

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/11/2024

(21) Application No.202431090727 A

(43) Publication Date : 13/12/2024

(54) Title of the invention : "Sun Blow Seed Separator: An Innovative Solar-Powered Solution for Efficient Seed Separation in Agriculture"

(51) International classification :H02S0040380000, F21S0009030000, B64C0039020000, H02S0010400000, C02F0001140000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :

The invention relates to a solar-powered, rechargeable wind blower designed for efficient seed separation in agricultural processing. The device utilizes a high-efficiency solar panel to capture sunlight and convert it into electrical energy, which is stored in a rechargeable battery for extended operation, even during low sunlight conditions. A motor, powered by the battery, drives a high-speed fan that generates airflow to separate seeds from husks. The system includes an adjustable speed controller, allowing precise control of the fan speed to optimize the separation process for different crop types. Housed in a weather-resistant casing, the portable and durable device enhances post-harvest efficiency, reduces labor costs, and supports sustainable agricultural practices by utilizing renewable solar energy.

No. of Pages : 12 No. of Claims : 10