

SOLAR POWER GENERATOR**Abstract**

[0036] The invention provides a solar power generator, which is able to actuate automatic solar tracking for optimal solar collection in daytime, turn off solar tracking during night for energy saving, and self-protect against adverse ambient conditions. The solar power generator comprises a support, a solar concentrator, a plurality of photovoltaic cells, a mechanical system for adjusting the orientation of the solar concentrator, a sensing system for sensing incident solar radiation and ambient conditions, and a control circuit for receiving signals from the sensing system and sending instructions to the mechanical system. The sensing system comprises a solar tracking sensor, a day/night sensor and a rain/snow sensor.

[0037] FIG. 1 for publication