

Title (en)  
SOLAR COLLECTOR ASSEMBLY

Title (de)  
SOLARKOLLEKTORBAUGRUPPE

Title (fr)  
ENSEMBLE CAPTEUR SOLAIRE

Publication  
**EP 2311097 A4 20140514 (EN)**

Application  
**EP 09774564 A 20090702**

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- US 7803808 P 20080703
- US 7802908 P 20080703
- US 7824508 P 20080703
- US 7825608 P 20080703
- US 7799808 P 20080703
- US 7799108 P 20080703
- US 49513609 A 20090630
- US 49530309 A 20090630
- US 49516409 A 20090630
- US 49603409 A 20090701
- US 49615009 A 20090701
- US 49539809 A 20090630
- US 49654109 A 20090701
- US 7825908 P 20080703

Abstract (en)  
[origin: WO2010003115A1] System(s) and method(s) for mounting, deploying, testing, operating, and managing a solar concentrator are provided. The innovation discloses mechanisms for evaluating the performance and quality of a solar collector via emission of modulated laser radiation upon (or near) a position of photovoltaic (PV) cells. The innovation discloses positioning two receivers at two distances from the source (e.g., solar collector or dish). These receivers are employed to collect light which can be compared to standards or other thresholds thereby diagnosing quality of the collectors. Receiver(s) includes photovoltaic (PV) module(s) for energy conversion, or module(s) for thermal energy harvesting. PV cell in PV modules can be laid out in various configurations to maximize electric current output. Moreover, a heat regulating assembly removes heat from the PV cells and other hot regions, to maintain the temperature gradient within predetermined levels.

IPC 8 full level  
**H01L 31/042** (2014.01); **F24S 23/70** (2018.01); **F24S 23/71** (2018.01); **F24S 23/74** (2018.01); **G02B 7/183** (2021.01)

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**F24S 23/70** (2018.04 - EP); **F24S 23/74** (2018.04 - EP US); **F24S 25/00** (2018.04 - EP); **F24S 30/458** (2018.04 - EP US); **F24S 40/90** (2018.04 - EP US); **F24S 50/20** (2018.04 - EP US); **G01M 11/005** (2013.01 - EP US); **G02B 7/183** (2013.01 - EP); **H01L 31/0547** (2014.12 - EP); **H02S 20/32** (2014.12 - EP); **F24S 40/85** (2018.04 - EP); **F24S 2023/874** (2018.04 - EP); **F24S 2201/00** (2018.04 - EP); **Y02E 10/47** (2013.01 - EP); **Y02E 10/52** (2013.01 - EP)

Citation (search report)

- [XY] EP 0101055 A1 19840222 - MORI KEI
- [XY] US 5587580 A 19961224 - VENIER PHILIPPE [CH], et al
- [X] US 4041307 A 19770809 - NAPOLI LOUIS SEBASTIAN, et al
- [Y] US 7185845 B1 20070306 - HARTMAN RICHARD LEON [US], et al
- [Y] US 2008017784 A1 20080124 - HOOT JOHN E [US], et al
- [Y] WO 9629745 A1 19960926 - HELFGOTT & KARAS P C [US], et al
- See references of WO 2010003115A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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