International Scientific Journal of Engineering and Management (ISJEM) ISSN: 2583-6129
Volume: 04 Issue: 07 | July – 2025 DOI: 10.55041/ISJEM04883
An International Scholarly || Multidisciplinary || Open Access || Indexing in all major Database & Metadata

"A Study and Development of Generating Electricity from Waste Thermo Energy Reactor"

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ABSTRACT

In This Project We use waste materials for generate Electricity We show in this project one Electricity generating zaar box when we have waste materials like plastic, paper and other Then we burn that Materials in zaar box and when burning start then heat going to heating penal then heating penal convert the heat into Electricity Then we store that Electricity in battery and use that Electricity for bulb glowing and many others work. This is Live working idea for generate Electricity by Plastic and Waste Materials, In This Project when electricity start storing that time output power supply off because we use heating sensor so when electricity store perfect then heating sensor turn on the output power supply and LED bulb start glowing and we can demonstrate that time live working of generate electricity by waste materials.

INTRODUCTION

The Purpose of this project is to generate electrical energy from waste materials, such as plastic, rubber, and garbage, and store that energy in a battery through a circuit. This stored energy will then be used to operate the entire project. And the LED bulb is shown to be turned on.

In this project, when the burning starts, heat generation begins, and the heating process starts converting heat into electricity. We can observe this on a multimeter display, which shows how much voltage is produced by waste materials and confirms that electricity is being generated effectively. An automatic heating sensor on the output power supply turns on, causing a big LED bulb to glow, allowing everyone to see the live working process. Our idea demonstrates that it is 100% effective in generating electricity from waste materials.

This is our best live working idea: Pollution Control Filter. In this concept, we present a theoretical pollution control system. When smoke is generated, it travels through a pipe to a water tank, where corban begins to collect on the water's surface. Since the water cannot be heated, we use a water cooling filter that cools the water repeatedly. This system primarily controls corban pollution by collecting smoke in the water tank above the corban level.

METHODOLOGY AND BLOCK DIAGRAM

The first step before the project implementation was to review. The project scope and research area. Then the next task was to Design the mechanical structure and electrical structure of the conveyor belt which is To be

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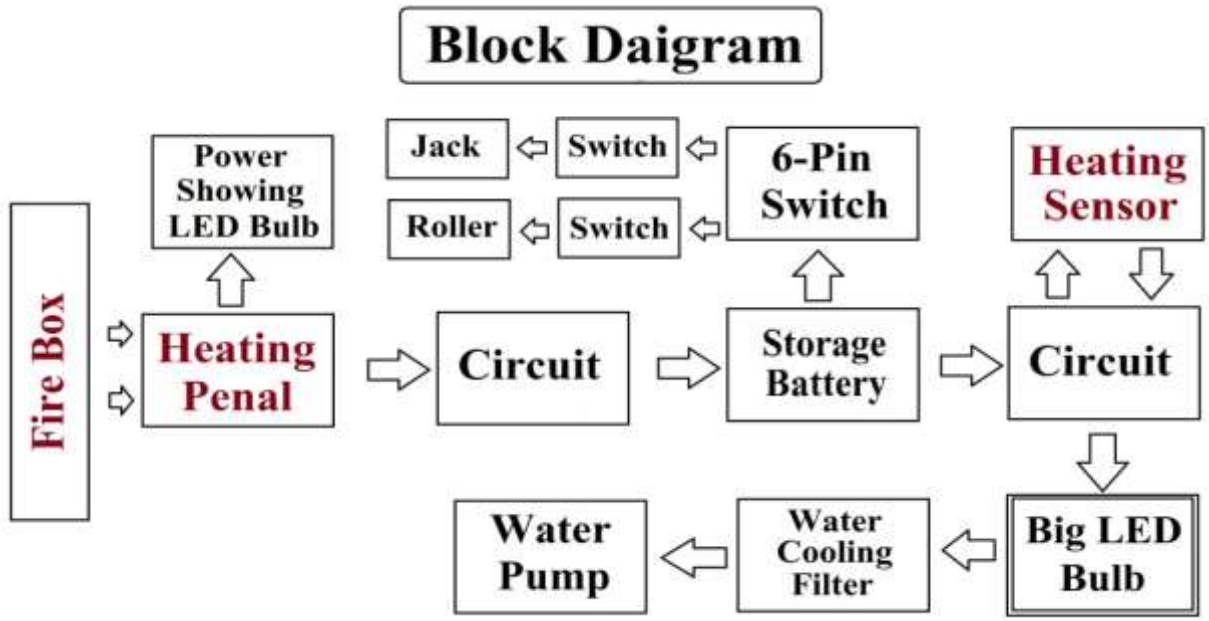
built. Then, if all the design had been finalized, the implementations of the hardware and the circuitry took place. Reaching the pick of the project, the programming segment Took place especially for the heating penal output , heating sensor sensing process and Output to the LED Bulb glow for . Last But not least, certain modification on the circuitry and soft-Ware took place in order to make the system perform in finer Movements. Thus, troubleshooting process also took place to Correct certain faulty processes while the system was performing its task

