DESIGN PROCESS OF THE PV PANELS TRACKING SYSTEMS

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Abstract: The tracking systems are used to increase the efficiency of the PV panels. The paper presents the main steps and the specific parameters involved in the design process of the tracking system used for the PV panels. The design process is depending on: the type of the tracking system; the mobility; the tracking angles values; the type of the actuators; the type of the bearings units; the type of the control system; the type of the sustaining structure.

1. Introduction

The tracking systems are used to increase the efficiency of the PV panels. Depending on the number of degrees of freedom, the tracking systems could be: with one degree of freedom (for the daily motion) or with two degrees of freedom (for the daily and seasonal motions both) [1]. Figure 1 presents a single axis tracking systems with daily motion.

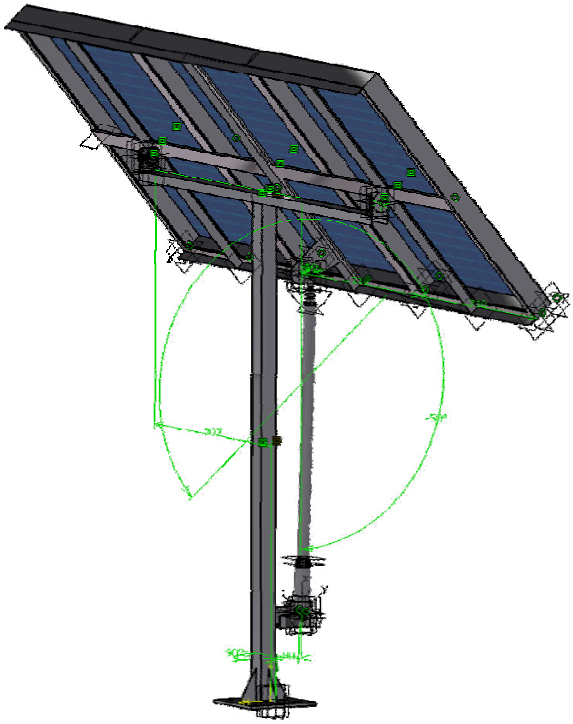

Figure 1: The constructive solution

References

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