

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/04/2025

(21) Application No.202541039083 A

(43) Publication Date : 16/05/2025

(54) Title of the invention : Solar Tracking System for Energy Enhancement of PV Solar Panel using Advanced Coating Technology

(51) International classification :C09D 7/62, G06Q 10/0637, H02S 40/10
(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

(71)Name of Applicant :

1)Ms. Anitha Mary M

Address of Applicant :Asst. Professor (SS), Dept. of ECE, Rajalakshmi Engineering college, Thandalam, Chennai – 602105, Tamilnadu, India. -----

2)Shreevidya M

3)Tharun K

4)Srivatssen D

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Ms. Anitha Mary M

Address of Applicant :Asst. Professor (SS), Dept. of ECE, Rajalakshmi Engineering college, Thandalam, Chennai – 602105, Tamilnadu, India. -----

2)Shreevidya M

Address of Applicant :UG Scholar, Dept. of ECE, Rajalakshmi Engineering college, Thandalam, Chennai – 602105, Tamilnadu, India. -----

3)Tharun K

Address of Applicant :UG Scholar, Dept. of ECE, Rajalakshmi Engineering college, Thandalam, Chennai – 602105, Tamilnadu, India. -----

4)Srivatssen D

Address of Applicant :UG Scholar, Dept. of ECE, Rajalakshmi Engineering college, Thandalam, Chennai – 602105, Tamilnadu, India. -----

(57) Abstract :

This innovative solution aims to repel foreign particles effectively, thereby ensuring the maintenance of optimal performance levels over time. Through rigorous experimentation and analysis, our research delves into extensive investigations to explore the profound impact of hydrophobic coatings on mitigating the detrimental effects of dust and moisture accumulation, ultimately leading to significant improvements in solar panel efficiency. By effectively addressing the challenges of dust and moisture accumulation through innovative coating technology, our project makes a significant contribution to advancing sustainable energy solutions. The application of hydrophobic coatings offers a cost-effective and scalable means to enhance the efficiency of solar panels, thereby facilitating broader adoption of renewable energy technologies and reducing reliance on fossil fuels. This research aligns with broader efforts to combat climate change and promote environmental sustainability through the deployment of innovative technological solutions that empower the transition towards a cleaner, greener future.

No. of Pages : 14 No. of Claims : 8