

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202341058380 A

(19) INDIA

(22) Date of filing of Application :30/08/2023

(43) Publication Date : 08/09/2023

(54) Title of the invention : DESIGN AND DEVELOPMENT OF SOLAR PANEL CLEANING BOT

<p>(51) International classification :H02S0040100000, F24S0040200000, F24S0025000000, H02S0020230000, F24S0025600000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Mr. Nagesh Kumar D N Address of Applicant :Mr. Nagesh Kumar D N Asst. Professor, Department of Electronics & Communication, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 -----</p> <p>2)Mr. Madhukar M 3)Dr. K. Chandrasekhar 4)Dr. Gopalakrishna K 5)Dr. K.V. Muralidhar Sharma 6)Yashas G 7)Dr. Ajjaiah HBM 8)Mr. Chandrashekar BM</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Mr. Nagesh Kumar D N Address of Applicant :Mr. Nagesh Kumar D N Asst. Professor, Department of Electronics & Communication, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 -----</p> <p>2)Mr. Madhukar M Address of Applicant :Mr. Madhukar M Asst. Professor, Department of Electronics & Communication, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 -----</p> <p>3)Dr. K. Chandrasekhar Address of Applicant :Dr. K. Chandrasekhar Professor & Head, Department of Electronics & Communication, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 -----</p> <p>4)Dr. Gopalakrishna K Address of Applicant :Dr. Gopalakrishna K Professor & Principal, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 -----</p> <p>5)Dr. K.V. Muralidhar Sharma Address of Applicant :Dr. K.V. Muralidhar Sharma Associate Professor, Department of Mechanical Engineering, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 -----</p> <p>6)Yashas G Address of Applicant :Yashas G #7,4th cross, Siddappa layout, konankunte cross, Bangalore -62 yashaspraveen6@gmail.com -----</p> <p>7)Dr. Ajjaiah HBM Address of Applicant :Dr. Ajjaiah HBM Associate professor, Department of Electronics & Communication, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 ajjaiah.hbm@jyothyit.ac.in -----</p> <p>8)Mr. Chandrashekar BM Address of Applicant :Mr. Chandrashekar BM Asst. Professor, Department of Electronics & Communication, Jyothy Institute of Technology, Thathaguni, Bangalore-560082 chandra.shekar@jyothyit.ac.in -----</p>
---	--

(57) Abstract :

The invention is presented for the first ever human portable robotic cleaning system for solar panels, which can clean and maneuver on the glass surface of a Solar panel array at varying angles from horizontal to vertical. This is done with the help of Microcontroller board Arduino Uno R3 which easily controls all the devices used in this particular model and therefore helps to understand the required parameters which deal with the change in efficiency brought about by the cleansing of the solar panel arrays.

No. of Pages : 15 No. of Claims : 1