BLOCK DIAGRAM



LITERATURE REVIEW

This project idea and invention are mine. Before I created this idea, no one else had it, so this project data is not available on the internet. Your idea is fully related to solar energy. In 1939, Bell Laboratories engineer Russell Ohl submitted a patent for what we now know as the modern solar panel. His patent called for the purification of metalloid crystals to form a solar cell. This process created a material that was much more conductive for solar energy, and I used a solar panel for heating a solar panel base, so our idea is similar. Our entire project work is on generating electricity from waste materials. So, my full project depends on heating a solar panel, and I am the only one working on heating a solar panel, so my research data is not available on the internet.

BASIC WORKING OF BLOCK DIAGRAM

In This Block Diagram you can see when we burn waste materials and fire box then heat generating and heating panel starts to heat convert electricity and after that that electricity we can see by LED Bulb glowing and that electricity go to circuit and after that in battery and start storing power and when electricity store in battery then heating sensor turn on the output power supply and LED Bulb start glowing and smoke go to water tank and filter system start controlling pollution.

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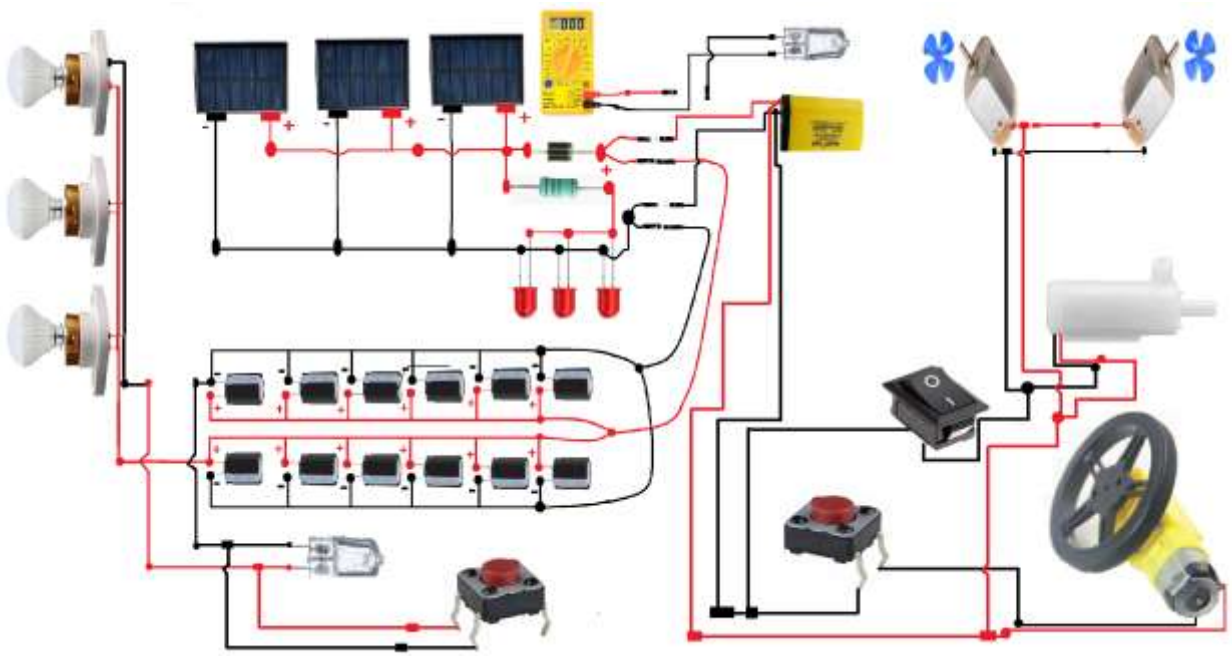
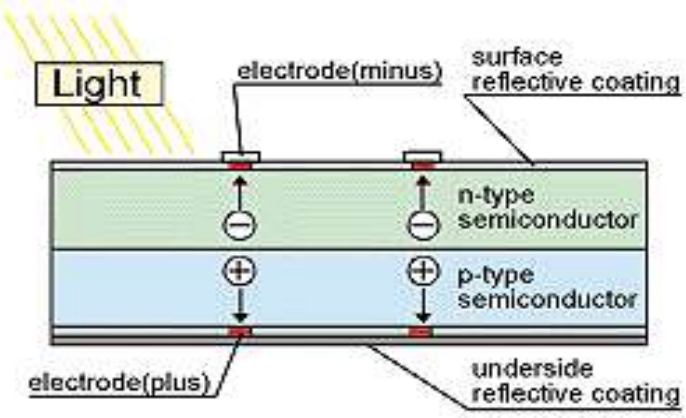
CIRCUIT DIAGRAM



