Patent Search

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Abstract:

ABSTRACT: Prudhvi Punarvi is an innovative self-sustaining solar-powered system that was conceptualized to fight plastic pollution in rivers and lakes. Being a renewa based solution, it offers a green approach to waste management through the amalgamation of advanced technology with environmental preservation. It does not co grid electricity, hence completely sustainable for combating water pollution and promoting the circular economy. At the core of this system is a floating slope belt me powered by solar, which effectively collects floating waste from plastic in water bodies. The collected waste is routed to the riverbank from where it is further routed t collection points in a subsidiary solar conveyor belt. The dual conveyor results in streamlined and energy-conserving waste handling, which thus does not strain natu to the fullest. What makes Prudhvi Punarvi unique is that it processes collected plastic waste into valuable raw materials for 3D printing and manufacturing. It not onl the burden of plastic pollution but also supports sustainable industrial practices by transforming waste into resources. This innovative recycling model reduces enviro degradation while promoting a zero-waste approach. The reliance on clean solar energy in the system minimizes carbon emissions from the earth and contributes po achieving the sustainability set globally. Prudhvi Punarvi is thus a power testimony to merging renewable energy with waste disposal and a solution that should be sc enough to enforce environmental restoration and resource effectiveness. It's an embodiment of the kind of innovation required when solving such burning issues as pollution and climate.

Complete Specification

Description:PREAMBLE TO THE DESCRIPTION:
The following specification particularly describes the invention and how it is to be performed:
Principal Elements:
- A mechanical collection device with two bearing-equipped revolving wheels
- A conveyor belt that is sloped and partially immersed
- Power-transmission solar-powered motor
- An additional conveyor for the transportation of garbage
- Power-storage solar panels

Priorities for Design:
- Optimal belt angles for garbage collecting efficiency
- Minimal power usage
- Constant functioning
- Low maintenance needs
- Resistance to weather

The novel features include the ability to process waste in addition to collection;

View Application Status

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