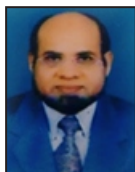


Newly Developed Panel Tree and Tracking with Laptop, Mobile and CFL Bulb as Load with LCD Display



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INTRODUCTION:

Solar enables more energy to be generated because the solar panel is always able to maintain a perpendicular profile to the sun's rays. By using solar panel tree we can generate real time application for college use that is tree.

MANUFACTURING OF NEW PANEL WHICH WORKS WITH SOLAR ENERGY:

This panel is a photovoltaic cell where light energy is converting into electrical energy. This cell produces 0.65v which is 44% more voltage and produced 42.2mA current which is 210 times more than the previous one. The vk0001 panel is made up of major-silicon material manufactured by single-diffusion process.

• VK0001 cell poles are uniformly doped silicon slice the resulting homogeneously doped based region is free can generate real time application for college use that is tree.

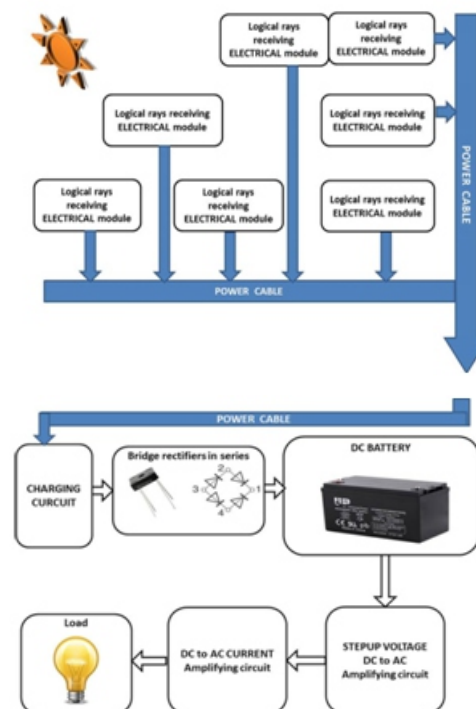
MANUFACTURING OF NEW PANEL WHICH WORKS WITH SOLAR ENERGY:

from accelerating field in bottom poles it generates the high current generation.

• These cells are type of archaebacterium: Mean single-celled microorganisms, these microbes are prokaryotes meaning that this will not have cell nucleus or any other membrane-bound organelles in their cells.

• Temperature operation can handle 2000C and -650C cell protects with aluminium heat sinker and mica insulator electrically 180 lattes the cell case from the heat silk.

BLOCK DIAGRAM:



“NORMAL SOLAR PANEL GIVES 12V, 5W NEWLY DEVELOPED PANEL GIVES 12V, 8W:

SOLAR TREE

A solar tree is a decorative means of producing solar energy and also electricity. It uses multiple no of solar panels which forms the shape of a tree. The panels are arranged in a tree fashion in a tall tower/pole. TREE stands for

T= TREE GENERATING

R=RENEWABLE

E=ENERGY

E=ELECTRICITY

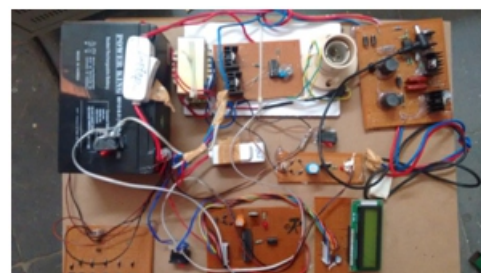
This is like a tree in structure and the panels are like leaves of the tree which produces energy.



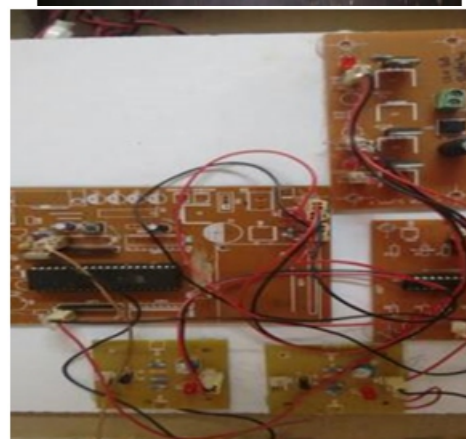
NEWLY DEVELOPED PANEL TRACKING:

The solar panels are operating at optimal parameters when they are at the perfect right angle to the sun. Unfortunately this is accomplished only if solar panels are rotated by the sun. So, this is done by tracking. The solar tracker circuit uses a comparator to maintain the motor in a idle state as long as the two LDRs are under the same illumination level. When the sun position is changing so does the illumination level on the LDRs and the input voltage for the comparator also changes. Thereby the output of the comparator generates information for the motor that rotates the panels for tracking the sun.

SOLAR TREE MOBILE, LAPTOP, CFL BULB LOAD WITH LCD DISPLAY:



TRACKER AND TRACKING CIRCUIT:



ADVANTAGES:

- No air pollution
- We wouldn't have to worry as much about future energy sources
- People in poor country would have access to electricity
- People can save money
- Land requirement is very less

APPLICATIONS:

- Street light House supply Industrial power supply.
- The day to day running and maintenance costs are slashed.
- There is a positive environmental impact as opposed to a negative one.

- The lack of wiring to be installed minimizes the disruption caused to, for example, road users during installation.
- Power outages have no impact whatsoever on street lighting in the area.
- Solar street lights can be easily erected in almost all locations.

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