WORKING PRINCIPLE OF PROJECT

This project depends on a heating solar panel, so the principle of the heating solar panel is the project's working principle. Simply put, a heating panel works by allowing photons, or particles of light or heat, to knock electrons free from atoms, generating a flow of electricity. Heating panels actually consist of many smaller units called photovoltaic cells. (Photovoltaic simply means they convert heat or light into electricity.)

HOW TO WORK HEATING PENAL



A p-n junction is formed by placing p-type and n-type semiconductors next to one another. The p-type, with one less electron, attracts the surplus electron from the n-type to stabilize itself. Thus the electricity is displaced and generates a flow of electrons, otherwise known as electricity. When heat hits the semiconductor, an electron springs up and is attracted toward the n-type semiconductor. This causes more negatives in the n-type semiconductors and more positives in the p-type, thus generating a higher flow of electricity. This is the photovoltaic effect.

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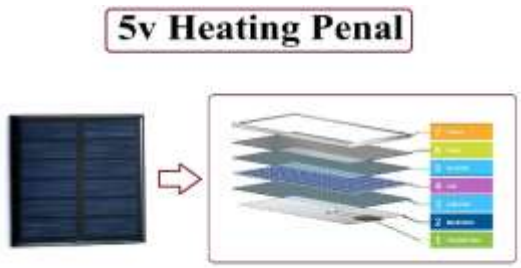
BASIC COMPONENTS AND DETAILS

Literature Survey

Now a day we have more idea for generate electricity, but in your idea we show very different ideas, because this idea we invent before i make nobody make this idea , every day everyone for making food burn many matters so we make a different type of jar box , when some one making for food start burning that time our jar box waste extra heat uses for convert heat to electricity and that electricity we can use in real life because we can store that electricity.

Sr. No.	Component
1.	Heating Penal
2.	Heating Sensor
3.	Capacitor 25v/1000uf
4.	LED Bulb
5.	Resistor
6.	DC motor 3000 RPM
7.	Battery 4.5V
8.	PCB
9.	Roller System
10.	Switch
11.	IN4007
12.	Wire

Hardware Specifications: Main Components Working Name



Heating Penal Principle

Voltage -6V

Simply put, a Heating panel works by allowing photons, or particles of light or heat , to knock electrons free from atoms, generating a flow of electricity. Heating panels actually comprise many, smaller units called photovoltaic cells. (Photovoltaic simply means they convert heating or light into electricity.)

