bıçak içeren bir resim

Açıklama otomatik olarak oluşturuldu

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**DESIGN AND IMPLEMENTATION OF AUTOMATED LOW-COST DOUBLE AXIS SOLAR TRACKING SYSTEM**

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The purpose of this work is to design and simulate a system that has low-cost and follows the sun by moving in two directions for solar panels. Solar panels collect sunlight and produces electrical energy. This production process depends on factors such as amount of light coming to the panel, ambient temperature, angle of sun rays. This study focuses on the angle of sunlight falling on solar panels. In order for solar panels to produce maximum energy, the sun's rays must come with 90 degrees. However, since the sun is constantly shifting for the day, fixed panels cannot produce maximum energy. If solar panels follow the sun, the amount of energy they can obtain can be increased. In this study created a system that allow the panel to follow the sun by using light dependent resistor, microprocessor and motors in a simulation program. The built system will integrate into the solar panel and compare with a fixed solar panel then efficiency obtained will be calculate.

**Key Words:** Dual Axes Solar Tracker, Renewable Energy, Solar Panel Efficiency Light Dependent Resistor, Direct Current Motor, Microcontroller