

पेटेंट कार्यालय  
शासकीय जर्नल

**OFFICIAL JOURNAL  
OF  
THE PATENT OFFICE**

---

---

निर्गमन सं. 10/2024  
ISSUE NO. 10/2024

शुक्रवार  
**FRIDAY**

दिनांक: 08/03/2024  
DATE: 08/03/2024

---

---

पेटेंट कार्यालय का एक प्रकाशन  
PUBLICATION OF THE PATENT OFFICE

(54) Title of the invention : INTELLIGENT ROBOTIC ARMED WHEELCHAIR TO ASSIST OLDER ADULTS WITH MOTOR DISABILITIES

(51) International classification :A61G0005040000, A61G0005100000, A61G0005140000, A61P0025160000, A61G0005080000

(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)S.Balamurugan**  
 Address of Applicant :No.21, Kalloori Nagar, Peelamedu, Coimbatore-641004, Tamilnadu, India -----  
 -----  
**2)Dr.Pooja Tripathi**  
**3)Dr Priya Arundhati**  
**4)Dr.M.Meenakshi**  
**5)Rupali Vijay Ithape**  
**6)Sonika Gill**  
**7)Shwetha M.**  
**8)Dr. Rangaswamy Y.**  
**9)Anand H.D**  
**10)Kavana Salimath**  
**11)Dr.Pavithra.G**  
**12)Dr.T.C.Manjunath**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)S.Balamurugan**  
 Address of Applicant :No.21, Kalloori Nagar, Peelamedu, Coimbatore-641004, Tamilnadu, India -----  
 -----  
**2)Dr.Pooja Tripathi**  
 Address of Applicant :Inderprastha Engg College Ghaziabad, Surya Nagar, Flyover Road, Industrial Area, Sahibabad, Ghaziabad, Uttar Pradesh 201010, India -----  
**3)Dr Priya Arundhati**  
 Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru - 560 064 Karnataka, India -  
 -----  
**4)Dr.M.Meenakshi**  
 Address of Applicant :Saveetha School of Engineering, Saveetha University, Thandalam campus, Chennai-602 105, TamilNadu, India -----  
**5)Rupali Vijay Ithape**  
 Address of Applicant :Assistant Professor, Electronics & Communication Engineering Department, School of Engineering & Sciences, Maharashtra Institute of Technology (MIT), Art Design & Technology University (ADT), MIT-ADT University, Pune-412201, Maharashtra, India -----  
**6)Sonika Gill**  
 Address of Applicant :Assistant Professor, Electronics & Communication Engineering Department, School of Engineering & Sciences, Maharashtra Institute of Technology (MIT), Art Design & Technology University (ADT), MIT-ADT University, Pune-412201, Maharashtra, India -----  
**7)Shwetha M.**  
 Address of Applicant :Assistant Professor, Electronics and Communication Engineering Department, Dr.Ambedkar Institute of Technology, Bengaluru-560056, Karnataka, India -----  
**8)Dr. Rangaswamy Y.**  
 Address of Applicant :Assistant Professor, Electronics and Communication Engineering Department, Dr.Ambedkar Institute of Technology, Bengaluru-560056, Karnataka, India -----  
**9)Anand H.D**  
 Address of Applicant :Assistant Professor, Electronics and Communication Engineering Department, Dr.Ambedkar Institute of Technology, Bengaluru-560056, Karnataka, India -----  
**10)Kavana Salimath**  
 Address of Applicant :Assistant Professor, Dept. of Electrical & Electronics Engineering, Dayananda Sagar College of Engg. (DSCE), Kumaraswamy Layout, Shavigemalleshwara Hills, Bangalore- 560111, Karnataka, India -----  
**11)Dr.Pavithra.G**  
 Address of Applicant :Associate Professor, Electronics & Communication Engg Dept. (ECE), Dayananda Sagar College of Engg. (DSCE), Block No. 17, Room No. 17205, Kumaraswamy Layout, Shavigemalleshwara Hills, Bangalore- 560078, Karnataka, India -----  
**12)Dr.T.C.Manjunath**  
 Address of Applicant :Professor & Head of The Dept. Electronics & Communication Engg Dept. (ECE), Dayananda Sagar College of Engg. (DSCE), Block No. 17, Room No. 208 Kumaraswamy Layout, Shavigemalleshwara Hills, Bangalore-560078, Karnataka, India -----

(57) Abstract :  
 There has been a steep rise in the ratio of aged population, especially aged above 65 years due to advancement in medical technologies and pharmaceutical industries. Physical Deterioration of Older Adults may lead to motor disabilities which makes the locomotion of the individual difficult. One of the common assistive devices for older adults with motor disabilities are electronic wheelchairs. Older Adults suffering from Parkinson’s Disease or spinocerebellar degeneration suffer from deterioration of bone metabolism, blood circulation and increased inflammation. Proposed is an Intelligent Robotic Armed Wheelchair to Assist Older Adults with Motor Disabilities. Egocentric Camera, Visual Marker and Frontal Display are equipped with the skeleton of the electric wheelchair. Human Robot Interface is equipped with Head Tracking Device, Depth Device and Laser pan-tilt. Power Distribution Box, Solenoid Button, Dual Computer Seat, Voltage Converter are assembled for the disabled older adult to be seated and operate. Encoders, LIPO batteries, EPW Lead Acid Batteries, Rotating Sensor Tower are synchronized with Footplate and Oscillating Dual Radio Frequency Laboratory LRF.

No. of Pages : 16 No. of Claims : 3