

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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