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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

30th May, 2025

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(54) Title of the invention : FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION

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(57) Abstract :
ABSTRACT FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION A facial muscle motor point simulator is disclosed for training, evaluation, and rehabilitation in neuromuscular therapy. The apparatus includes an anatomically accurate three-dimensional facial model constructed from bio-simulative materials mimicking human skin, muscle, and nerve pathways. Strategically embedded conductive elements represent facial motor points and are stimulated by an integrated electrical stimulation system with adjustable parameters. A multimodal feedback system provides real-time visual, tactile, and audio responses to guide accurate motor point localization and stimulation. The simulator further includes a digital interface for anatomical visualization, performance tracking, and interactive training modules. Optional features include integration with augmented reality (AR), electromyography (EMG) sensing, and manual palpation for tactile skill development. Portable and wireless, the system supports educational, clinical, and research applications in physiotherapy, neurology, and facial rehabilitation.

No. of Pages : 19 No. of Claims : 8

Application Details	
APPLICATION NUMBER	202541043964
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	06/05/2025
APPLICANT NAME	Sri Devaraj Urs Academy of Higher Education and Research
TITLE OF INVENTION	FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
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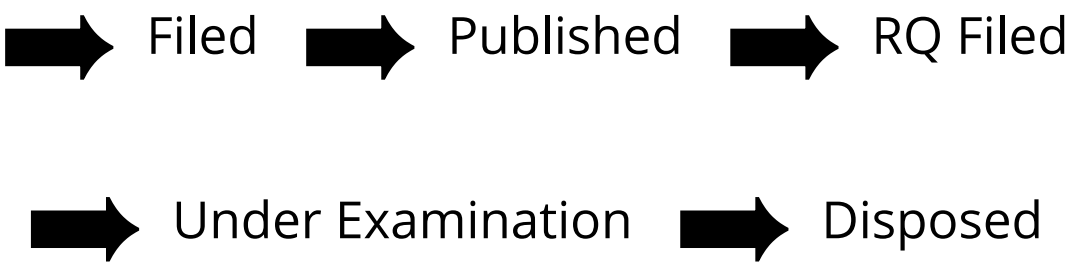
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	30/05/2025

Application Status	
APPLICATION STATUS	**Awaiting Request for Examination**

			View Documents



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FORM 1 THE PATENTS ACT, 1970 (39 of 1970) & THE PATENTS RULES, 2003 APPLICATION FOR GRANT OF PATENT [See sections 7,54 & 135 and rule 20(1)]	(FOR OFFICE USE ONLY) Application No.: ..... Filing Date: ..... Amount of Fee Paid: ..... CBR No.: ..... Signature: .....

1. APPLICANT(S):

Sr.No.	Name	Nationality	Address	Country	State	Distict	City
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			Academy of Higher Education and Research, Kolar – 563101, Karnataka, India.				

3. TITLE OF THE INVENTION: FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION

4. ADDRESS FOR CORRESPONDENCE OF APPLICANT / AUTHORISED PATENT AGENT IN INDIA:

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5. PRIORITY PARTICULARS OF THE APPLICATION(S) FILED IN CONVENTION COUNTRY:

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Tilte of the Invention

6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE APPLICATION:

International Application Number	International Filing Date as Allotted by the Receiving Office
PCT//	

7. PARTICULARS FOR FILING DIVISIONAL APPLICATION

Original (first) Application Number	Date of Filing of Original (first) Application

8. PARTICULARS FOR FILING PATENT OF ADDITION:

Main Application / Patent Number:	Date of Filing of Main Application

9. DECLARATIONS:

(i) Declaration by the inventor(s)

I/We ,Dr. Senthil Kumar E ,Vyshnavi P B,Sandhya, is/are the true & first inventor(s) for this invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: -----

(b) Signature(s) of the inventor(s): .....

(c) Name(s): Dr. Senthil Kumar E ,Vyshnavi P B,Sandhya

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

I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: -----

(b) Signature(s) : .....

(c) Name(s) of the singnatory: Sri Devaraj Urs Academy of Higher Education and Research

(iii) Declaration by the applicant(s)

- **The Complete specification relating to the invention is filed with this application.**
- **I am/We are, in the possession of the above mentioned invention.**
- **There is no lawful ground of objection to the grant of the Patent to me/us.**
- **I am/We are, the assignee or legal representative to true first inventors.**

10. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION:

Sr.	Document Description	FileName

I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters stated hering are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this(Final Payment Date): ----------

Signature: .....

