

Profile View

Details

Title: Armenian producer of different kinds of equipment used in solar energy production is looking for distribution services and manufacturing agreements

POD Reference: BOAM20211025001

Summary: This Armenian company is involved in the production of cleaning robots for solar photovoltaic modules; solar photovoltaic and thermal hybrid converters as well as solar water heating panels. The company is interested to sell the mentioned products in foreign markets under distribution services and manufacturing agreements.

Description: This Armenian company was founded in 2012 and since then has become one of the leading producers of solar energy products, such as cleaning robots of solar photovoltaic modules; solar photovoltaic & thermal hybrid converters as well as solar water heating panels.

Robot for cleaning of solar photovoltaic modules: cleaning the surface of photoelectric modules allows to significantly increase the amount of electricity produced. The cleaning problem is especially acute during the summer months, when, in the presence of the bright sun, due to the scarcity of rain, the modules are covered with a layer of dust, and the electricity produced by solar modules is considerably reduced. The company has developed a robot for cleaning the photovoltaic modules. It allows to automatically clean the solar photovoltaic modules and to increase the efficiency of the modules by up to 30-50%. The cleaning robot is equipped with an autonomous power supply system, which converts solar energy into electricity, ensuring the robot's constant power supply, eliminating the need for regular recharging of electric batteries. The developed cleaning robot is economically viable and allows, with a small investment, to increase significantly the efficiency of the photovoltaic plant, to generate more electricity, especially during the summer months, in the presence of the bright sun. The robot can be used with the following forms.

1. By remote control, i.e. the operator can turn on the robot at any time via the remote control module and perform cleaning.
2. The robot will perform the cleaning automatically, according to the cleaning schedule entered in advance by the user.
3. With the help of the developed dust sensor, the robot can, by registering the presence of dust, perform the cleaning in automatic mode, i.e. clean the solar modules when it is needed. Note that a certain level of dust for starting the cleaning is selected and entered in advance by the user.

Solar photovoltaic & thermal hybrid converter – PVT: a solar energy converter has been developed to convert solar energy into both electric and thermal energies (hybrid, two in one). It is a combination of a solar photovoltaic module and a new type of heat-absorbing panel, which is the latest development of the company. The heat-absorbing panel of a hybrid converter absorbs the heat of a solar photovoltaic module, reduces its operating temperature, which brings to increasing of the efficiency of the photovoltaic module and generating more electricity. Absorbed heat energy is transferred to water, i.e. water is heated at the same time, which is used for various purposes. The generated electricity and hot water can be used for household and business purposes (workshops, agricultural enterprises, hotels, sanatoriums, rest houses, etc.). The PVT hybrid converter successfully can be used to heat pool water and generate electricity with increased efficiency.

New type solar water heating panel: the new type of panel converting solar energy into thermal energy (in the form of hot water). It is made using the new types of materials and simple production technology, developed by the company.

The company uses raw materials from Armenia and imported from France and China. The company's monthly production capacity is 500 pieces.

The mentioned products are already represented in the local markets. The company is also interested in foreign markets and is looking for new sales opportunities under distribution services or manufacturing agreements.

Advantages and Innovations:**Robot for cleaning of solar photovoltaic modules:**

- Different forms of use and opportunities,
- Automatic cleaning mode, controlled by the new type dust sensor,
- Autonomous power supply, via solar energy,
- Low cost.

Solar photovoltaic & thermal hybrid converter – PVT:

- Increased efficiency of the solar photovoltaic modules, i.e. more electricity is generated, due to the reduction of the operating temperature.
- Obtaining additional thermal energy.
- Low cost, due to the use of new type heat-absorbing panel, with the simple production process, which is the latest development of the Armenian company;
- Smaller required areas compared to existing separated individual photovoltaic and heating systems.

New type solar water heating panel

- Low prime cost, due to the: a) cheap raw materials used; b) using new types of materials developed, and a simple production process that does not require large investments.
- Several times the more lightweight.
- Long service life.
- Possibility to use in low-pressure and high-pressure water heating systems.

Stage of
Development:

Already on the market

IPR status::

Trade Marks

Comments

Regarding IPR

The company has obtained Patent and IP rights.

Status:

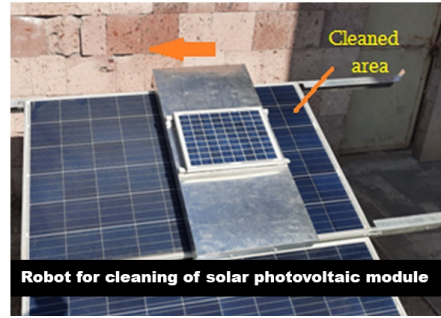
Attachments



Solar Photovoltaic and Thermal Hybrid Converter – PVT



New Type Solar Water Heating Panel



Robot for cleaning of solar photovoltaic module

Products related to Solar Energy

Keywords

Market Keywords: 06003001 Solar/thermal energy
06003002 Photovoltaics

Partner Sought

Type and Role of Partner Sought:

The company is looking for distributors of solar energy products, who are interested to sell the company's products in foreign markets under a distribution services agreement.

The company is also ready to produce by the potential partners' individual order, brand and design. The company is also ready to produce under individual orders of hotels, hospitals, and other organizations interested to apply the proposed solar energy products in their business. For these cooperation types, the company offers a manufacturing agreement.

Type of Partnership Considered:

Distribution services agreement
Manufacturing agreement

Client

Type and Size of Client: Industry SME <= 10
Year Established: 2012
Turnover (euro): <1M
Already Engaged in Trans-National Cooperation: No
Languages Spoken: English, Russian
Client Country: Armenia

