



Tamil Nadu Physical Education and Sports University
Chennai 600 127

Criterion 3 - Research, Innovations and Extension

3.4.2 PATENTS



Registrar
Tamilnadu Physical Education
and
Sports University
Chennai - 600 127.



Application Details

APPLICATION NUMBER	202341084156
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	10/12/2023
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TITLE OF INVENTION	"ADVANCED HYPOXIC ROOM SYSTEM FOR OPTIMAL TRAINING AND THERAPY"
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
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ADDITIONAL-EMAIL (As Per Record)	
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शासकीय जर्नल

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पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

(PROF. (DR) UNNAT P. PANDIT)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

5th JANUARY, 2024

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**THE PATENT OFFICE
KOLKATA, 05/01/2024**

Address of the Patent Offices/Jurisdictions

The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-

<p>1 Office of the Controller General of Patents, Designs & Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai - 400 037</p> <p>Phone: (91)(22) 24123311, Fax : (91)(22) 24123322 E-mail: cgpdtm@nic.in</p>	<p>4 The Patent Office, Government of India, Intellectual Property Rights Building, G.S.T. Road, Guindy, Chennai - 600 032.</p> <p>Phone: (91)(44) 2250 2081-84 Fax : (91)(44) 2250 2066 E-mail: chennai-patent@nic.in</p> <p>❖ The States of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.</p>
<p>2 The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai - 400 037</p> <p>Phone: (91)(22) 24137701 Fax: (91)(22) 24130387 E-mail: mumbai-patent@nic.in</p> <p>❖ The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli</p>	<p>5 The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector -V, Salt Lake City, Kolkata- 700 091</p> <p>Phone: (91)(33) 2367 1943/44/45/46/87 Fax: (91)(33) 2367 1988 E-Mail: kolkata-patent@nic.in</p> <p>❖ Rest of India</p>
<p>3 The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi - 110075</p> <p>Phone: (91)(11) 25300200 & 28032253 Fax: (91)(11) 28034301 & 28034302 E.mail: delhi-patent@nic.in</p> <p>❖ The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.</p>	

Website: www.ipindia.nic.in

www.patentoffice.nic.in

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.

Fees: The Fees may either be paid in cash or may be sent by Bank Draft or Cheques payable to the Controller of Patents drawn on a scheduled Bank at the place where the appropriate office is situated.

पेटेंट कार्यालय

कोलकाता, दिनांक 05/01/2024

• कार्यालयों के क्षेत्राधिकार के पते

विभिन्न जगहों पर स्थित पेटेंट कार्यालय के पते आंचलिक आधार पर दर्शित उनके प्रादेशिक अधिकार क्षेत्र के साथ नीचे दिए गए हैं:-

<p>1 कार्यालय : महानियंत्रक, एकस्व, अभिकल्प तथा व्यापार चिह्न, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत, फोन: (91) (22) 24123311 फ़ैक्स: (91) (22) 24123322 ई. मेल: cgpdtm@nic.in</p>	<p>4 पेटेंट कार्यालय, भारत सरकार इंटेलेक्चुअल प्रॉपर्टी राइट्स बिल्डिंग, इंडस्ट्रियल इस्टेट एसआईडीसीओ आरएमडी गोडाउन एरिया एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड, गायन्डी चेन्नई - 600 032. फोन: (91) (44) 2250 2081-84 फ़ैक्स: (91) (44) 2250-2066 ई. मेल: chennai-patent@nic.in ✧ आन्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र, लक्षदीप</p>
<p>2 पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, फोन: (91) (22) 24137701 फ़ैक्स: (91) (22) 24130387 ई. मेल: Mumbai-patent@nic.in ✧ * गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित क्षेत्र, वमन तथा दीव, दादर और नगर हवेली.</p>	<p>5 पेटेंट कार्यालय, भारत सरकार कोलकाता, (प्रधान कार्यालय) बौद्धिक संपदा भवन, सीपी-2, सेक्टर- V, साल्ट लेक सिटी, कोलकाता-700 091, भारत. फोन: (91) (33) 2367 1943/44/45/46/87 फ़ैक्स:/Fax: (91) (33) 2367 1988 ई. मेल: kolkata-patent@nic.in ✧ भारत का अवशेष क्षेत्र</p>
<p>3 पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, प्लॉट सं. 32, सेक्टर- 14, द्वारका, नई दिल्ली- 110 075. फोन: (91) (11) 25300200, 28032253 फ़ैक्स: (91) (11) 28034301, 28034302 ई. मेल: delhi-patent@nic.in हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान, उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित क्षेत्र चंडीगढ़</p>	

वेबसाइट: <http://www.ipindia.nic.in>
www.patentoffice.nic.in

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाएँ, विवरण या अन्य दस्तावेज़ या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे। शुल्क: शुल्क या तो नगद रूप में या Controller of Patents के नाम में देय बैंक ड्राफ्ट या चेक के द्वारा भेजी जा सकती है जो उसी स्थान के किसी अनुसूचित बैंक में प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है।

SPECIAL NOTICE

18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

**(PROF. (DR) UNNAT P. PANDIT)
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SPECIAL NOTICE

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules there under, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18th months , grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every **Friday**.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

SPECIAL NOTICE

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.



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Ministry of Commerce & Industry

उद्योग संवर्धन और आंतरिक व्यापार विभाग

Department for Promotion of Industry and Internal Trade

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संख्या/No. : CGPDTM-17031/4/2023-POK

दिनांक/Date: 23-11-2023

LIST OF HOLIDAYS FOR THE YEAR - 2024

The following days have been declared by C.G.E.W.C.C., Kolkata as holidays to be observed by the Patent Office Kolkata during the year 2024.

Sl. No.	Holidays & Connected Festivals	Date	Days of Week
1.	Republic Day	January, 26	Friday
2.	Basant Panchami/Sri Panchami	February, 14	Wednesday
3.	Holi	March, 25	Monday
4.	Good Friday	March, 29	Friday
5.	Idu'l Fitr	April, 11	Thursday
6.	Mahavir Jayanti	April, 21	Sunday
7.	Buddha Purnima	May, 23	Thursday
8.	Id-uz-zuha(Bakrid)	June, 17	Monday
9.	Muharram	July, 17	Wednesday
10.	Independence Day	August, 15	Thursday
11.	Milad-un-nabi or Id-E-Milad (Birth Day Prophet Mahammad)	September, 16	Monday
12.	Mahatma Gandhi's Birth Day	October, 02	Wednesday
13.	Dussehra (Mahaashtami/Mahanavmi) (Additional Day)	October, 11	Friday
14.	Dussehra (Vijay Dashmi)	October, 12	Saturday
15.	Diwali (Deepavali)	October, 31	Thursday
16.	Guru Nanak's Birthday	November, 15	Friday
17.	Christmas Day	December, 25	Wednesday

Note: Central Government Organizations, which include industrial, commercial & training establishments (i.e. other than doing work of Secretariat nature) would observe 16 holidays in a year out of which 3 namely Republic Day, Independence Day and Mahatma Gandhi's Birthday will be compulsory. The remaining holidays/occasions may be determined by such Establishments/Organizations themselves on year to year basis.

In deciding whether a particular Deptt/Establishment/Organization an industrial, commercial or trading organizations (i.e. other than those doing work of Secretariat nature) the decision may be taken by the respective Ministry/Ministry of Home Affairs, New Delhi.

*The date of Holidays for the Muslim festivals may be changed on sighting of the Moon and decision to be taken by the CGEWCC, Kolkata based on the decision of the State Government in respect of Idu'l Fitr, Idu'l Zoha, Muharram and Id-e-Milad.