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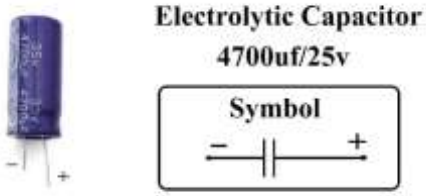
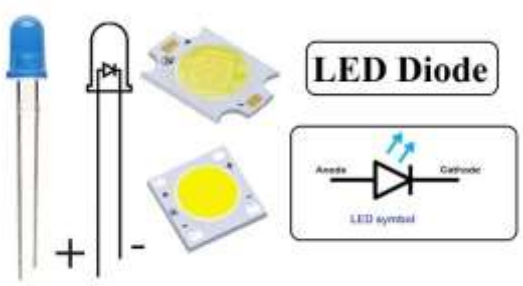
This sensor gives the battery power to the LED bulb only when this sensor is heated by heating . If this sensor is not heated , then LED bulbs will not glowing.

Here is heating penal use for switching battery power , Because A Heating Sensor is an electrically operated switch.

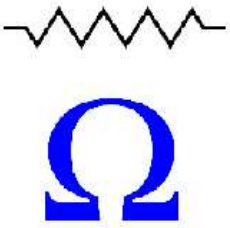


A voltage applied across the conductors creates an electrical field in the capacitor, which stores energy. A capacitor operates like a battery in that, if **a potential difference is applied across it that can cause a charge greater than its "present" charge, it will be charged up**.



3V DC LED Bulb We use for showing electricity generating for.

resistor



resistor symbol

We use resistor with LED bulb

DC Motor
RPM: 3000, Operating Voltage: 6V DC,
Shaft diameter: 6mm with internal hole, Torque: 7 kg-cm
No-load current = 60 mA(Max), Load current = 300 mA(Max).

(This is rechargeable battery ,Charging For Contact 4V Charger And Battery Charge)
(4V Battery More Use For LED Bulb , Mini Circuit and Mini Motor)

We use resistor with LED bulb

DC Water Pump Motor
RPM: 3000, Operating Voltage: 6V DC,
Shaft diameter: 6mm with internal hole, Torque: 7 kg-cm
No-load current = 60 mA(Max), Load current = 300 mA(Max).

ADVANTAGES AND LIMITATIONS OF THE SYSTEM

Advantages

- He can generate electricity by solid waste
- He can generate electricity within second and anywhere
- We can use any where
- Making cost very less and any where we can make
- He can generate electricity depend on heating penal voltage and zaar box size
- We can generate electricity making food time.
- We can collect Corban by this idea and make many product by Corban

Limitations of the system

1. We can not burn waste materials in large level so we can generate electricity only normal level.
2. We can control pollution 100% when we burn plastic and other.

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CONCLUSION

When We Completed our project after that we check our project working , it is very good ,he is full work without stop or any problem , So We can use our Project in real life like our industries or Field and he perfect work on there without any problem , This is our project idea and it is full work our project . So Our project idea is to work in our prototype project ,so our conclusion is so good**.**

FUTURE DEVELOPMENT

Effectiveness of this project can be improved by following this Recommendation

- We can make high quality heating penal for generate high electricity
- We can make large level burning box with easily heating penal connecting system
- We can make best storage system by generate electricity by waste materials.

ACKNOWLEDGEMENT

I would like to thank the Project guide, Head of Department and Dean of Department, for providing all the material possible and encouraging throughout the course of project. It is great pleasure for us to acknowledgement his assistance and contributions for his prompt and timely aid in the official clearances and valuable suggestions during the growth of this project.I would also like to express my profound gratitude to

my faculty members and all my team members for their efforts and collaboration in doing this project work.Last but not least, I express my heartiest gratitude to almighty god and our well wishes for their love and blessings to complete the project successfully.

FINANCIAL SUPPORT

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

ACKNOWLEDGMENT

The author is thankful to the DST, Technology Enabling Centre (TEC), Career Point University, Hamirpur, Himachal Pradesh for providing essential facilities.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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