

Title (en)

MICRO CONCENTRATORS ELASTICALLY COUPLED WITH SPHERICAL PHOTOVOLTAIC CELLS

Title (de)

MIT KUGELFÖRMIGEN PV-ZELLEN ELASTISCH GEKOPPELTE MIKROKONZENTRATOREN

Title (fr)

MICRO - CONCENTRATEURS COUPLES ELASTIQUEMENT AVEC DES CELLULES PHOTOVOLTAIQUES SPHERIQUES

Publication

EP 2038936 A2 20090325 (EN)

Application

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Priority

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- US 81927306 P 20060707

Abstract (en)

[origin: WO2008005557A2] With small dimensional optics, small photovoltaic cells have heat distribution surfaces, very high concentrations and subsequently high utilization of the semiconductors can be achieved. Discrete photodiodes can be formed as spherical and other geometric shaped, cells with high performance characteristics, precision dimensions, and low cost. This invention positions discrete photovoltaic cells by using their geometric shape, elastic electrical mounts, couples them to small optical concentrator systems of refractory and or reflective optics and makes electrical network connections to those photodiodes, reliably, adjusting for thermal expansion, and at low cost to form low cost and reliable electrical power arrays. The electrical connectors and network can form part of the reflective optics and heat removal system. The electrical interconnection system can also form a reliable network that is self -correcting and tolerant of point failures.

IPC 8 full level

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Citation (search report)

See references of WO 2008005557A2

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