Easy-manufacturing solar concentrator

Description

This device is a parabolic-channel structure solar concentrator which is lightweight and highly rigid. The structure is composed of simple elements that are built and assembled easily, facilitating its mass production. The reflective surface consists of metallic foil that does not require preformed fold or some other type of manufacturing for use. The structural elements used in the design of the parabolic channel do require neither specialized machinery nor skilled workers for assembly or disassembly. Moreover the system is modular, so it is possible to use as many collectors as required.

Application

The solar concentrator can be integrated to steam generation and hot water systems, as well as methane production from waste, among other applications. Since the solar concentrator is light, its application in residential heaters and industrial water is feasible. IN the same way, several concentrators can be installed on buildings without representing significant load.

Stage of Development

Pre-commercial prototype

IP Status

Patent application No. MX/a/2012/005315

Inventors:

Dr. Rafael Castrejón García Dr. Oscar Alfredo Jaramillo Salgado (Instituto de Energías Renovables)



-

Renewable Energies

Market potential

The production of solar power in Mexico is augmenting, as a result of an increase of 14.0% in the total installed area of solar heaters and 46.0% in PV modules.

Transferring conditions

- ✓ Technological development agreement (optional)
- Licensing (includes front payment and royalties)



Contacto UNAM:

UNAM Contact:

César León cesar.leon@unam.mx +52 (55) 56 58 56 50 Ext. 208

La información de esta ficha es propiedad de la Universidad Nacional Autónoma de México. Únicamente con fines informativos. Techologias o<mark>NAM</mark>

UNAM Technologies