(Pramathesh Sen)

Joint Controller of Patents & Designs & Head of Office



बौद्धिक संपदा भारत

एकस्व/अभिकल्प/व्यापार चिह्न/भौगोलिक
उपदर्शन/आर जी एन आई आई पी एम

INTELLECTUAL PROPERTY INDIA
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संख्या/No. : सीजीपीडीटीएम-17031/4/2023-पीओके

दिनांक/Date:

वर्ष 2024 में छुट्टियों की सूची

सी.जी.ई.डब्ल्यू.सी.सी., कोलकाता द्वारा वर्ष 2024 के दौरान पेटेंट कार्यालय, कोलकाता के लिए निम्नलिखित दिनों को छुट्टी घोषित किया गया है।

क्र.सं.	छुट्टियाँ तथा संबंधित त्यौहार	दिनांक	सप्ताह के दिन
1.	गणतंत्र दिवस	जनवरी, 26	शुक्रवार
2.	बसंत पंचमी/श्री पंचमी	फरवरी, 14	बुधवार
3.	होली	मार्च, 25	सोमवार
4.	गुड फ्राइडे	मार्च, 29	शुक्रवार
5.	ईद-उल-फितर	अप्रैल, 11	गुरुवार
6.	महावीर जयंती	अप्रैल, 21	रविवार
7.	बुद्ध पुर्णिमा	मई, 23	गुरुवार
8.	ईद-उल-जुहा (बकरीद)	जून, 17	सोमवार
9.	मुहर्रम	जुलाई, 17	बुधवार
10.	स्वतंत्रता दिवस	अगस्त, 15	गुरुवार
11.	मिलाद-उन-नबी या ईद-ए-मिलाद (प्रोफेट मोहम्मद जन्मदिवस)	सितंबर, 16	सोमवार
12.	महात्मा गाँधी जयंती	अक्टूबर, 02	बुधवार
13.	दशहरा (महाअष्टमी/महानवमी) (अतिरिक्त दिन)	अक्टूबर, 11	शुक्रवार
14.	दशहरा (विजय दशमी)	अक्टूबर, 12	शनिवार
15.	दिवाली (दिपावली)	अक्टूबर, 31	गुरुवार
16.	गुरुनानक जयंती	नवंबर, 15	शुक्रवार
17.	क्रिसमस डे	दिसम्बर, 25	बुधवार

टिप्पणी: केन्द्र सरकार के संस्थानों में, जिनमें औद्योगिक, वाणिज्यिक तथा प्रशिक्षण प्रतिष्ठान (यथा सचिवालयी प्रवृत्ति से पृथक कार्य कराने वाले) शामिल हैं, इस वर्ष 16 अवकाश होंगे जिनमें से 3 (तीन) यथा गणतंत्र दिवस, स्वतंत्रता दिवस तथा महात्मा गाँधी जयंती अनिवार्य होंगे। शेष अवकाश/अवसर उन प्रतिष्ठानों/संस्थानों द्वारा प्रत्येक वर्ष स्वयं निर्धारित किए जायेंगे।

कोई विशेष/प्रतिष्ठान/संगठन औद्योगिक, वाणिज्यिक एवं व्यापारिक प्रतिष्ठान (अर्थात् सचिवालयीय प्रवृत्ति के कार्य करने वाले प्रतिष्ठानों के अतिरिक्त) है कि नहीं इसका निर्धारण संबंधित मंत्रालय/गृह मंत्रालय, नई दिल्ली द्वारा किया जाएगा।

*मुस्लिम त्यौहारों की छुट्टी के दिन चाँद के दिखने तथा राज्य सरकार द्वारा लिए गए निर्णय के आधार CGEWCC, कोलकाता द्वारा लिए गए निर्णय के द्वारा ईद-उल-फितर, ईद-उल-जुहा, मुहर्रम एवं ईद-ए-मिलाद पर बदले जा सकते हैं।

(प्रमथेश सेन)

संयुक्त नियंत्रक, एकस्व व अभिकल्प तथा कार्यालय प्रधान

(12) PATENT APPLICATION PUBLICATION

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(22) Date of filing of Application :10/12/2023

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(54) Title of the invention : "ADVANCED HYPOXIC ROOM SYSTEM FOR OPTIMAL TRAINING AND THERAPY"

(51) International classification :A61B0005000000, A61B0005020500, G16H0040670000,
G09B0019000000, A63B0024000000

(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 :
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3)Prof. R. Mohana Krishnan
4)Dr.M.Senthil Kumar
5)Dr.M.Mahalingam
6)Dr.P.Kumaravelu
7)Prof.S.Saroja
8)Dr.S.Jayasingh Albert Chandrasekar
9)Dr.M.Siva
10)Mr.K.Govindasamy
Name of Applicant : NA
Address of Applicant : NA

(72)Name of Inventor :
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4)Dr.M.Senthil Kumar
Address of Applicant :Associate Professor & Head Department of Yoga, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India. -----

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Address of Applicant :Professor & Head (Additional) Department of Physical Education & Sports, Association Convener, MagicEvents, Dr.M.G.R Educational and Research Institute, Deemed to be University, Maduravoyal, Chennai. -----

6)Dr.P.Kumaravelu
Address of Applicant :Associate Professor, Department of Physical Education, Tamil Nadu Physical Education and Sports University, Mellakottaiyur, Tamil Nadu, India. -----

7)Prof.S.Saroja
Address of Applicant :Professor cum Coordinator, Centre for Yoga Education, Alagappa University, Karaikudi -----

8)Dr.S.Jayasingh Albert Chandrasekar
Address of Applicant :Associate Professor & Head Department of Physical Education and Sports Sciences, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India. -----

9)Dr.M.Siva
Address of Applicant :Assistant Professor, Department of Physical Education and Sports Sciences, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India. -----

10)Mr.K.Govindasamy
Address of Applicant :Doctoral Research Fellow, Department of Physical Education and Sports Sciences, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India. -----

(57) Abstract :
The present invention pertains to an advanced hypoxic room system designed for optimal training and therapy, simulating low-oxygen conditions akin to high altitudes. The system employs a hypoxicator to regulate oxygen levels, creating a controlled environment for hypoxic experiences. Enhanced by personalized hypoxic control, integrated physiological monitoring, environmental regulation, performance tracking, telemedicine integration, an interactive training interface, and adaptive training programs, this modular system ensures a user-centric approach. It caters to athletes, fitness enthusiasts, and those requiring therapeutic hypoxia, fostering safety, efficiency, and user engagement. The invention signifies a comprehensive solution in hypoxic training and therapy, amalgamating technology, customization, and versatility.

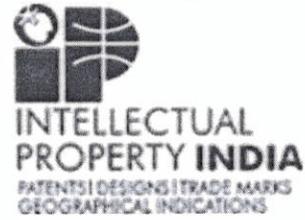
No. of Pages : 18 No. of Claims : 9



Office of the Controller General of Patents, Designs & Trade Marks
Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

Application Details

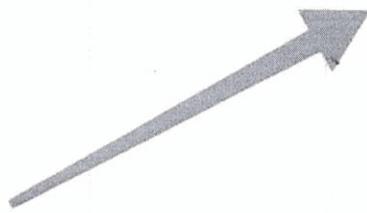
APPLICATION NUMBER	202321012900
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	25/02/2023
APPLICANT NAME	1. Prof. Vasanthi Kadhiravan 2. Mrs. P. Yoga Lakshmi 3. Dr. S. Saroja 4. Dr. P. Kumaravelu 5. Karuppasamy Govindasamy 6. MouPramanik 7. Ms. Dilpreet kaur 8. Dr Hemantajit Gogoi 9. Dr Poli Borah 10. Dr. KoullaParpa 11. Prof. Abderraouf Ben Abderrahman 12. Ajay kumar
TITLE OF INVENTION	"AI BASED YOGA MAT WITH ATTACHABLE MARKERS"
FIELD OF INVENTION	MECHANICAL ENGINEERING
E-MAIL (As Per Record)	contact@elipsanalytix.com
ADDITIONAL E-MAIL (As Per Record)	elipsanalytix17@gmail.com



Patent and Design Journal

Search:

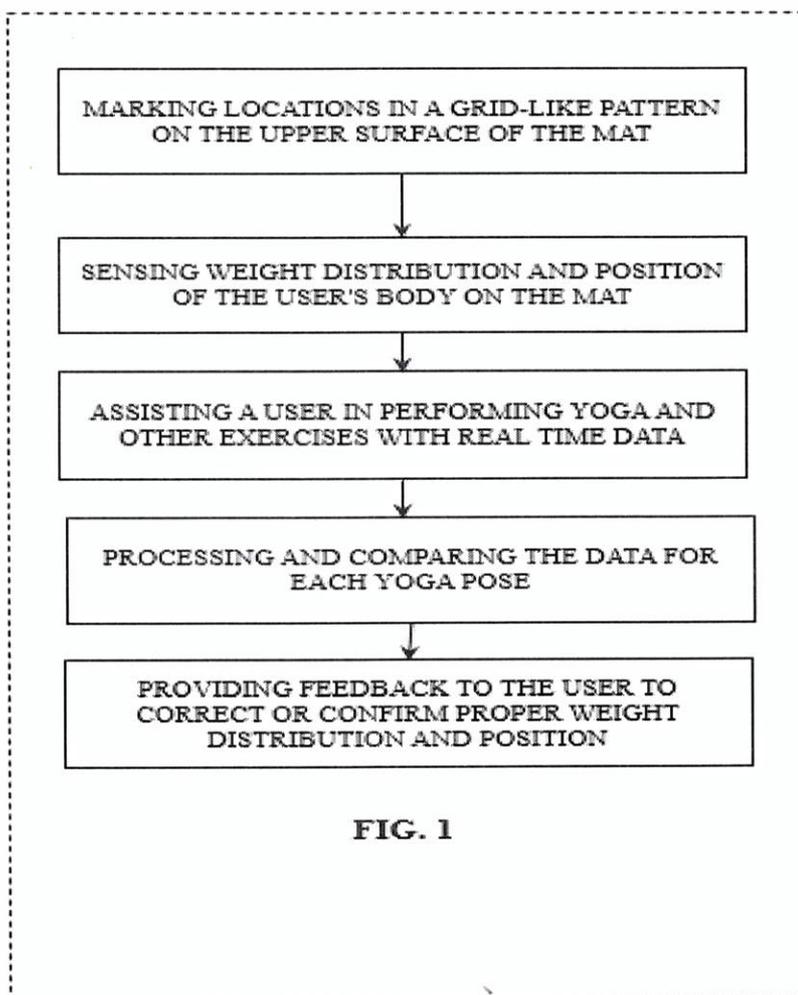
Date of Publication	Date of Availability	Download
17/03/2023	17/03/2023	Part I Part II Part III Part IV- Designs
10/03/2023	10/03/2023	Part I Part II Part III- Designs
03/03/2023	03/03/2023	Part I Part II



