Title (en)

METHOD FOR MANAGING A PHOTOVOLATAIC SOLAR MODULE AND A PHOTOVOLTAIC SOLAR MODULE

Title (de)

VERWALTUNGSVERFAHREN FÜR PHOTOVOLTAISCHES SOLARMODUL UND PHOTOVOLTAISCHES SOLARMODUL

Title (fr)

PROCEDE DE GESTION D'UN MODULE SOLAIRE PHOTOVOLTAIQUE ET MODULE SOLAIRE PHOTOVOLTAIQUE

Publication

EP 1360752 A1 20031112 (FR)

Application

EP 02703664 A 20020206

Priority

- DE 10107600 A 20010217
- FR 0200457 W 20020206

Abstract (en)

[origin: DE10107600C1] The invention relates to a solar module (1) comprising numerous individual solar cells (2) which are electrically interconnected in series, having at least one solar cell (5, 6) that is exposed to the same conditions but which is not connected to the other solar cells and which acts as a sensor for the instantaneous incident light on the solar module. Said module is also provided with a switching device (8) that can be controlled at least indirectly by the sensor in order to act on the electrical power leaving the solar module. According to the invention, at least two solar cells (5, 6), which are disposed at a great distance from one another, are provided as sensors, the output voltages or currents of which are directed to an evaluation circuit (7) where they are compared to one another by the latter. Said evaluation circuit (7) connects, by means of the switching device (8), a bypass which shunts the series circuit of solar cells (2) in the solar module (1) when the difference between the output from both sensors exceeds a threshold value.

IPC 1-7

H02J 7/35; H01L 31/042

IPC 8 full level

H01L 31/042 (2006.01); **H01L 31/05** (2006.01)

CPC (source: EP KR US)

H01L 31/02021 (2013.01 - EP US); **H02J 7/35** (2013.01 - KR); Y02E 10/50 (2013.01 - US); Y02E 10/56 (2013.01 - EP); Y10S 136/29 (2013.01 - EP US); Y10S 136/291 (2013.01 - EP US); Y10S 136/293 (2013.01 - EP US); Y10S 323/906 (2013.01 - EP US)

Citation (search report)

See references of WO 02071571A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

DE 10107600 C1 20020822; CN 100570986 C 20091216; CN 1537351 A 20041013; EP 1360752 A1 20031112; JP 2004528708 A 20040916; JP 4335530 B2 20090930; KR 100863752 B1 20081016; KR 20030076606 A 20030926; US 2004123894 A1 20040701; US 6858791 B2 20050222; WO 02071571 A1 20020912

DOCDB simple family (application)

DE 10107600 A 20010217; CN 02805047 A 20020206; EP 02703664 A 20020206; FR 0200457 W 20020206; JP 2002570372 A 20020206; KR 20037009256 A 20030710; US 64227803 A 20030818