

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/04/2025

(21) Application No.202531040467 A

(43) Publication Date : 02/05/2025

(54) Title of the invention : A solar-powered go-kart

(51) International classification :B60L0007100000, G01R0031367000, H02S0040380000, B60L0050600000, B62D0021180000
(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)Swami Vivekananda University
Address of Applicant :Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
Name of Applicant : NA
Address of Applicant : NA
(72)Name of Inventor :
1)Mr. Suman Kumar Ghosh
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
2)Dr. Ranjan Kumar
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
3)Dr. Samrat Biswas
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
4)Dr. Bikash Panja
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
5)Mr. Soumya Ghosh
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
6)Mr. Saurabh Adhikari
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
7)Mr. Sayan Paul
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
8)Mr. Snehasish Saha
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----
9)Mr. Sudipta Hazra
Address of Applicant :Swami Vivekananda University, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, Kolkata, West Bengal 700121, India. -----

(57) Abstract :

The Solar-Powered Go-Kart is an eco-friendly vehicle that uses solar energy to power a brushless DC motor. It incorporates a photovoltaic solar panel system mounted on the frame to convert sunlight into electrical energy, which is stored in high-efficiency lithium-ion or graphene batteries. A regenerative braking system recovers kinetic energy during braking to recharge the battery. The go-kart features a lightweight, durable chassis, and a control system for smooth acceleration and braking. An LCD display provides real-time data on battery levels, solar input, and performance. The go-kart offers a sustainable, low-maintenance, and energy-efficient alternative to traditional fuel-powered karts.

No. of Pages : 14 No. of Claims : 7