

Seguidor solar fotovoltaico a dos ejes con una fuerza motriz

Two-axis photovoltaic solar tracker with one driving force

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Resumen

el seguidor solar fotovoltaico a dos ejes con una fuerza motriz consta de un eje móvil vertical y uno horizontal el cual haría de cabezal y soporte de los paneles, a la columna vertical se le transmite un movimiento, que seguiría al movimiento del sol mediante la descripción del ángulo acimutal de Este a Oeste, por medio de un motor mediante una corona central que se encuentra fija a dicho eje donde a través de la misma se transmite un movimiento (por engrane) a otra rueda dentada, de igual características técnicas, para otorgar mediante un mecanismo de brazo pivote, solidario a dicho engranaje y a la estructura del cabezal, un movimiento angular que describa la altitud solar. De esta manera se obtiene dos movimientos mediante un solo motor.

Palabras claves: Seguidor Solar a Dos Ejes, Seguimiento Solar, Brazo Pivote.

Abstract

the two-axis photovoltaic solar tracker with a driving force consists of a vertical and a horizontal mobile axis which would act as the head and support of the panels, a movement is transmitted to the vertical column, which would follow the movement of the sun through the description of the azimuth angle from East to West, by means of a motor through a central crown that is fixed to said axis where through it a movement is transmitted (by meshing) to another gear wheel, of the same technical characteristics, to grant by means of a pivot arm mechanism, integral with said gear and the head structure, an angular movement that describes the solar altitude. In this way, two movements are obtained by a single motor.

Keywords: Two Axis Solar Tracker, Solar Tracker, Pivot Arm.