

SOLAR POWERED STREET LIGHTING SYSTEM

Abstract

[0055] The present invention provides a street lighting system which comprises a pole; a solar power generator mounted on the pole for converting solar radiation into electrical energy; a rechargeable storage battery electronically connected to the solar power generator for receiving, storing and outputting the generated electrical energy; a lighting module extending from the pole and powered by the rechargeable storage battery; a solar tracking sensor for determining the relative orientation of the solar concentrator to the incident sunlight; a day/night sensor for detecting the transition from day to night; a rain/snow sensor for detecting rainfall and snowfall; and a position controller for receiving and processing the signals from the solar tracking sensor, day/night sensor and rain/snow sensor, and adjusting the orientation of the solar power generator accordingly.

[0056] FIG. 1 for publication