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# “EUROINVENT”



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Technical University of Moldova,  
Department of Machine Projecting Basics

## PHOTOVOLTAIC INSTALLATION „SUNFLOWER”

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**Goal:**

Widening the functional possibilities, simplifying the construction and increasing the conversion efficiency.



**Solution:**

- ✓ Automatic realization of the orientation of the photovoltaic panel towards the Sun in the southern and azimuthal plane according to the natural model of the sunflower, by using relatively simple constructive innovative solutions;
- ✓ Consideration of the seasonal factor through a relatively simple purely mechanical construction solution ensures increased conversion efficiency and low cost.

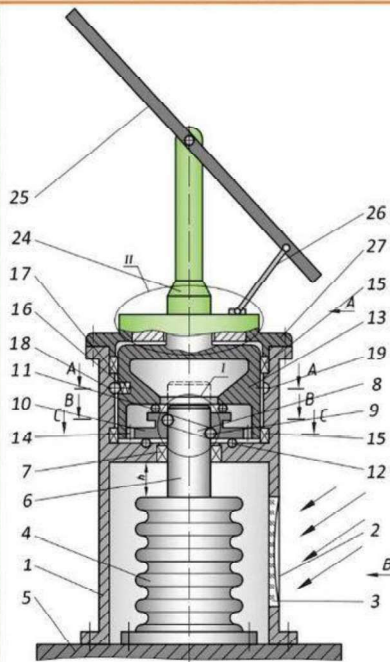
**Advantages:**

- ✓ automatic realization of the orientation of the photovoltaic panel towards the Sun in the southern and azimuthal plane according to the natural model of the sunflower, by using relatively simple constructive innovative solutions;
- ✓ consideration of the seasonal factor by a relatively simple purely mechanical construction solution, which ensures increased conversion efficiency and low cost.

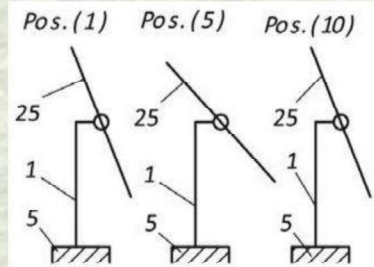
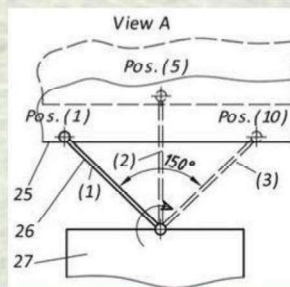
**Stage:**

Computerized model.

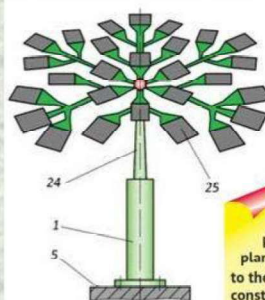
Overview of the photovoltaic panel "Sunflower".



Positions of the photovoltaic panel relative to the sun at sunrise, mid-day and sunset.



System with many tree-shaped photovoltaic panels.



The technical result of the invention consists in increasing the conversion efficiency by automatically orienting the photovoltaic panel in the southern and azimuthal plane taking into account the seasonal factor according to the natural pattern of the sunflower, simplifying the construction and reducing the cost.