Applicant Name: Prof. Vasanthi Kadhiravan; Mrs. P. Yoga Lakshmi; Dr. S.Saroja;
Dr. P.Kumaravelu; Karuppasamy Govindasamy; MouPramanik; Ms. Dilpreet kaur;
Dr Hemantajit Gogoi; Dr Poli Borah; Dr. KoullaParpa; Prof. Abderraouf Ben
Abderrahman; Ajay kumar

Application Number:

Total No. of Sheets: 1
Sheet No. 1



Somya Kaushik
AGENT FOR THE APPLICANT
IN/PA/5019

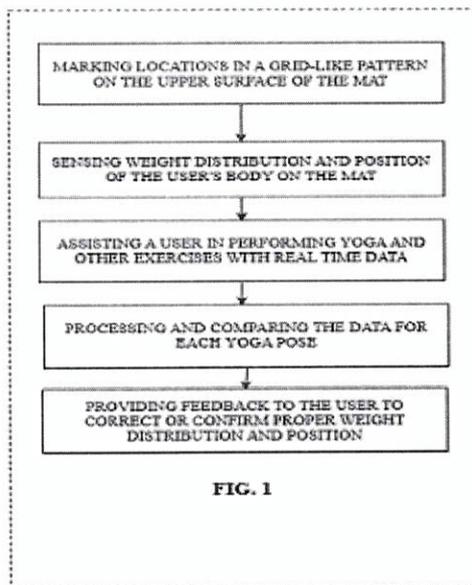


FIG. 1

FORM 3
THE PATENTS ACT, 1970
(39 OF 1970)
&
THE PATENTS RULES, 2003

We, Prof. Vasanthi Kadiravan, an Indian Citizen having registered address at **Professor & Head , Department of Physical Education, University of Mumbai, Kalina Campus, Santacruz (East), Mumbai – 400098**; Mrs. P. Yoga Lakshmi an Indian Citizen having registered address at **Assistant Professor (Sr.G) Department of Computer Science, College of Science and Humanities, SRM Institute of Science and Technology, Katankulathur 603203**; Dr. S.Saroja an Indian Citizen having registered address at **Associate Professor cum Coordinator, Centre for Yoga Education, Alagappa University, Karaikudi- 630003**; Dr. P.Kumaravelu an Indian Citizen having registered address at **Department of Physical Education, Tamilnadu Physical Education and Sports University, Mellakottaiyur, Chennai-600127**; Karupphasamy Govindasamy an Indian Citizen having registered address at **Doctoral Research Fellow, Department of Physical Education and Sports Sciences, College of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamil nadu, India**; MouPramanik an Indian Citizen having registered address at **Ph.D Research Scholar, Department of Yoga, College of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamilnadu, India- 603203**; Ms. Dilpreet kaur an Indian Citizen having registered address at **Assistant Professor & Director Physical Education , suryadatta Group of Institutes , Pune, India**; Dr Hemantajit Gogoi an Indian Citizen having registered address at **Village: TengaAamMajGaon, PO: Ghilamara, Dist: Lakhimpur, PIN: 787053, Assam**; Dr Poli Borah an Indian Citizen having registered address at **Village: TengaAamMajGaon, PO: Ghilamara, Dist: Lakhimpur, PIN: 787053, Assam**; Dr. KoullaParpa a Cyprus Citizen having registered address at **Faculty of Sports and Exercise Science, UCLan University of Cyprus, Pyla 7080, Cyprus**; Prof. Abderraouf Ben Abderrahman a Tunisia Citizen having registered address at **Higher Institute of Sport and Physical**

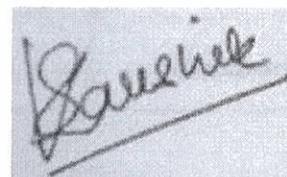
Signature Not Verified

Digitally Signed.
Name: Somya Kayshik
Date: 25-Feb-2023 15:29:02
Reason: Patent Filing
Location: DELHI

Education of Ksar-Said, University of Manouba, Tunisia; Ajay kumar an Indian Citizen having registered address at Faculty sports physiotherapy, Ambala, Haryana, India; .hereby declare

- (i) that we who has made the Application # _____, had not made any application for the same/substantially the same invention outside India
- (ii) that we undertake that up-to the date of grant of the patent, by the Controller, we would keep him informed in writing the details regarding corresponding applications for the patents filed outside India within three months from the date of filing of such application.

Dated this 22nd day of February, 2023



Somya Kaushik
AGENT FOR THE APPLICANT
IN/PA/5019

To,
The Controller of Patents
The Patent Office,
New Delhi.

FORM-9

THE PATENTS ACT, 1970

(39 of 1970)

&

THE PATENTS RULES, 2003

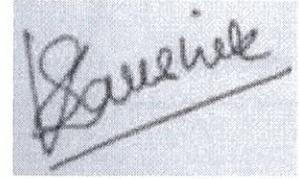
Request for Publication

[See Section 11A (2) and Rule 24A]

We, Prof. Vasanthi Kahiravan, an Indian Citizen having registered address at **Professor & Head , Department of Physical Education, University of Mumbai, Kalina Campus, Santacruz (East), Mumbai – 400098**; Mrs. P. Yoga Lakshmi an Indian Citizen having registered address at **Assistant Professor (Sr.G) Department of Computer Science, College of Science and Humanities, SRM Institute of Science and Technology, Katankulathur 603203**; Dr. S.Saroja an Indian Citizen having registered address at **Associate Professor cum Coordinator, Centre for Yoga Education, Alagappa University, Karaikudi- 630003**; Dr. P.Kumaravelu an Indian Citizen having registered address at **Department of Physical Education, Tamilnadu Physical Education and Sports University, Mellakottaiyur, Chennai-600127**; Karuppasamy Govindasamy an Indian Citizen having registered address at **Doctoral Research Fellow, Department of Physical Education and Sports Sciences, College of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamil nadu, India**; MouPramanik an Indian Citizen having registered address at **Ph.D Research Scholar, Department of Yoga, College of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamilnadu, India- 603203**; Ms. Dilpreet kaur an Indian Citizen having registered address at **Assistant Professor & Director Physical Education , suryadatta Group of Institutes , Pune, India**; Dr Hemantajit Gogoi an Indian Citizen having registered address at **Village: TengaAamMajGaon, PO: Ghilamara, Dist: Lakhimpur, PIN: 787053, Assam**; Dr Poli Borah an Indian Citizen having registered address at **Village: TengaAamMajGaon, PO: Ghilamara, Dist: Lakhimpur, PIN: 787053, Assam**; Dr. KoullaParpa a Cyprus Citizen having registered address at **Faculty of Sports and Exercise Science, UCLan University of Cyprus, Pyla 7080, Cyprus**; Prof. Abderraouf Ben Abderrahman a Tunisia Citizen having registered address at **Higher Institute of Sport and Physical Education of Ksar-Said, University of Manouba, Tunisia**; Ajay kumar an Indian Citizen having registered address at **Faculty sports physiotherapy, Ambala, Haryana, India**;, hereby request for early publication of our Patent Application no.

under section 11A (2) of the Act.

Dated this 22nd day of February, 2023

A rectangular stamp containing a handwritten signature in black ink. The signature appears to be 'Somya Kaushik' written in a cursive style. A horizontal line is drawn across the bottom of the signature.

