POLIT Challenges of science today 5-7 April 2021

Alternative energy from human heat

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There are many types of energy in the world that make up electricity, such as chemical, thermal, mechanical, nuclear and many others. The speciality of all types of energy are that they must have a source from which resources are fixed for the formation of an electric flow of energy. And that's a big problem. They depend on, so to speak, the source of certain energy - coal, water, nuclear fuel and so on. There is also a problem at the time that those resources are becoming scarce and people are starting to turn to alternative energy sources.

Alternative energy sources are any energy source that is an alternative to fossil fuels. In other words, alternative energy sources are renewable sources to which energy from solar radiation, wind, seas, rivers, biomass, Earth's heat, and secondary energy resources that exist permanently or generate periodically in length will be restored. Thanks to these types of sources, we can save quite a lot of resources, which are quite a few.

One of the alternative energy options that will become the most popular is energy from the human body. However, the question appears - how can it be done. This is possible with the help of such a thermoelectric converter - Peltier products. These elements generate electrical energy due to the appearance of temperature differences with increasing electric current.

Peltier elements are based on the connection of two conductive materials with different levels of electron energy in the area of responsibility. Provided the structure is determined through the contact of such materials, electronic energy is obtained to move to a higher energy area of responsibility of other semiconductors. When this energy is absorbed, the contact point of the semiconductors is protected. When the structure flows back, the contact point of the semiconductors is heated, in addition to the usual thermal effect.

If you take the structure of the elements, it will be created by one or more minor semiconductor parallelepipeds - one N-type and one R-type in a pair, which are connected in pairs utilizing metal jumpers. The metal jumpers themselves simultaneously serve as temporary contacts and create an unsuitable film or ceramic plate.

The main advantage of the Pelt element is its small size. By changing the directional structure, cooling and heating are possible, which allows thermostating at ambient temperatures both above and below the thermostat temperature.

The disadvantage of the Peltier element is a very low efficiency, which leads to high power consumption to achieve a noticeable temperature difference.

How can we use these products to collect "our" heat and convert it? One of the main items can be jackets, sweaters, backpacks and other things that are tightly attached to the person, so they can reduce heat loss and efficient recycling.

To sum it all up, this led to a not surprising idea of producing energy from human heat. This energy can be used to charge a phone or other gadget or simply redirect this energy to a so-called energy bank so that, if possible, you can use it. Of course, having recently started using this technology, proteite in the future, it can play an important role in people's lives and the preservation of minerals.

Reference:

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