

The invention relates to systems for the conversion of renewable energy, namely to systems for the orientation of a group of photovoltaic panels by the sun.

The photovoltaic panel orientation system comprises photovoltaic panels (1), installed on supports (2, 3, 4) in the points A, B, C. The support (2), with one end, is rigidly fixed on a base, and with the other end is fixed in the point A, placed in the upper part of the middle of the panel (1), by means of a spherical bearing (14), placed in a spherical seat (17) and made with 2 degrees of freedom for the positioning of a pin (15) in a groove (16), made longitudinally in the spherical seat (17), connected to a rod (18), which by means of an overrunning clutch (19) communicates with a screw (20) of a node (21) with screw-nut gear with small thread pitch, and the supports (3 and 4), with one end, are rigidly fixed, respectively, in the points B and C, symmetrically arranged with respect to the point A in the lower part of the panel (1), and are made in the form of adjustable rods, which contain, respectively, a node (5 and 6) with screw-nut gear with screws (7 and 8), rigidly connected to spiral wheels (9 and 10), between which is placed a helical pinion (11), kinematically connected to the shaft of an electric motor (12), also connected to cardan shafts (13). The direction of the helix of the screw (7) is the reverse direction of the helix of the screw (8).

Claims: 2

Fig.: 3

