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Improved solar panel recycling

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TRL scale	

What's needed for?

Over the next decade the number of unserviceable photovoltaic solar panels will increase exponentially. More efficient methods designed to separate the many materials that make up a panel must be developed so that they do not end up discarded in a landfill. This patent improves the current methods available to separate the glass from the photovoltaic cells.

In most photovoltaic panels, an array of photovoltaic cells are attached to the surface of the glass. Currently air flow or vibrating moving belts are used to separate different materials, but these systems are not effective for separating glass from cells, since they have a similar specific weight.

The value of materials recovered after separation depends on their purity. This patent has developed a simple and effective method to improve the separation of the glass from the cells. Thanks to the accurate separation of each material, their value as a reusable raw material is greatly increased.

Advantages

- · Accurate separation of glass and photovoltaic cells
- · Increase of the value of the recovered material
- Avoids landfill dismissal of photovoltaic panels
- Reasonable plant construction cost

Applications

- · Industrial photovoltaic panel recycling plants
- Glass/photovoltaic cell separation systems

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