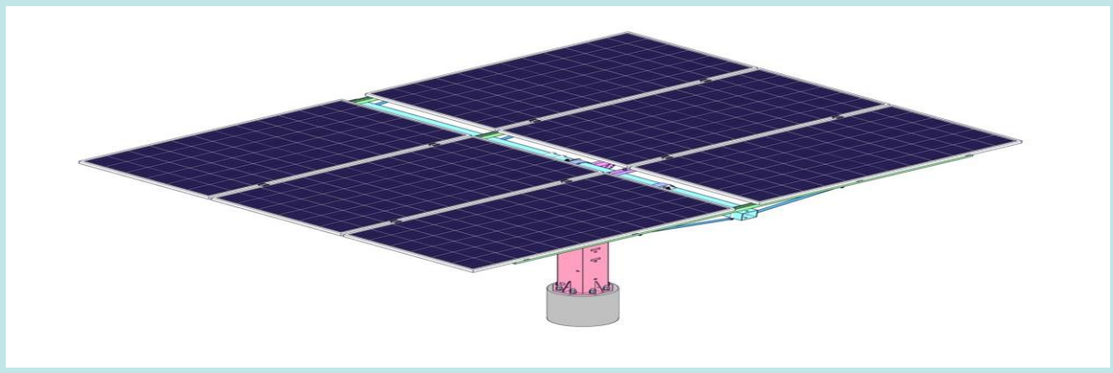
" A dual axis continuous solar tracking system using shape memory alloy bimorph based solar panel "

"Seeking industrial partners for co-development, production and marketing"

Preface



- ***Solar trackers can increase the power by about 30 to 40 percent for renewable energy and the decreasing cost of photovoltaic panels has made the solar power as a potential source of commercial energy generation.***
- ***Solar trackers, gives much shorter warranties, require one or more actuators to move the panel and external energy source. This increases the installation costs, operation cost and maintenance cost.***
- ***Thus, market needs a cost effective, automatic, self-reliant system. [Source: Global market insights]***
- ***We are offering an innovative advanced dual axis solar tracker.***

The Technology

A dual axis solar tracking system with self-actuated shape memory alloy (SMA) bimorph based photovoltaic panel unit for maximum solar power tracking

Value Proposition

- *It provides dual axis operation*
- *It offers a continuous solar tracking system*
- *It uses self-actuated shape memory alloy bimorph based on photovoltaic panel unit*
- *It calibrates and maintains the functioning of dual axis with auxiliary power supply*
- *It has feedback control to minimize the error*
- *It has PV panel unit for maximum point tracing of sunlight*
- *It is cost effective as no additional source of energy is required*

Industrial Utility

- *Industrial Facilities*
- *Desalination*
- *Agriculture*
- *Meteorological predictions*

Intellectual Property

- *Patent application has been filed*

Market Size & Growth Projection

- *Solar Tracker Market Size valued at USD 6 billion in 2021 and is estimated to grow at over 8% CAGR between 2022 and 2028 as expected from ongoing government initiatives and targets on renewable sources along with the huge implementation of large-scale projects. [Source: Global market insights]*

Competition

- *Technology has competitive edge in terms of cost effectiveness in continuous solar tracking with no requirement of external energy source.*

Contact at: reema.fitt@gmail.com

i-TTO, a regional tech transfer office established at FITT with support from NBM, BIRAC

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