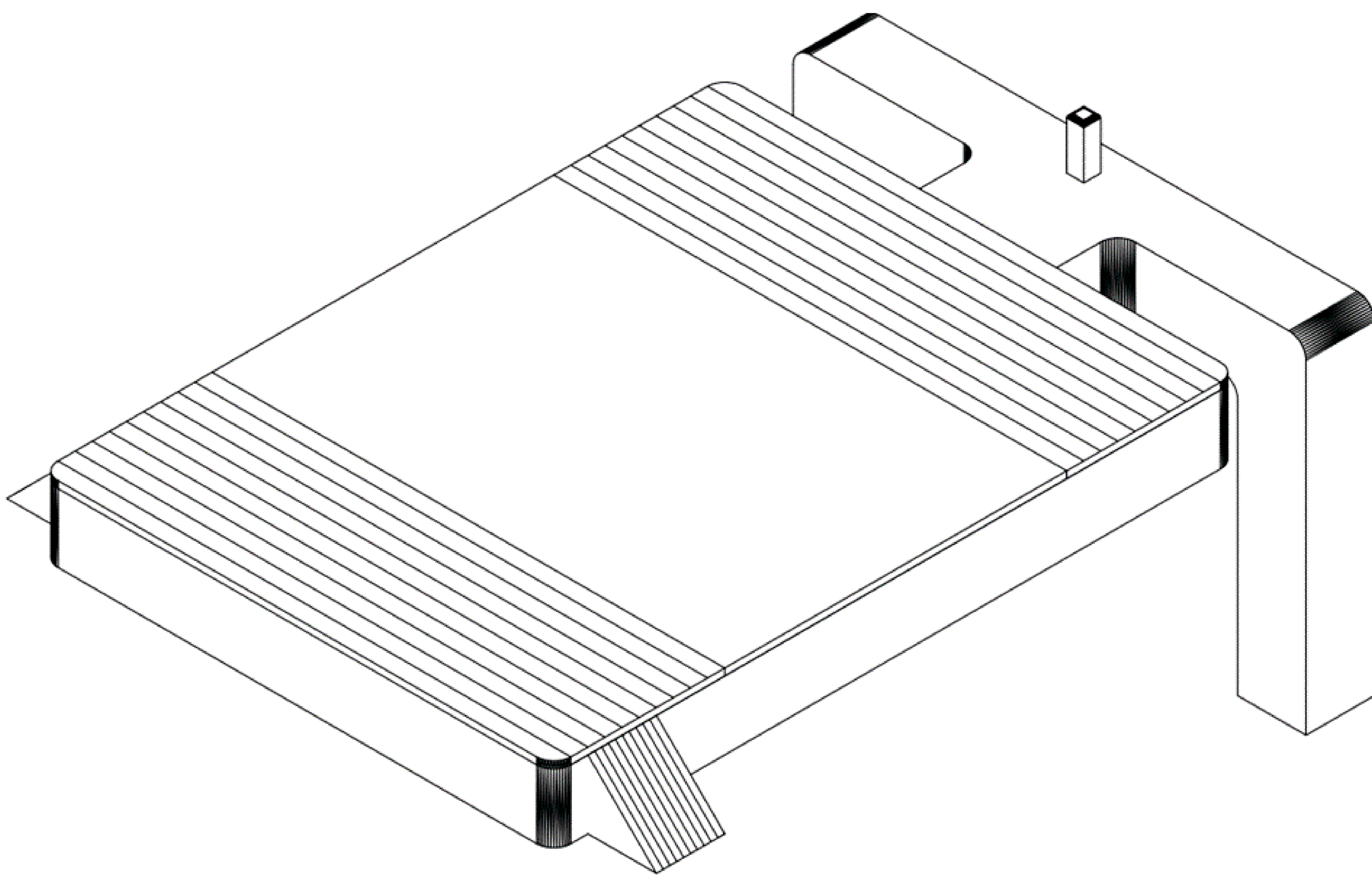


Figure 1. Solar heating system to maintain the batteries charged. Overview.

