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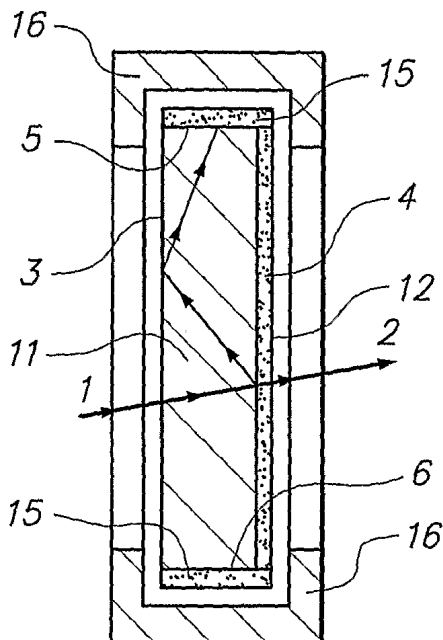
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(54) Title: SOLAR COLLECTION DEVICES



(57) Abstract: Solar collection devices make use of (a) an absorption body including luminescent material and (b) photovoltaic (PV) cells placed at the edges of the absorption body. The luminescent material absorbs solar radiation and generates luminescent radiation of a different wavelength. The PV cells receive the luminescent radiation and convert it into electrical energy. The devices have one or more of the following characteristics: - (a) the luminescent material is such that part of the radiation is converted into electrical energy and part of the radiation is transmitted; (b) the PV cells are bifacial, i.e. will generate electricity in response to radiation from both sides; (c) the PV cells have electrodes which do not lie between the PV cell and the luminescent body; and (d) the constitution and/or dimensions of the PV cells and/or of the luminescent body are selected so as to provide a desired result, e.g. a desired spatial variation in the generation of luminescent radiation, a desired spatial variation in the ratio of absorption to transmission, or more uniform generation of current in the different PV cells.

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**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **H01L 31/00( 2006.01),31/042( 2006.01)**  
  
 USPC: 136/247,257  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 136/247,257

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 DERWENT, EPO, JPO

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
x	US 4,149,902 (MAUER et al.) 17 April 1979 (19.01.1979), FIG. 1 and columns 2 and 4	1-4
a	US 4,257,676 (GREUBEL et al.) 24 March 1981 (24.03.1981), FIG. 1	1-4

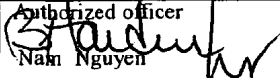
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