

AUTOMATIC SOLAR TRACKING ADJUSTMENT/CONTROL APPARATUS OF SOLAR GENERATION SYSTEM

ABSTRACT

An automatic solar tracking adjustment/control apparatus of solar generation system includes a support assembly, a two-dimensionally movable pivotal rotational assembly disposed on the support assembly, a solar generation module disposed on the support assembly via the pivotal rotational assembly for converting solar energy into electrical energy and two intersecting drive assemblies disposed between the support assembly and the solar generation module. The drive assemblies drive the solar generation module to tilt in different directions and angles according to reference parameters previously stored in a control unit. A detection/correction module is disposed on the solar generation module for detecting various parameters including tilting direction and inclination angle of the solar generation module. The control unit compares the parameters with the reference parameters to modify the operation of the drive assemblies so as to adjust the tilting direction and inclination angle of the solar generation module.

Figure: 1