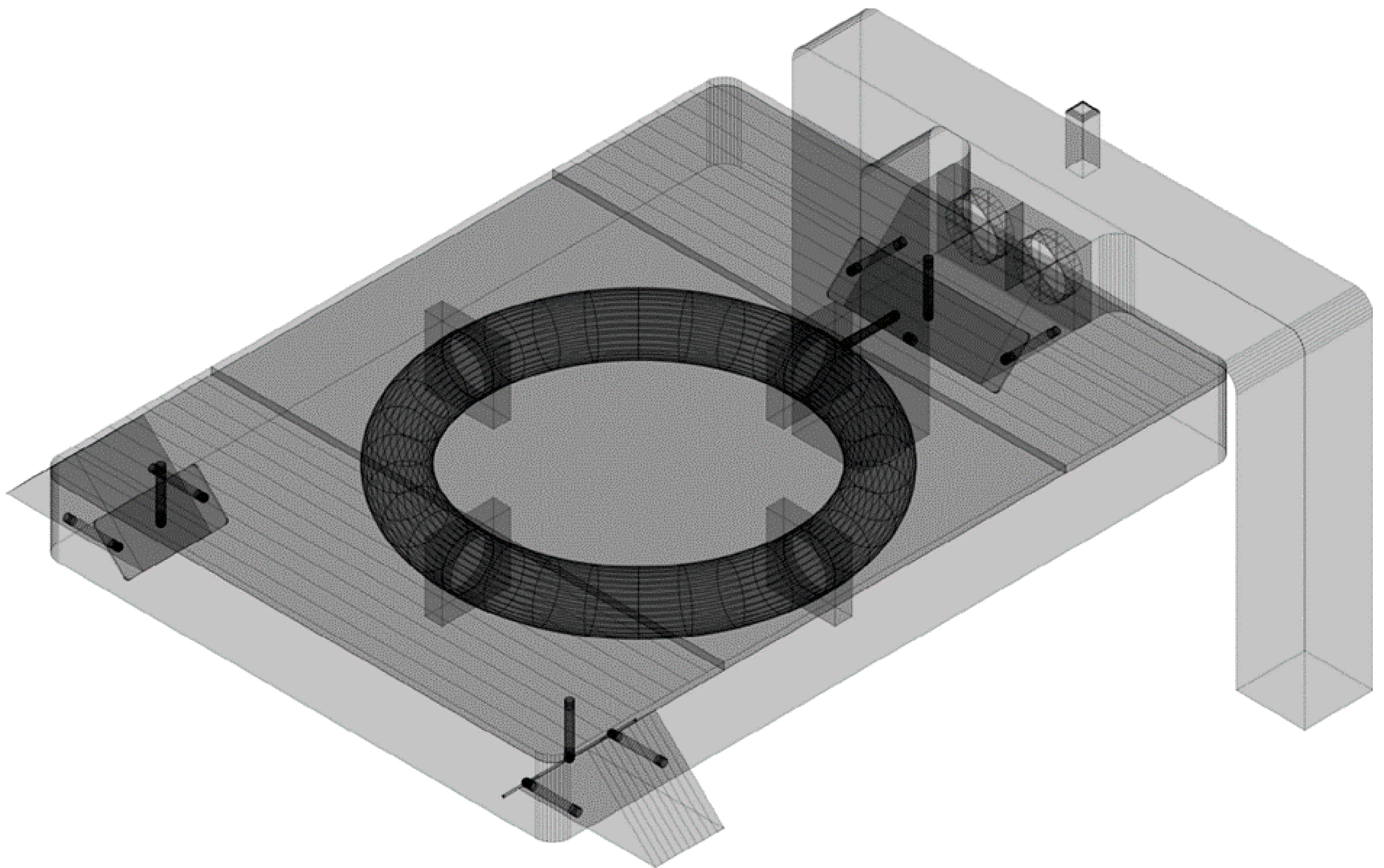


Figure 2. Structure of a solar heating system to maintain the batteries charged. Overview.

ADVANTAGES

- it introduces new possibilities for hot air heating and/or electrical power supply, respectively for the adaptive maintaining of the temperature and/or charge level of the electrical energy storage elements of a vehicle, vulnerable to low temperatures;
- it reduces the number of charge/discharge cycles of the electrical energy storage elements and at the same time it reduces and/or covers the electrical energy losses, increases the lifetime and lowers their maintenance costs;
- it's actuated autonomously and the control process is regulated automatically, without requiring additional input of energy or special maintenance.