Somya Kaushik
AGENT FOR THE APPLICANT
IN/PA/5019

To,
The Controller of Patents,
The Patent Office,
at Delhi

FORM 1 THE PATENTS ACT 1970 (39 OF 1970) and THE PATENTS RULES, 2003 APPLICATION FOR GRANT OF PATENT (See section 7, 54 and 135 and rule sub rule (1) of rule 20)				(FOR OFFICE USE ONLY)					
				Application No.:					
				Filing Date:					
				Amount of Fee Paid:					
				CBR No:					
				Signature:					
1. APPLICANT'S REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY THE OFFICE)									
2. TYPE OF APPLICATION									
Ordinary (<input checked="" type="checkbox"/>)		Convention ()		PCT – NP ()					
Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()				
3 A. APPLICANT(S)									
Name in Full		Nationality	Country of Residence	Address of the Applicant					
Prof. Vasanthi Kadhiravan		Indian	India	House No.					
				Street	Professor & Head , Department of Physical Education, University of Mumbai, Kalina Campus, Santacruz (East), Mumbai - 400098				
				City	Mumbai				
				State	Maharashtra				
				Country	India				
				Pin Code	400098				
Name in Full		Nationality	Country of Residence	Address of the Inventor					
Mrs. P. Yoga Lakshmi		Indian	India	House No.					
				Street	Assistant Professor (Sr.G) Department of Computer Science, College of Science and Humanities, SRM Institute of Science and Technology, Katankulathur 603203				
				City	Kattankulathur				
				State	Tamil Nadu				
				Country	India				
				Pin Code	603203				
Name in Full		Nationality	Country of Residence	Address of the Inventor					
Dr. S.Saroja		Indian	India	House No.					
				Digitally Signed, Name: Somya Kavshik Date: 25-Feb-2023 15:29:02 Reason: Patent Filing					

			Street	Associate Professor cum Coordinator, Centre for Yoga Education, Alagappa University, Karaikudi- 630003
			City	Karaikudi
			State	Tamil Nadu
			Country	India
			Pin Code	630003
Name in Full	Nationality	Country of Residence	Address of the Inventor	
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			State	Tamil Nadu
			Country	India
			Pin Code	600127
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			City	Kattankulathur
			State	Tamil Nadu
			Country	India
			Pin Code	603203
Name in Full	Nationality	Country of Residence	Address of the Inventor	
MouPramanik	Indian	India	House No.	
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				Tamilnadu, India
			City	Kattankulathur
			State	Tamil Nadu
			Country	India
			Pin Code	603203
Name in Full	Nationality	Country of Residence	Address of the Inventor	
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			Street	Assistant Professor & Director Physical Education , suryadatta Group of Institutes , Pune
			City	Pune
			State	Maharashtra
			Country	India
			Pin Code	
Name in Full	Nationality	Country of Residence	Address of the Inventor	
Dr Hemantajit Gogoi	Indian	India	House No.	
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			City	Lakhimpur
			State	Assam
			Country	India
			Pin Code	787053
Name in Full	Nationality	Country of Residence	Address of the Inventor	
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			City	Lakhimpur
			State	Assam
			Country	India
			Pin Code	787053
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			State	Pyla
			Country	Cyprus
			Pin Code	7080
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			City	Manouba
			State	Manouba Governorate
			Country	Tunisia
			Pin Code	
Name in Full	Nationality	Country of Residence	Address of the Inventor	
Ajay kumar	Indian	India	House No.	
			Street	Faculty sports physiotherapy
			City	Ambala
			State	Haryana
			Country	India
			Pin Code	
3 B. CATEGORY OF APPLICANT				
Natural Person ()	Other than Natural Person			
	Small Entity ()	Startup ()	Other (✓)	
4. INVENTOR(S)				
Are all the inventor(s) same as the applicant(s) named above?			Yes ()	No (✓)
If "No" furnish the details of the inventor(s)				
5. TITLE OF THE INVENTION -				
"AI BASED YOGA MAT WITH ATTACHABLE MARKERS"				
6. AUTHORISED REGISTERED PATENT AGENT(S)			INPA NO.	5019
			Name	Ms. Somya Kaushik

		Mobile No.:	+91 9582649699
7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA	Name	Elpis Analytix	
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	Telephone No.	NA	
	Mobile No.	+91 9582649699	
	Fax No.	NA	
	Email ID	<u>contact@elpisanalytix.com</u>	

8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN CONVENTION COUNTRY, PARTICULARS OF CONVENTION APPLICATION

Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention	IPC (as classified in the convention country)
NA	NA	NA	NA	NA	NA

9. IN CASE OF PCT NATIONAL PHASE, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT)

International Application Number	International filing date
NA	NA

10. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION

Original (first) application no.	Date of filing of Original (first) application
NA	NA

11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT

Main application/patent no.	Date of filing of main application
NA	NA

12. DECLARATIONS

(i) Declaration by the inventor(s):

I, the above-named inventor is the true & first inventor for this invention and declare that the applicant herein is my assignee or legal representative.

a) Date: 22nd day of February, 2023

1. Signature:

Vasanth K Reddy

2. Signature:

[Handwritten Signature]

Name: Prof. Vasanthi Kadhiravan

Name: Mrs. P. Yoga Lakshmi



3. Signature:

Name: Dr. S.Saroja



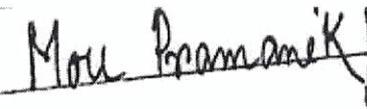
4. Signature:

Name: Dr. P.Kumaravelu



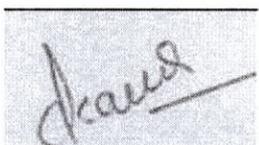
5. Signature:

Name: Karuppasamy Govindasamy



6. Signature:

Name: Mou Pramanik



7. Signature:

Name: Ms. Dilpreet kaur



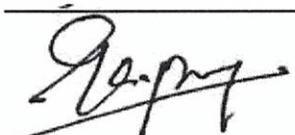
8. Signature:

Name: Dr HemantajitGogoi



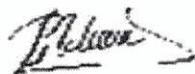
9. Signature:

Name: Dr Poli Borah



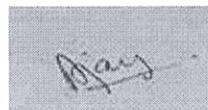
10. Signature:

Name: Dr. KoullaParpa



11. Signature:

Name: Prof. Abderraouf Ben Abderrahman



12. Signature:

Name: Ajay kumar

(ii) Declaration by the applicant(s) in the convention country

I, the applicant in the convention country declare that the applicant herein is my assignee or legal representative.

- a) Date: _____ NA _____
b) Signature: _____ NA _____
c) Name of the signatory: NA

(iii) Declaration by the applicant:

I/We, the applicant(s) hereby declare(s) that:-

- I am in possession of the above mentioned invention.
- The complete specification relating to the invention is filled with this application.
- The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me before the grant of patent to me.
- There is no lawful ground of objection to the grant of patent to me.

I am the true and first Inventor.

I am the assignee or legal representative of true & first inventor.

The application or each of the applications, particulars of which are given in Paragraph-8 was the first application in convention country/countries in respect of my invention.

I claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of invention had been made in a convention country before that date by me or by any person from which I derive the title.

My application in India is based on International Application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9.

The application is divided out of my application particulars of which is given in paragraph-10 and pray that this application may be treated as deemed to have been filed on _____ under section 16 of the Act.

The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph-11.

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

a) Form 2

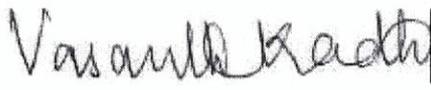
Item	Details	Fee	Remarks
Complete Specification	No. of Pages: 12	--	--
No. of Claim(s)	No. of Claims: 5 and No. of Pages: 2	--	--
Abstract	No. of Page: 1	--	--
Drawing(s)	No. of Drawings: 1 and No. of Pages: 1	--	--

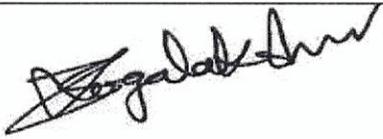
- b) Complete specification (in confirmation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable,
- c) Drawings (in confirmation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable,
- d) Statement and undertaking on Form-3,
- e) Declaration of Inventorship on Form-5,
- f) Copy of International Application Status Report,
- g) Copy of Notification of receipt of record copy (PCT/IB/301),
- h) Copy of Notification Concerning Submission or Transmittal of Priority Document (PCT/IB/304),
- i) Copy of International Search Report,

Deposit of Total Fee _____ 1600 _____

I hereby declare that to the best of my knowledge, information and belief the facts and matters stated herein are correct and I request that a patent may be granted to me for the said invention.

