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(57) Abstract :
ABSTRACT Our invention Solar Panel Rotation System: is a system for use in solar power generation and to the arrangement of solar panel drive and tilt mechanisms to follow the movement of the sun relative to the earth and the invention more relates to a drive mechanism for rotating a large defined array of solar panels in a very cost effectively. The invented technology also includes a solar tracking control system selectively energizes and deenergizes a motor and the motor causes a rotatable shaft supported on a base and situated parallel to the earths axis of rotation to be rotated. The invented technology also a U-member is connected to the rotatable shaft and to a frame upon which there is mounted a solar panel or collector and a bracket is connected to each of the two U-member legs and to the frame. The invented technology also includes a two reinforcing walls are connected to the U-member legs and the U-member middle portion so as to reinforce and retain the U-member shape and by selectively rotating the rotatable shaft the solar panel or collector is pivoted in a substantially perpendicular position to the sun throughout the day. The invented technology also fellow the another mounting assembly the frame is connected to a first plate having a pivot hole and a plurality of equidistant angle displacement holes and a second plate is connected to the base and has a pivot hole and an angle displacement hole. The invented technology also includes a pivot shaft is received through the pivot holes thereby allowing the frame to pivot and an angle displacement shaft is selectively received through the second plate angle displacement hole and any one of the first plate angle displacement holes so as to selectively angularly fix the frame and solar panel or collectors to more substantially be perpendicular to the sun during the various seasons of the year.

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