

Title (en)
SOLAR COLLECTOR HAVING A PIVOTABLE CONCENTRATOR ARRANGEMENT

Title (de)
SOLARKOLLEKTOR MIT EINER VERSCHWENKBAREN KONZENTRATORANORDNUNG

Title (fr)
COLLECTEUR SOLAIRE POURVU D'UN SYSTÈME CONCENTRATEUR PIVOTANT

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Application
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Abstract (en)
[origin: WO2013078567A2] The invention relates to a trough collector comprising a number of secondary concentrators, by which the solar radiation concentrated by the concentrator of the trough collector in a first direction transverse to the length thereof is concentrated in a second direction running along the trough collector, wherein the secondary concentrators each have a first, front reflecting wall and a second, rear reflecting wall which concentrate the radiation in the second direction, and wherein the secondary concentrators are arranged such as to be synchronously pivotable with one another, preferably about a respective pivot axis fixed with respect to the primary concentrator, such that as the position of the sun changes, the secondary concentrators can always be oriented in accordance with the incident radiation. The invention is characterised in that the first and the second reflecting wall of the secondary concentrators have different lengths in the entry region of the radiation, such that a longer reflecting wall of one secondary concentrator lies in each case next to a shorter reflecting wall of the adjacent secondary concentrator. The secondary concentrators can thereby be arranged side by side without a gap, yet remain pivotable over a range of minus 20 degrees to plus 70 degrees with respect to the primary concentrator.

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