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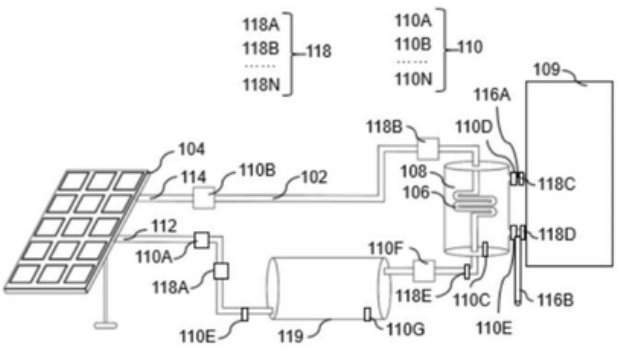
SOLAR ASSEMBLY AND METHOD OF REGULATING WATER TEMPERATURE IN SOLAR ASSEMBLY

Seeking parties interested in licensing and commercialization of technology.

Technology Brief

This technology presents an innovative solar assembly and method designed to enhance the electrical efficiency of photovoltaic panels while simultaneously utilizing waste thermal energy for water heating. The system features a serpentine tube positioned beneath the solar panels through which a refrigerant circulates, absorbing excess heat and evaporating before flowing into a coiled extension located inside a condenser tank. By integrating strategically placed thermal sensors, flow-regulating switches, and an intelligent controller, the assembly dynamically monitors operating parameters and incorporates real-time weather forecasts alongside user temperature preferences to optimize thermal transfer.

Block Diagram



Technical Applications

The technology is highly suited for residential, commercial, and industrial solar installations seeking to maximize dual-output energy systems that generate both electricity and heated water. It can be integrated into green building energy management networks, large-scale commercial solar farms, and institutional cogeneration setups to improve overall system efficiency.

Salient Features

- Dual-Energy Optimization
- Intelligent Thermal Regulation
- Smart Forecasting Integration

Glimpse of the Technology

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TECHNOLOGY SECTOR
Electronics & Semiconductors

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Patent Granted

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TRL 3

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