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सत्यमेव जयते

भारत सरकार  
GOVERNMENT OF INDIA

पेटेंट कार्यालय  
THE PATENT OFFICE

पेटेंट प्रमाणपत्र  
PATENT CERTIFICATE  
(Rule 74 of The Patents Rules)

क्रमांक : 011154337  
SL No :



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फाइल करने की तारीख / Date of Filing : 05/04/2022  
पेटेंटी / Patentee : 1.Nishant Kumar 2.Megha Kainth

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित POWER DRIVEN STAIR CLIMBING TRI-WHEELED SPIDER-WHEEL SYSTEM नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख अप्रैल 2022 के पांचवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled POWER DRIVEN STAIR CLIMBING TRI-WHEELED SPIDER-WHEEL SYSTEM as disclosed in the above mentioned application for the term of 20 years from the 5<sup>th</sup> day of April 2022 in accordance with the provisions of the Patents Act,1970.



अनुदान की तारीख : 28/12/2022  
Date of Grant :

पेटेंट नियंत्रक  
Controller of Patent

**टिप्पणी** - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, अप्रैल 2024 के पांचवें दिन को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।

**Note.** - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 5<sup>th</sup> day of April 2024 and on the same day in every year thereafter.

(54) Title of the invention : POWER DRIVEN STAIR CLIMBING TRI-WHEELED SPIDER-WHEEL SYSTEM

(51) International classification :A61G0005060000, F16H0001280000, B62B0005020000, A47L0011400000, B66D0001740000

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**(57) Abstract :**

The present invention relates to a power driven stair climbing tri-wheeled spider-wheel system comprising; an axle (14), wherein said spider (12) is fixed on said axle (14) in such a way that, it allows the spider (12) and wheel (10) to spin freely around their axes, Plurality of wheels (10), wherein said wheels are embedded on said spider (12), wherein, said wheels are evenly spaced at around 120°, an electric motor supported on said frame and operatively connected to drive said pair of spider assemblies to rotate, a power source supported on said frame an operatively connected to said electric motor, a motor's drive shaft (1), wherein said drive shaft drives the train in said stair climbing tri-wheeled spider-wheel system, two epicyclic gear trains in the gearing system, wherein said both gear trains share a common sun gear (4), wherein said spider (12) and driving shaft (1) are connected by means of a first gear train in such a way that an annulus (11) mounted on said spider and the carrier (2) of the planetary gears (3) of the said gear train is connected to the said drive shaft and common sun is connected to wheel gears in the second gear train through an idler gear (6) with the axis fixed in the centre of the spider in the first gear train.

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