Dated this: 22nd day of February, 2023

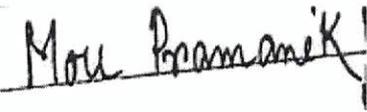
1. Signature: 
Name: Prof. Vasanthi Kadiravan

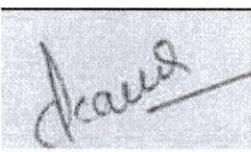
2. Signature: 
Name: Mrs. P. Yoga Lakshmi

3. Signature: 
Name: Dr. S. Saroja

4. Signature: 
Name: Dr. P. Kumaravelu

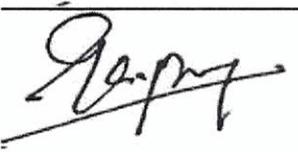
5. Signature: 
Name: Karupphasamy Govindasamy

6. Signature: 
Name: Mou Pramanik

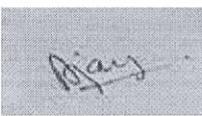
7. Signature: 
Name: Ms. Dilpreet kaur

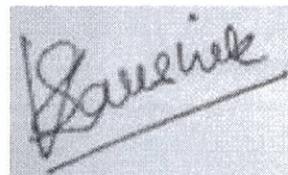
8. Signature: 
Name: Dr Hemantajit Gogoi

9. Signature: 
Name: Dr Poli Borah

10. Signature: 
Name: Dr. Koulla Parpa

11. Signature: 
Name: Prof. Abderraouf Ben Abderrahman

12. Signature: 
Name: Ajay kumar



Somya Kaushik
AGENT FOR THE APPLICANT
IN/PA/5019

To,
The Controller of Patents,
The Patent Office,
at New Delhi

FORM 5
THE PATENTS ACT 1970
(39 of 1970)
&
THE PATENTS RULES, 2003
DECLARATION AS TO INVENTORSHIP
[See section 10 (6) and 13 (6)]

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Prof. Abderraouf Ben Abderrahman	Tunisia	Higher Institute of Sport and Physical Education of Ksar-Said, University of Manouba, Tunisia
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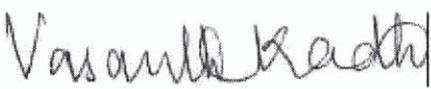
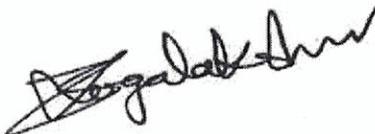
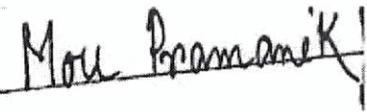
hereby declare that the true and first inventor of the invention disclosed in the complete specification filed in pursuance of our application numbered _____ and titled **“AI BASED YOGA MAT WITH ATTACHABLE MARKERS”** is:

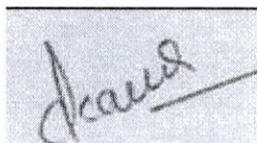
2. INVENTOR

Name	Nationality	Address
Prof. Vasanthi Kadhiravan	Indian	Professor & Head , Department of Physical Education, University of Mumbai, Kalina Campus, Santacruz (East), Mumbai - 400098
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Dated this 22nd day of February, 2023

1. Signature: 
Name: Prof. Vasanthi Kadhiravan
2. Signature: 
Name: Mrs. P. Yoga Lakshmi
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Name: Dr. P. Kumaravelu
5. Signature: 
Name: Karuppasamy Govindasamy
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Name: Mou Pramanik



7. Signature:

Name: Ms. Dilpreet kaur



8. Signature:

Name: Dr HemantajitGogoi



9. Signature:

Name: Dr Poli Borah



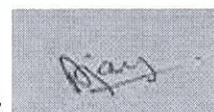
10. Signature:

Name: Dr. KoullaParpa



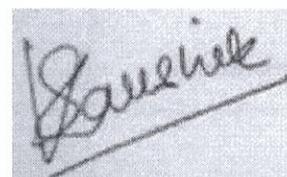
11. Signature:

Name: Prof. Abderraouf Ben Abderrahman



12. Signature:

Name: Ajay kumar



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To,
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The Patent Office,
at Delhi

FORM 2

THE PATENTS ACT, 1970

(39 of 1970)

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THE PATENTS RULES, 2003

COMPLETE SPECIFICATION

(See Section 10; rule 13)

Title of the Invention

“AI BASED YOGA MAT WITH ATTACHABLE MARKERS”

APPLICANTS:

Name : Prof. Vasanthi Kadhiraavan; Mrs. P. Yoga Lakshmi; Dr. S.Saroja;
Dr. P.Kumaravelu; Karuppasamy Govindasamy; MouPramanik; Ms. Dilpreet
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Ben Abderrahman; Ajay kumar

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Reason: Patent Filing

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10 The following specification particularly describes the invention and the manner in which it is performed.

TECHNICAL FIELD

[0001] The invention relates to the field of a yoga mats, and more specifically to an exercise mat with electrical hardware, sensors, and a wired or wireless software application configured to optimize exercise mechanics and training routines, e.g., a yoga practice.

BACKGROUND ART

[0002] Background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0003] Staying physically active and exercising is an essential part of life, as maintaining an active life-style not only replenishes a person's state of mind by releasing chronic tension and increasing self-awareness, but also ensures, that chronic diseases and various other ailments are effectively kept in check. It is clear, that as the incidence of debilitating medical conditions such as but not limited to heart diseases and cancer diminish due to an improved public awareness regarding maintaining a healthy life-style and regular physical activity, there is still an unmet need for exercise mats from the perspective of actively exercising individuals, that greatly aide in the improvement of their physical form and maintenance of correct posture during the physical work-out session.

[0004] Yoga and exercise mats have been accessible in a plethora of distinct shapes, colors, designs and materials heretofore. Exercise and yoga mat designs with printed indicia and grids are available in order to assist visually impaired exercisers in maintaining a proper body posture and alignment and to assess incremental improvements in flexibility.

[0005] A standard yoga mat typically comprises a sheet of foamed or solid elastomeric material (e.g., polyvinyl chloride (PVC)) having a plurality of layers of different material are used. For example, yoga mats sold for use in hot yoga or Bikram yoga may have an absorbent upper layer (e.g., terry cloth material)

permanently affixed to an elastomeric mat lower layer such that the elastomeric lower layer will contact the underlying floor while the yoga practitioner sits/stands on the towel-like upper layer. The towel like upper layer may then absorb perspiration. One commercially available example is the Breath™ Yoga Mat marketed by Breath Yoga Mats or Vancouver, British Columbia which has a
5 cotton terry top layer, a middle layer of absorbent cushioning fibers and a coated, brushed bottom layer for gripping the underlying floor surface. However, the multi-layer yoga mats of the prior art have typically not been designed to permit periodic detachment and laundering of the upper perspiration-absorbing layer.

10 [0006] Therefore, there a need for an exercise mat with electrical hardware, sensors, and a wired or wireless software application configured to optimize exercise mechanics and training routines, e.g., a yoga practice. Therefore, the present disclosure overcomes the above-mentioned problem associated with the traditionally available method or system, any of the above-mentioned inventions
15 can be used with the presented disclosed technique with or without modification.

[0007] All publications herein are incorporated by reference to the same extent as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference. Where a definition or use of a term in an incorporated reference is inconsistent or contrary to the definition
20 of that term provided herein, the definition of that term provided herein applies and the definition of that term in the reference does not apply.

OBJECTS OF THE INVENTION

[0008] The principal object of the present invention is to overcome the disadvantages of the prior art.

25 [0009] Another object of the present invention is to provide an AI based yoga mat with attachable markers.

[0010] Another object of the present invention is to provide an exercise mat with electrical hardware, sensors, and a wired or wireless software application

configured to optimize exercise mechanics and training routines, e.g., a yoga practice.

[0011] Another object of the present invention is to provide an elegant, reliable and precise approach towards the AI based yoga mat with attachable markers.
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[0012] Yet another object of the present invention is to provide a process of improving functionalities of the AI based yoga mat with attachable markers.

SUMMARY

[0013] The invention relates to the field of a yoga mats, and more specifically to an exercise mat with electrical hardware, sensors, and a wired or wireless software application configured to optimize exercise mechanics and training routines, e.g., a yoga practice.
10

[0014] The AI based yoga mat with attachable markers includes a flat mat having a plurality of perimeter edges and an upper surface upon which a person may practice yoga, a body position marking locations in a grid-like pattern on the upper surface of the mat, a set of pressure sensing sensors configured to sense weight distribution and position of the user's body, an AI based processor configured to assist a user in performing yoga and other exercises with real time data of weight distribution and position of the user's body as it applies pressure to the yoga mat, and a feedback module to processed and compared the data for each yoga pose, and to provide feedback to the user to correct or confirm proper weight distribution and position.
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[0015] According to an aspect, the markers have a color that is different from and contrasts with the color of the mat.

[0016] According to an aspect, the markers operatively associated with certain of the body position marking locations, such that an individual using the mat can obtain enhanced results during physical activity by associating the
25

markers with the marking locations for maintaining proper alignment, correct form, positioning and posture during yoga or exercise.

[0017] According to an aspect, the processor operatively connected to the yoga mat that reads and processes data relating to weight distribution and position
5 of the user.

[0018] According to an aspect, the upper surface of the mat is made of a different material than the rest of the body and has a sufficient strength and thickness to securely retain the markers to the holes.

[0019] These and other features will become apparent from the following
10 detailed description of illustrative embodiments thereof, which is to be read in connection with the accompanying drawings. While the invention has been described and shown with reference to the preferred embodiment, it will be apparent that variations might be possible that would fall within the scope of the present invention.

15 **BRIEF DESCRIPTION OF DRAWINGS**

[0020] So that the manner in which the above-recited features of the present invention can be understood in detail, a more particular description of the invention, briefly summarized above, may have been referred by embodiments, some of which are illustrated in the appended drawings. It is to be noted, however,
20 that the appended drawings illustrate only typical embodiments of this invention and are therefore not to be considered limiting of its scope, for the invention may admit to other equally effective embodiments.

