Solar Concentrator

Description

This invention is related to a novel design of solar concentrator integrated by small and flat mirrors that can be adjusted to get a parabolic curvature allowing a high coefficient of concentration of solar energy in a small area.

There are other solar concentrators such as channel, tower and parabolic shape which have a complex control system and are relatively expensive. This technology seeks to approximate the parabolic surface with a number of triangular mirrors -cheaper than square or rectangular - and a novel cell design for the support of the mirrors. The solar concentrator reaches temperatures between 360 to 400 °C.

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.

Stage of Development

Commercial prototype

IP Status

Mexican patents Nos. 309,274 y 313,963; US patent No. 8,631,995

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Market potential

The use of solar power is augmenting in Mexico, as a result of an increase in the total installed area of solar heaters and photovoltaic modules.

Transferring conditions

- Technological development agreement (optional)
- Licensing (will include upfront payment and royalties)



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