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सत्यमेव जयते

क्रमांक : 044124420
SL No :



भारत सरकार
GOVERNMENT OF INDIA

पेटेंट कार्यालय
THE PATENT OFFICE

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

पेटेंट सं. / Patent No. : 351230
आवेदन सं. / Application No. : 3633/CHE/2012
फाइल करने की तारीख / Date of Filing : 03/09/2012
पेटेंटी / Patentee : INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT Madras)

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में यथाप्रकटित A HUMAN POWERED DEVICE नामक आविष्कार के लिए, पेटेंट अधिनियम, १९७० के उपबंधों के अनुसार आज तारीख 3rd day of September 2012 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 A HUMAN POWERED DEVICE as disclosed in the above mentioned application for the term of 20 years from the 3rd day of September 2012 in accordance with the provisions of the Patents Act,1970.



अनुदान की तारीख : 10/11/2020
Date of Grant :

पेटेंट नियंत्रक
Controller of Patent

OkSupta

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, 3rd day of September 2014 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 3rd day of September 2014 and on the same day in every year thereafter.



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उपदर्शन/GEOGRAPHICAL INDICATIONS



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सं. \ No. 3633/CHE/2012

दिनांक \ Dated the 10/11/2020

सेवा मे, \ To :

Address of Service:- SHRI. D. MOSES JEYAKARAN, ADVOCATE & PATENT AGENT, 245/105, METTU STREET, AYANAVARAM, CHENNAI - 600 023.

Email Id:- mjeyakaran@yahoo.com

विषय :- पेटेंट आवेदन संख्या 3633/CHE/2012 के संबंध में अधिनियम की धारा 43 के तहत पेटेंट अनुदान तथा पेटेंट रजिस्टर में प्रविष्टि की सूचना

Sub :- Intimation of the grant and recordal of patent under section 43 of the Act in respect of patent application no. 3633/CHE/2012

महोदय/महोदया,

Sir/Madam,

आपको सूचित किया जाता है कि पेटेंट अधिनियम, 1970 की धारा 12 व 13 तथा उस आधार पर बने नियम के तहत उपर्युक्त पेटेंट आवेदन के परीक्षण [व ----- को हुई सुनवाई] के उपरांत एतद्वारा पेटेंट अनुदान किया जाता है। तथा पेटेंट अनुदान की प्रविष्टि 10/11/2020 को पेटेंट रजिस्टर में कर दी गयी है।

This is to Inform you that following the examination of above mentioned patent application under section 12 and 13 of The Patents Act, 1970 and Rules made thereunder [and hearing held on -----] a patent is hereby granted and recorded in the Register of Patents on the 10/11/2020. The Patent Certificate is enclosed herewith.

पेटेंट संख्या \ Patent No	: 351230
आवेदक का नाम \ Name Of Applicant	: INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT Madras)
पेटेंट दिनांक \ Date of Patent	: 03/09/2012
पूर्विका तिथि \ Priority Date	: 03/09/2012
परीक्षण हेतु अनुरोध दाखिल करने की तिथि \ Filing date of Request for examination	: 26/07/2013
शीर्षक \ Title	: A HUMAN POWERED DEVICE
दावों की संख्या \ Number of claims	: 1-7

उपर्युक्त पेटेंट के अनुदान का प्रकाशन अधिनियम की धारा 43 के तहत पेटेंट कार्यालय के आधिकारिक जर्नल में किया जाएगा।

The grant of above mentioned patent will be published in the Official Journal of the patent Office under section 43 of the Act.

पेटेंट अधिनियम 1970 यथा संशोधित पेटेंट (संशोधन) नियम, 2005/ पेटेंट नियम, 2003 यथा संशोधित पेटेंट (संशोधन) नियम, 2016 की धारा 142 की उप-धारा (4) के प्रावधानों के तहत उपरोक्त प्रविष्टि की तिथि से 3 माह के भीतर इस कार्यालय में नवीकरण शुल्क जमा किया जाना चाहिए।

The payment of renewal fee is required to be made at this office within three(3) months from the aforesaid date of recording according to the proviso in sub-section(4) of Section 142 of The Patents Act,1970, as amended by The Patents (Amendment) Act, 2005 / The Patents Rules, 2003 as amended by The Patents (Amendment) Rules, 2016.

Omvir Singh

(नियंत्रक पेटेंट)

Controller of Patents

टिप्पणी / Note :

1. संशोधित नवीकरण शुल्क हेतु कृपया महानियंत्रक पेटेंट, अभिकल्प एवं व्यापार चिह्न की आधिकारिक वेबसाइट www.ipindia.gov.in पर उपलब्ध पेटेंट (संशोधन) नियम 2016 की प्रथम अनुसूची (शुल्क) देखें।

For revised renewal fees kindly refer to the First Schedule (fees) of The Patents (Amendment) Rules 2016 available on the official website of Controller General of Patents, Designs and Trade Marks www.ipindia.gov.in

2. कार्यालय द्वारा पेटेंट प्रमाणपत्र की कोई भी कागजी प्रति अलग से जारी नहीं की जाएगी।

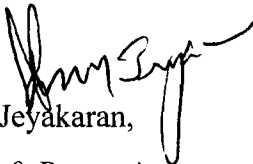
No hard copy of Patent Certificate shall be issued separately by the office.

We Claim,

1. A device useful for converting the stair climbing motion of one or more users into rotary output.
2. A device of claim 1, wherein comprises a drive-train, clutch assembly, brake assembly, peripheral connections and a supporting structure.
3. A device of claim 1, wherein drive-train includes a set of pedals which are actuated by the user. It further includes the primary and secondary shafts and a set of pawl and ratchets that are used to convert the intermittent rotary motion into a continuous rotary motion.
4. A device of claim 1, wherein the clutch assembly is used to separate the operator from the load. It may work by disengaging the pedals from the primary shafts. It may be operated by the user through a lever.
5. A device of claim 1, wherein the brake assembly is used to stop the motion of the secondary shaft and therefore, by extension of the primary shaft and the pedal as well. It may work on the principle of friction braking and is applied on the secondary shaft. It may be operated by the user through a lever.
6. A device of claim 1, wherein the peripheral connections are used to utilize the rotary motion from the device to perform various tasks such as material lifting and rod bending. The support structure provides a structural support to the aforementioned components.
7. A device of claim 1, wherein the user operates the device by executing a stair climbing motion using the pedals which are connected to the primary shafts. The primary shafts are supported on the bearings which are in turn mounted on the support structure.
8. A device of claim 1, wherein the stair-climbing motion of the operator oscillates the pedals which in turn rotate the primary shafts. The primary shafts are connected to the respective sprockets via a pair of clutch assemblies. The sprockets are connected to smaller sprockets mounted on the secondary shaft via chains.
9. A device of claim 1, wherein introduces a multiplication of the rotational speed. The smaller sprocket has an in-built pawl and ratchet assembly which ensures that motion only along one direction is passed from the primary shaft to the secondary shaft. It is required to ensure that while the operator is reversing the pedals it does not lead to a reverse rotation of the secondary shaft.
10. A device of claim 1, wherein has a modular design. Multiple devices can be connected together in series to add their powers and torques. Thus, the same device which is used by a rod-bender for low power requirements can also be used by multiple operators for

lifting heavy weight in construction sites and may be effectively designed to be a plug-and-play aid in several manual jobs bringing the modularity in the design.

Dated at Chennai this June 15, 2013

Signature: 
D. Moses Jeyakaran,
Advocate & Patent Agent
IN/PA – 369