[0021] These and other features, benefits, and advantages of the present invention will become apparent by reference to the following text figure, with like
25 reference numbers referring to like structures across the views, wherein: Figures attached: N.A.

DETAILED DESCRIPTION OF THE INVENTION

[0022] While the present invention is described herein by way of example using embodiments and illustrative drawings, those skilled in the art will recognize that the invention is not limited to the embodiments of drawing or drawings described and are not intended to represent the scale of the various components. Further, some components that may form a part of the invention may not be illustrated in certain figures, for ease of illustration, and such omissions do not limit the embodiments outlined in any way. It should be understood that the drawings and the detailed description thereto are not intended to limit the invention to the particular form disclosed, but on the contrary, the invention is to cover all modifications, equivalents, and alternatives falling within the scope of the present invention as defined by the appended claim.

[0023] As used throughout this description, the word "may" is used in a permissive sense (i.e. meaning having the potential to), rather than the mandatory sense, (i.e. meaning must). Further, the words "a" or "an" mean "at least one" and the word "plurality" means "one or more" unless otherwise mentioned. Furthermore, the terminology and phraseology used herein are solely used for descriptive purposes and should not be construed as limiting in scope. Language such as "including," "comprising," "having," "containing," or "involving," and variations thereof, is intended to be broad and encompass the subject matter listed thereafter, equivalents, and additional subject matter not recited, and is not intended to exclude other additives, components, integers, or steps. Likewise, the term "comprising" is considered synonymous with the terms "including" or "containing" for applicable legal purposes. Any discussion of documents acts, materials, devices, articles, and the like are included in the specification solely for the purpose of providing a context for the present invention. It is not suggested or represented that any or all these matters form part of the prior art base or were common general knowledge in the field relevant to the present invention.

[0024] In this disclosure, whenever a composition or an element or a group of elements is preceded with the transitional phrase "comprising", it is understood

that we also contemplate the same composition, element, or group of elements with transitional phrases “consisting of”, “consisting”, “selected from the group of consisting of”, “including”, or “is” preceding the recitation of the composition, element or group of elements and vice versa.

5 [0025] The present invention is described hereinafter by various
embodiments with reference to the accompanying drawing, wherein reference
numerals used in the accompanying drawing correspond to the like elements
throughout the description. This invention may, however, be embodied in many
different forms and should not be construed as limited to the embodiment set forth
10 herein. Rather, the embodiment is provided so that this disclosure will be
thorough and complete and will fully convey the scope of the invention to those
skilled in the art. In the following detailed description, numeric values and ranges
are provided for various aspects of the implementations described. These values
and ranges are to be treated as examples only and are not intended to limit the
15 scope of the claims. In addition, several materials are identified as suitable for
various facets of the implementations.

[0026] The invention relates to the field of a yoga mats, and more specifically
to an exercise mat with electrical hardware, sensors, and a wired or wireless
software application configured to optimize exercise mechanics and training
20 routines, e.g., a yoga practice.

[0027] The AI based yoga mat with attachable markers includes a flat mat
having a plurality of perimeter edges and an upper surface upon which a person
may practice yoga, a body position marking locations in a grid-like pattern on the
upper surface of the mat, a set of pressure sensing sensors configured to sense
25 weight distribution and position of the user's body, an AI based processor
configured to assist a user in performing yoga and other exercises with real time
data of weight distribution and position of the user's body as it applies pressure to
the yoga mat, and a feedback module to processed and compared the data for each
yoga pose, and to provide feedback to the user to correct or confirm proper weight

distribution and position.

[0028] According to an aspect, the markers have a color that is different from and contrasts with the color of the mat.

[0029] According to an aspect, the markers operatively associated with certain of the body position marking locations, such that an individual using the mat can obtain enhanced results during physical activity by associating the markers with the marking locations for maintaining proper alignment, correct form, positioning and posture during yoga or exercise.

[0030] According to an aspect, the processor operatively connected to the yoga mat that reads and processes data relating to weight distribution and position of the user.

[0031] According to an aspect, the upper surface of the mat is made of a different material than the rest of the body and has a sufficient strength and thickness to securely retain the markers to the holes.

[0032] Interactive exercise mat apparatuses, systems, and methods of use are shown and described in one embodiment, an exercise mat may include electrical hardware, sensors, and a wired or wireless software application configured to optimize exercise mechanics and training routines, e.g., a yoga practice. The mat may be a pressure sensing yoga mat that may communicate via Bluetooth or other wired or wireless compatible communication protocol to a smart phone, tablet, computer, or other device. The mat may assist a user in performing yoga and other exercises with real time data of weight distribution and position of the user's body as it applies pressure to the yoga mat. This data may be processed and compared to an ideal position for each yoga pose, and feedback may be provided to the user to correct or confirm proper weight distribution and position. A processor may be operatively connected to the yoga mat that reads and processes data relating to weight distribution and position of the user.

[0033] In accordance with various aspects of the subject specification, an example embodiment may employ classifiers that are explicitly trained (e.g., via a generic training data) as well as implicitly trained (e.g., via observing user behavior, user preferences, historical information, receiving extrinsic information). For example, support vector machines may be configured via learning or training phase within a classifier constructor and feature selection module. Thus, the classifier(s) may be used to automatically learn and perform a number of functions, including but not limited to determining exercise routines, user identities, target goals for dietary or fitness needs, and the likes. This learning may be on an individual basis, i.e., based solely on a single user, or may apply across a set of or the entirety of the user base. Information from the users may be aggregated and the classifier(s) may be used to automatically learn and perform a number of functions based on this aggregated information. The information may be dynamically distributed, such as through an automatic update, a notification, or any other method or means, to the entire user base, a subset thereof or to an individual user.

[0034] Additionally, the mats may be coupled with one or more of warning devices, light emitting diodes (LEDs), memory devices, associated speakers, sound and speech synthesizers, audio/video feedback, realignment sensors, heart rate monitors, pulse monitors, gyroscopic sensors, or voice guidance to correct postures based on body measurements including height and weight, weight distribution, heart rate, length and timing of posture held, position of the user's upper body which may not be in contact with the mat, and timing of breath. Furthermore, provisions can be made for reading of directional movement including spiral movements of energy lines (meridians) through the body; lifting and alignment of bones and skeletal structure, musculature, the pelvis, shoulders, spine, vertebrae, vertebral column, and biofeedback and instruction can be provided based thereon. The systems may further provide measurement of vital signs and brain frequency to give biofeedback on meditative state, including responsive light or audio guidance or voice guidance for breath control, programs

for breath control techniques to change brain/meditative frequencies, and deep relaxation and de-stress techniques, programs and control systems.

[0035] The timing and biofeedback systems may, for example, instruct the user on how long to hold a pose while also correlating the length held with the
5 rhythm and timing of the breath. Breathing is a fundamental and important guideline to physical movement, bodily awareness, and mind-body control. Biofeedback systems may also provide feedback on biorhythms and functions of the body such as heart rate. The biofeedback systems may also assist with mental focus while training. Machine generation of original flow sequencing and
10 programming can also be based upon the user's level of physical capability, performance, and increases/improvements in skill, flexibility, agility, strength, overall health, and brain function.

[0036] The mat of the present invention of the preferred embodiment has attachable and detachable markers that are produced and manufactured in a
15 plurality of forms, shapes, styles and colors. Instead of the plug and hole configuration described previously, other forms of attachment, such as Velcro, a reusable adhesive, buttons or snaps, or any type of temporary or subsequently removable securement can be used to temporarily secure the markers to the mat. In some embodiments, the areas of attachment can be magnetized and the markers
20 magnetically adhered to the magnetized locations as desired.

[0037] While the foregoing describes various embodiments of the invention, other and further embodiments of the invention may be devised without departing from the basic scope thereof. The scope of the invention is determined by the claims that follow. The invention is not limited to the described embodiments,
25 versions or examples, which are included to enable a person having ordinary skill in the art to make and use the invention when combined with information and knowledge available to the person having ordinary skill in the art.

[0038] Thus, the scope of the present disclosure is defined by the appended claims and includes both combinations and sub-combinations of the various

features described hereinabove as well as variations and modifications thereof, which would occur to persons skilled in the art upon reading the foregoing description.

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CLAIMS

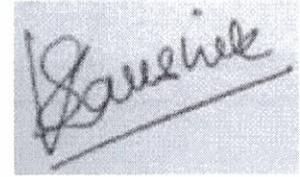
I/We Claim:

1. An AI based yoga mat with attachable markers comprising:
 - 5 a flat mat having a plurality of perimeter edges and an upper surface upon which a person may practice yoga;
 - a body position marking locations in a grid-like pattern on the upper surface of the mat;
 - a set of pressure sensing sensors configured to sense weight distribution and position of the user's body;
 - 10 an AI based processor configured to assist a user in performing yoga and other exercises with real time data of weight distribution and position of the user's body as it applies pressure to the yoga mat; and
 - a feedback module to processed and compared the data for each yoga pose, and to provide feedback to the user to correct or confirm proper weight
15 distribution and position.
2. The AI based yoga mat with attachable markers as claimed in claim 1, wherein the markers have a color that is different from and contrasts with the color of the mat.
3. The AI based yoga mat with attachable markers as claimed in claim 1,
20 wherein the markers operatively associated with certain of the body position marking locations, such that an individual using the mat can obtain enhanced results during physical activity by associating the markers with the marking locations for maintaining proper alignment, correct form, positioning and posture during yoga or exercise.
- 25 4. The AI based yoga mat with attachable markers as claimed in claim 1, wherein the processor operatively connected to the yoga mat that reads and processes data relating to weight distribution and position of the user.

