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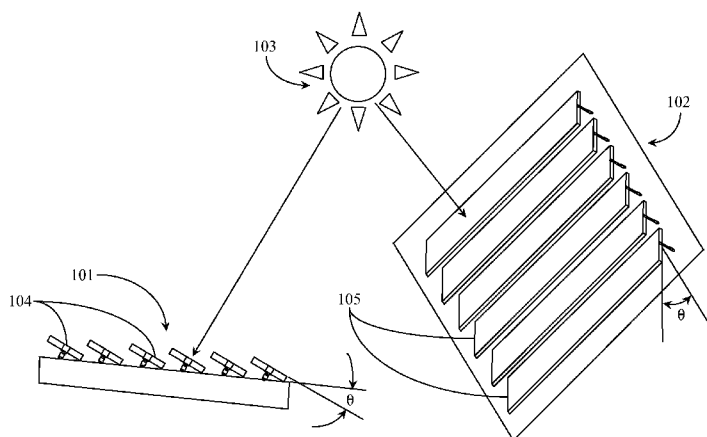


Fig. 1

(57) Abstract: A method for tracking solar panels includes the steps (a) beginning a tracking cycle substantially at sunrise with adjacent tilting panels all horizontal, (b) tilting the adjacent panels in unison in a first angular direction toward the rising sun at a tilt rate that just avoids shading of adjacent panels, (c) reversing direction of panel tilt at a point that the panels reach either a maximum tilt limited by mechanical design, or the panel surfaces are orthogonal to the rising sun, (d) tilting the adjacent panels in a second angular direction, following movement of the sun and keeping the surface of the panels at right angles to the sun's position, until a point is reached that shadowing is imminent from the angle of the setting sun, and (e) reversing direction of panel tilt again to the first angular direction, adjusting tilt as the sun sets to avoid shading until the panels are again horizontal.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/037297**A. CLASSIFICATION OF SUBJECT MATTER*****F24J 2/38(2006.01)i, F24J 2/52(2006.01)i, H01L 31/042(2006.01)i***

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)

F24J 2/38; H01L 31/04; H01L 31/042

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: sun, solar, track, follow, trace, chase, tilt, angular, angle, panel, photovoltaic, control, drive, motor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006-0044511 A1 (KEVIN MACKAMUL) 02 March 2006 See abstract, figures1,2A,2, page(2,3)	1-10
A	JP 2008-218582 A (NAGAOKA UNIV OF TECHNOLOGY) 18 September 2008 See abstract, detailed description 4-6, figures 1,2	1-10
A	US 4429178 A1 (PRIDEAUX; DANIEL L. et al.) 31 January 1984 See abstract, figures1,2, and column 1,2	1-10

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006-0044511 A1	02.03.2006	US 2006-044511 A1	02.03.2006
JP 2008-218582 A	18.09.2008	JP 2008-218582 A	18.09.2008
US 4429178 A1	31.01.1984	None	