

Title (en)
CONCENTRATED PHOTOVOLTAIC AND THERMAL SOLAR ENERGY COLLECTOR

Title (de)
KONZENTRIERTER FOTOVOLTAISCHER UND THERMISCHER SONNENENERGIEKOLLEKTOR

Title (fr)
CAPTEUR SOLAIRE PHOTOVOLTAÏQUE ET THERMIQUE CONCENTRÉ

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Application
EP 10860411 A 20101208

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Abstract (en)
[origin: WO2012078146A1] This invention relates to a solar energy collector that converts solar radiation into both electrical and thermal energy. More specifically this invention relates to a concentrating solar energy collector with an integrated construction that minimizes cost, bulk, and weight, and maximizes overall efficiency. Typical non-concentrating solar collectors use photovoltaic cells over the entirety of their surface. These solar cells are the most expensive part of the collector. This invention discloses using a reflector to concentrate the incident radiation on photovoltaic cells with one-twentieth the area of the reflector, and transferring the co-generated thermal energy into a working fluid pumped through the cell support structure.

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Citation (search report)
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