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Obtaining Additional Electricity from Alternative Energy Sources

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ABSTRACT

The article deals with obtaining electricity from alternative energy sources and using them in the field of transport.

Recently, social and economic development of the population, improvement of the living conditions of the population, satisfaction of people's needs, production and delivery of cheap and ecologically clean energy to the population have been given great attention. Today, we cannot imagine roads in cities and villages without a lighting system. At the time of the development of urbanization, the demand for electricity is growing. For all practical purposes necessary for the effectiveness of alternative energy sources, social benefits, as well as economic competitiveness, energies including solar or wind are used. An international symposium was held in Delhi in collaboration with India. In 1973, an international congress was held in Nigeria and in Paris in 1973 on the theme "The sun is at the service of man". All these sympoises were the beginning of getting alternative energy. Decree of the President of the Republic of Uzbekistan dated 01.03.2013 No. PQ-4512 on measures to further develop alternative energy sources and dated 01.03.2013 "On the establishment of the International Solar Energy Institute" As part of the implementation of the decision PQ-1929, a solar energy institute was established on the basis of the scientific production association "Solar Physics". This paved the way for the development of alternative energy in Uzbekistan.

Problems: Today, the demand for conventional electricity generation is increasing all over the world. However, they emit a large amount of carbon dioxide (C2O) and carbon dioxide (CO) into the environment. These have a great impact on the flora and fauna. In terms of energy efficiency and stability, there are relatively few NPPs, thermal power plants, and hydroelectric power plants, but alternative energy sources are one of the current topics today. Currently, the demand for electricity in urban and rural areas is increasing. This causes problems in supplying a certain amount of electricity. This has a great impact on economic development. It has an impact on the development of private business and entrepreneurs in our country.

Solution: This invention of ours collects solar and wind energy and transmits it to photo relays

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installed to turn on at night. This saves a lot of energy that can be obtained by human power. Here I will tell you about the photo relay. The photorelay has a variable resistance, has a constant control, and consists of a combination of photoresistors and transistors.

1 – picture

1 – Base 2 – Wind blades and masts 3 – Solar panel

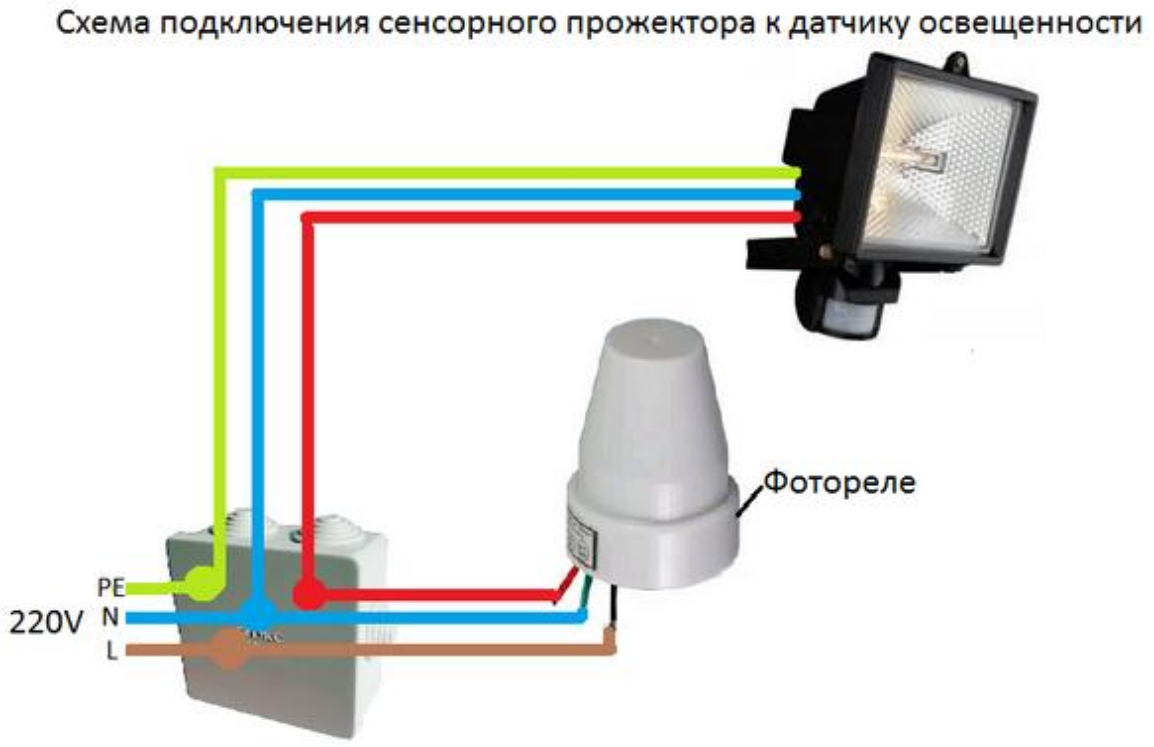

Figure 2

Photo relay connection diagram

Result: Our above invention shows that it shows great results in obtaining, producing and lighting the roads. If we only count wind power. We use here the wind speed generated by the

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movement of the car and the surface of the wind blades of our invention, air density and wind power coefficient.

Problem 1. If the average speed of cars is 5 m/s, the air density is 1.9 kg/m3, and the cross-sectional area of one wind blade is 35 cm*75 cm, find the wind power.

Solving the Given Formula

V=5m/s

a=o.35m P=(F*p*E*(v))/2 =(0.35*0.75*125*0.35*1.9)/2=11W

b=0.75 m

p=1.9kg/m3

E=0.35

P=?

The power of only one battery is 11 W, and in our invention there will be 3 batteries, their total power will be 33 W.

Now, if we use 100 W of solar panel, we will use 1.5 kW inverter for it. On average, in our country, if the solar heat is 39 ℃ at 11:15 a.m., 191.3 V of energy is released from the solar panel, 208.2 V of energy is released at 1:30 p.m. when it is 41 ℃, at 1:00 p.m. 220.2 You can see the energy release.

If we get acquainted with the prices of the domestic market

Table 1

1) Photo relay	10A	40 000	
2) Solar panels	20w – 200w	200 000 – 800 000	
3) Inverters	2400w	680 000	
4) Controller	10A – 100A	140 000 – 5 740 000	
5) Accumulator	150A	3 000 000	Total amount: 10 260 000 so‘m

The total amount we need to live is average

If we take from Table 1, if it is 11 million soums for one piece, this invention will pay for itself within 4 years, and the remaining 16 years of operation will bring great benefits to the development of our economy.

Conclusion: Alternative energy harvesting shows that the way to use a lot of electricity is now opened for factories and factories. This will pave the way for the development of our country's economy. All these energies are renewable energies. Although each of these are small power plants, their efficiency is lower than NPP, IES, HPP, but they are distinguished by their ecological cleanliness. Through this, we distinguish the environment with ecological purity and economic activity.

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