5. The AI based yoga mat with attachable markers as claimed in claim 1, wherein the upper surface of the mat is made of a different material than the rest of the body and has a sufficient strength and thickness to securely retain the markers to the holes.

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Dated this 22nd day of February, 2023



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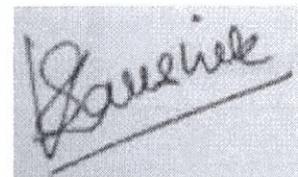
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ABSTRACT

“AI BASED YOGA MAT WITH ATTACHABLE MARKERS”

The invention relates to the field of a yoga mats, and more specifically to an exercise mat with electrical hardware, sensors, and a wired or wireless software application configured to optimize exercise mechanics and training routines, e.g.,
5 a yoga practice. The AI based yoga mat with attachable markers includes a flat mat having a plurality of perimeter edges and an upper surface upon which a person may practice yoga, a body position marking locations in a grid-like pattern on the upper surface of the mat, a set of pressure sensing sensors configured to
10 sense weight distribution and position of the user's body, an AI based processor configured to assist a user in performing yoga and other exercises with real time data of weight distribution and position of the user's body as it applies pressure to the yoga mat, and a feedback module to processed and compared the data for each yoga pose, and to provide feedback to the user to correct or confirm proper weight
15 distribution and position.

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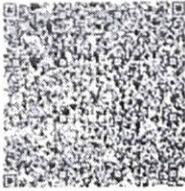


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Name: Somya Kaushik
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FORM -26
THE PATENTS ACT, 1970
(39 of 1970)

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THE PATENTS RULES, 2003

Form for Authorization of a Patent Agent/ or Any Person in a Matter or Proceeding under
the Act

(See sections 127 and 132; rule 135)

We, Prof. Vasanthi Kadiravan, an Indian Citizen having registered address at **Professor & Head , Department of Physical Education, University of Mumbai, Kalina Campus, Santacruz (East), Mumbai – 400098**; Mrs. P. Yoga Lakshmi an Indian Citizen having registered address at **Assistant Professor (Sr.G) Department of Computer Science, College of Science and Humanities, SRM Institute of Science and Technology, Katankulathur 603203**; Dr. S.Saroja an Indian Citizen having registered address at **Associate Professor cum Coordinator, Centre for Yoga Education, Alagappa University, Karaikudi- 630003**; Dr. P.Kumaravelu an Indian Citizen having registered address at **Department of Physical Education, Tamilnadu Physical Education and Sports University, Mellakottaiyur, Chennai-600127**; Karuppasamy Govindasamy an Indian Citizen having registered address at **Doctoral Research Fellow, Department of Physical Education and Sports Sciences, College of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamil nadu, India**; MouPramanik an Indian Citizen having registered address at **Ph.D Research Scholar, Department of Yoga, College of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Tamilnadu, India- 603203**; Ms. Dilpreet kaur an Indian Citizen having registered address at **Assistant Professor & Director Physical Education , suryadatta Group of Institutes , Pune, India**; Dr Hemantajit Gogoi an Indian Citizen having registered address at **Village: TengaAamMajGaon, PO: Ghilamara, Dist: Lakhimpur, PIN: 787053, Assam**; Dr Poli Borah an Indian Citizen having registered address at **Village: TengaAamMajGaon, PO: Ghilamara, Dist: Lakhimpur, PIN: 787053, Assam**; Dr. KoullaParpa a Cyprus Citizen having registered address at **Faculty of Sports and Exercise Science, UCLan University of Cyprus, Pyla 7080, Cyprus**; Prof. Abderraouf Ben Abderrahman a Tunisia Citizen having registered address at **Higher Institute of Sport and Physical Education of Ksar-Said, University of Manouba, Tunisia**; Ajay kumar an Indian Citizen having registered address at **Faculty sports physiotherapy, Ambala, Haryana, India**; hereby authorise Ms. Ojeswini Bondalapati Agent (IN/PA/2969); Ms. Somya Kaushik (IN/PA/5019) of Elpis Analytix, having their office address at 1004/E, Lohiya Gali No. 4, Babarpur, New Delhi,-110032 to act on our behalf in connection with filling of patent application for the invention under the above mentioned Act in respect of

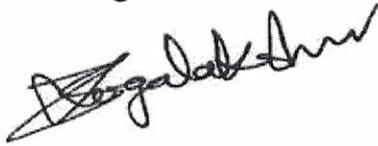
invention entitled “AI BASED YOGA MAT WITH ATTACHABLE MARKERS” and request that all notices, requisitions and communication relating thereto may be sent to such persons at the above address unless otherwise specified.

We hereby revoke all previous authorizations, if any made, in respect of same matter or proceeding.

We hereby assent to the action already taken by the said persons in the above matters.

Dated this 22nd day of February, 2023

1. Signature:  2. Signature:

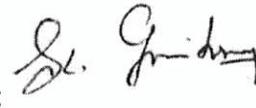
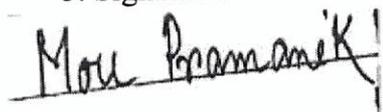


Name: Prof. Vasanthi Kadhiravan

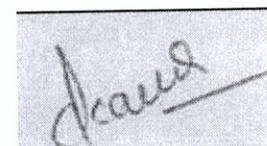
Name: Mrs. P. Yoga Lakshmi

3. Signature: 
Name: Dr. S. Saroja

4. Signature: 
Name: Dr. P. Kumaravelu

5. Signature: 

Name: Karuppasamy Govindasamy

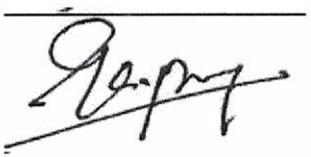
6. Signature:
Name: Mou Pramanik

7. Signature: 


Name: Ms. Dilpreet kaur

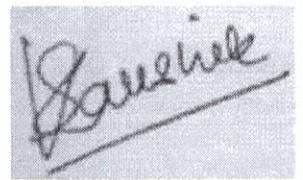
8. Signature:
Name: Dr HemantajitGogoi

9. Signature: 
Name: Dr Poli Borah

10. Signature: 
Name: Dr. KoullaParpa

11. Signature: 
Name: Prof. Abderraouf Ben Abderrahman

12. Signature: 
Name: Ajay kumar



Somya Kaushik
AGENT FOR THE APPLICANT
IN/PA/5019

To,
The Controller of Patents,
The Patent Office,
at Delhi

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 11/2023
ISSUE NO. 11/2023

शुक्रवार
FRIDAY

दिनांक: 17/03/2023
DATE: 17/03/2023

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

(PROF. (DR) UNNAT P. PANDIT)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

17nd MARCH, 2023

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THE PATENT OFFICE27

KOLKATA, 17/03/2023

Address of the Patent Offices/Jurisdictions

The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-

1	<p>Office of the Controller General of Patents, Designs & Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai - 400 037</p> <p>Phone: (91)(22) 24123311, Fax : (91)(22) 24123322 E-mail: cgpdtm@nic.in</p>	4	<p>The Patent Office, Government of India, Intellectual Property Rights Building, G.S.T. Road, Guindy, Chennai - 600 032.</p> <p>Phone: (91)(44) 2250 2081-84 Fax : (91)(44) 2250 2066 E-mail: chennai-patent@nic.in</p> <p>❖ The States of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.</p>
2	<p>The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai - 400 037</p> <p>Phone: (91)(22) 24137701 Fax: (91)(22) 24130387 E-mail: mumbai-patent@nic.in</p> <p>❖ The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli</p>	5	<p>The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector -V, Salt Lake City, Kolkata- 700 091</p> <p>Phone: (91)(33) 2367 1943/44/45/46/87 Fax: (91)(33) 2367 1988 E-Mail: kolkata-patent@nic.in</p> <p>❖ Rest of India</p>
3	<p>The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi - 110075</p> <p>Phone: (91)(11) 25300200 & 28032253 Fax: (91)(11) 28034301 & 28034302 E.mail: delhi-patent@nic.in</p> <p>❖ The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.</p>		

Website: www.ipindia.nic.in

www.patentoffice.nic.in

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.

Fees: The Fees may either be paid in cash or may be sent by Bank Draft or Cheques payable to the Controller of Patents drawn on a scheduled Bank at the place where the appropriate office is situated.

पेटेंट कार्यालय
कोलकाता, दिनांक 17/03/2023

• कार्यालयों के क्षेत्राधिकार के पते

विभिन्न जगहों पर स्थित पेटेंट कार्यालय के पते आंचलिक आधार पर दर्शित उनके प्रादेशिक अधिकार क्षेत्र के साथ नीचे दिए गए हैं:-

<p>1 कार्यालय : महानियंत्रक, एकस्व, अभिकल्प तथा व्यापार चिह्न, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत, फोन: (91) (22) 24123311 फ़ैक्स: (91) (22) 24123322 ई. मेल: cgpdtm@nic.in</p>	<p>4 पेटेंट कार्यालय, भारत सरकार इंटेलेक्चुअल प्रॉपर्टी राइट्स बिल्डिंग, इंडस्ट्रियल इस्टेट एसआईडीसीओ आरएमडी गोडाउन एरिया एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड, गायन्डी चेन्नई - 600 032. फोन: (91) (44) 2250 2081-84 फ़ैक्स: (91) (44) 2250-2066 ई. मेल: chennai-patent@nic.in ❖ आन्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र, लक्षदीप</p>
<p>2 पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, फोन: (91) (22) 24137701 फ़ैक्स: (91) (22) 24130387 ई. मेल: Mumbai-patent@nic.in ❖ * गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित क्षेत्र, दमन तथा दीव, दादर और नगर हवेली .</p>	<p>5 पेटेंट कार्यालय, भारत सरकार कोलकाता, (प्रधान कार्यालय) बौद्धिक संपदा भवन, सीपी-2, सेक्टर- V, साल्ट लेक सिटी, कोलकाता-700 091, भारत. फोन: (91) (33) 2367 1943/44/45/46/87 फ़ैक्स:/Fax: (91) (33) 2367 1988 ई. मेल: kolkata-patent@nic.in ❖ भारत का अवशेष क्षेत्र</p>
<p>3 पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, प्लॉट सं. 32, सेक्टर- 14, द्वारका, नई दिल्ली- 110 075. फोन: (91) (11) 25300200, 28032253 फ़ैक्स: (91) (11) 28034301, 28034302 ई. मेल: delhi-patent@nic.in हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान, उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित क्षेत्र चंडीगढ़</p>	

वेबसाइट: <http://www.ipindia.nic.in>
www.patentoffice.nic.in

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाएं, विवरण या अन्य दस्तावेज़ या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे। शुल्क: शुल्क या तो नगद रूप में या Controller of Patents के नाम में देय बैंक ड्राफ्ट या चेक के द्वारा भेजी जा सकती है जो उसी स्थान के किसी अनुसूचित बैंक में प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है।

SPECIAL NOTICE

18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

**(PROF. (DR) UNNAT P. PANDIT)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS**

SPECIAL NOTICE

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules there under, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18th months , grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every **Friday**.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

SPECIAL NOTICE

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.

Early Publication:

The following patent applications have been published under section 11A (2) of The Patents (Amendment) Act 2005 and rule 24A of The Patents (Amendment) Rules, 2006. Any person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111055768 A

(19) INDIA

(22) Date of filing of Application :01/12/2021

(43) Publication Date : 17/03/2023

(54) Title of the invention : AUTOMATED SUPPORT STAND AND SYSTEM THEREOF

(51) International classification :F16M0011180000, B64C0039020000, A63B0055530000, B63H0021170000, F41A0033000000

(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

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Address of Applicant :Plot no. 779, Satyanarayan Marg, Gandhi colony, Jaisalmer, Rajasthan-345001. -----

(57) Abstract :

An automated support stand (100) and system (200) thereof is disclosed. The automated support stand (100) does not require any input from a rider and can be automatically retracted dynamically. The automated support stand (100) includes a plurality of components i.e. mechanical components as well as electrical components which help to retract the automated support stand (100). The mechanical components may include a plurality of rods (101a, 101b), grooves (al, bl), nail (103), etc. The electrical components may include one or more of, a motor (105) and a battery (107). The system (200) helps to release the automated support stand (100) or any other stand too. The system (200) includes one or more of, a processor (201), a motor (203a), a motor driver (203b), a display (205), a plurality of sensors (207), and a battery (209).

No. of Pages : 25 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211007095 A

(19) INDIA

(22) Date of filing of Application :10/02/2022

(43) Publication Date : 17/03/2023

(54) Title of the invention : NOVEL NON-AQUEOUS NANO EMULSION OF BITERIN OIL AND PROCESS THEREOF

(51) International classification :A61K0036420000, A61K0009107000, A61Q0019000000, A61K0036480000, A61K0047440000
(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

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4)KULKARNI, Mangesh Pradeep

Address of Applicant :Jalandhar- Delhi GT road Phagwara, Punjab, India 144411. -----

(57) Abstract :

The present invention describes a novel non-aqueous nano emulsion of biterin oil and process thereof. The novel drug delivery system is to conserve the physical and chemical stability of the constituent as well as to provide the better pharmacological action of the active pharmaceutical ingredient in management of diabetic foot ulcers. The reduced size of the emulsion provides deeper penetration into the skin and hence it initiates curative effect. The said invention focused towards scientific research and industry diversification for the herbal drugs and concentrated in the development of novel therapeutic in the management of diabetic foot ulcers.

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211012253 A

(19) INDIA

(22) Date of filing of Application :07/03/2022

(43) Publication Date : 17/03/2023

(54) Title of the invention : A SIPPER CUM STRAW SYSTEM IN BOTTLES AND THE METHOD THEREOF

(51) International classification :G01N0001140000, A47G0021180000, A47G0019220000, B65D0077280000, B65D0001020000
(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

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Address of Applicant :Department of Design, Shiv Nadar University, Dadri, Uttar Pradesh India 201310 -----

(57) Abstract :

The present invention relates to a sipper cum straw system in bottles for infant feeding comprising of a sipper cap [1], a straw [2], two or more balls [3,& 6] ,a filter grid [4 & 8] , a detachable casing [5 & 9], a spring [7]. The sipper cap [1] is attached to the straw [2], and the straw is having three openings, the two balls wherein, the first ball for allowing flow when the bottle is upright and the other for allowing flow when the bottle is inverted, the filter grid [4 & 8] is two in number , first grid [4] is allow first ball resting and the second grid [8] is the one on which the spring [7] is based.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202321012900 A

(19) INDIA

(22) Date of filing of Application :25/02/2023

(43) Publication Date : 17/03/2023

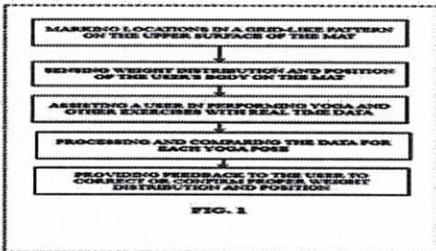
(54) Title of the invention : "AI BASED YOGA MAT WITH ATTACHABLE MARKERS"

(51) International classification :A63B 060000, A63B 210000, A63B 710000, A63F 030000, C10L 010000
 (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

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 3)Dr. S.Saroja
 4)Dr. P. Kumaravelu
 5)Karuppasamy Govindasamy
 6)MouPramanik
 7)Ms. Dilpreet kaur
 8)Dr Hemantajit Gogoi
 9)Dr Poli Borah
 10)Dr. KoullaParpa
 11)Prof. Abderraouf Ben Abderrahman
 12)Ajay kumar
 Name of Applicant : NA
 Address of Applicant : NA
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(57) Abstract :

The invention relates to the field of a yoga mats, and more specifically to an exercise mat with electrical hardware, sensors, and a wired or wireless software application configured to optimize exercise mechanics and training routines, e.g., a yoga practice. The AI based yoga mat with attachable markers includes a flat mat having a plurality of perimeter edges and an upper surface upon which a person may practice yoga, a body position marking locations in a grid-like pattern on the upper surface of the mat, a set of pressure sensing sensors configured to sense weight distribution and position of the user's body, an AI based processor configured to assist a user in performing yoga and other exercises with real time data of weight distribution and position of the user's body as it applies pressure to the yoga mat, and a feedback module to processed and compared the data for each yoga pose, and to provide feedback to the user to correct or confirm proper weight distribution and position.



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(57) Abstract :

The proposed invention relates to the field of sustainable footwear, specifically focusing on the development, manufacturing, and marketing of plant-based leather footwear. Utilizing a unique blend of plant fibers such as hemp, flax, sisal, and coconut, the invention encompasses a method of treating these fibers with natural enzymes and organic catalysts to form a leather-like material. The material exhibits qualities such as wear resistance, fungal resistance, softness, and strength that are comparable to or exceed traditional leather. The invention also includes a modular production line with a closed-loop recycling system, eco-friendly packaging, a targeted marketing strategy, and a recycling method for end-of-life products. The overall concept emphasizes sustainability, quality, and ethical consumption, making it a groundbreaking solution in the field of environmentally responsible footwear.

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