Name: Madhu Smita

To The Controller of Patents

The Patent office at CHENNAI

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FORM 2

THE PATENTS ACT, 1970

(39 of 1970)

&

The Patent Rules, 2003

COMPLETE SPECIFICATION

(See sections 100 & rule 103)

1. TITLE OF THE INVENTION

FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION

2. APPLICANTS (S)

NAME(S)	NATIONALITY	ADDRESS
Sri Devaraj Urs Academy of Higher Education and Research	Indian	Sri Devaraj Urs Academy of Higher Education and Research, Kolar – 563101, Karnataka, India.

3. PREAMBLE TO THE DESCRIPTION

COMPLETE SPECIFICATION

The following description particularly describes the invention and the method in which it has to be performed.

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FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION

TECHNICAL FIELD

[0001]. The invention relates to the field of medical simulation and rehabilitation devices and specifically to a facial muscle motor point simulator for neuromuscular training and rehabilitation.

BACKGROUND

[0002]. Facial muscle dysfunction is a prevalent clinical issue encountered in patients recovering from neurological disorders, traumatic injuries, or post-surgical interventions. Conditions such as Bell's palsy, facial nerve paralysis, and stroke-induced facial paresis can result in impaired facial expressions, compromised speech and eating function, and reduced quality of life.

[0003]. One of the most effective therapeutic strategies for restoring facial muscle activity is motor point stimulation, which involves applying electrical impulses to specific anatomical locations where motor nerves penetrate muscle tissue. This technique promotes muscle re-education, improves strength, and enhances neuroplasticity, thereby facilitating recovery. However, despite its clinical value, the accurate identification and stimulation of facial motor points require significant anatomical knowledge, manual dexterity, and clinical experience.

[0004]. Current training methods for motor point stimulation are limited and often inadequate. Physiotherapy students and novice practitioners typically lack access to live patients or high-fidelity anatomical models. Existing educational tools, such as static diagrams or simplified manikins, fail to replicate the complexity of facial anatomy and do not provide real-time feedback or interactive learning experiences. Moreover, incorrect stimulation techniques can result in patient discomfort, ineffective treatment, or unintended muscle activation.

[0005]. Accordingly, there is a pressing need for a realistic, interactive, and safe training platform that enables learners to practice motor point localization and stimulation without relying on live patients. Such a tool should accurately represent human facial anatomy, offer responsive feedback, and support variable stimulation parameters to simulate real-world clinical conditions.

[0006]. The present invention addresses these limitations by providing a Facial Muscle Motor Point Simulator designed for comprehensive training and rehabilitation. The system integrates anatomically precise structures, embedded motor points, adjustable electrical stimulation, and multimodal feedback to create a realistic and effective learning environment. This invention facilitates skill development, enhances treatment accuracy, and supports diverse applications in education, therapy, and research.

SUMMARY

[0007]. In one aspect of the present disclosure, an apparatus for simulating facial muscle motor point stimulation, comprising a three-dimensional anatomical model of a human face formed with bio-simulative materials that mimic skin elasticity, muscle structure, and nerve pathways embedded conductive elements positioned at anatomically accurate motor points of facial muscles an electrical stimulation system configured to deliver user-adjustable pulses to the motor points, wherein the stimulation parameters include amplitude, frequency, and pulse duration a multimodal feedback system including visual indicators that activate upon correct stimulation of motor points tactile feedback via vibration modules simulating muscle contractions audio cues to assist in training and an integrated user interface configured to display anatomical overlays, track stimulation accuracy, and provide real-time feedback

[0008]. In some aspects of the present disclosure, the anatomical model includes a nerve pathway layer composed of conductive wiring that simulates facial nerve branches and responds to stimulation.

[0009]. In some aspects of the present disclosure, the user interface includes pre-loaded training modules and case-based scenarios simulating clinical conditions such as Bell's palsy and post-stroke facial paralysis.

[0010]. In some aspects of the present disclosure, electromyography (EMG) sensors that detect and display simulated muscle activation in response to electrical stimulation.

[0011]. In some aspects of the present disclosure, the apparatus is configured for integration with augmented reality (AR) or virtual reality (VR) environments to visually guide users in locating motor points.

[0012]. In some aspects of the present disclosure, a manual palpation module that simulates tissue resistance, enabling users to practice tactile identification of motor points.

[0013]. In some aspects of the present disclosure, the system is portable and includes a rechargeable battery and wireless connectivity module for remote training and data synchronization.

[0014]. In some aspects of the present disclosure, the system is configured to store and analyze user performance data, including accuracy of electrode placement, stimulation duration, and technique consistency.

BRIEF DESCRIPTION OF DRAWINGS

[0015]. The above and still further features and advantages of aspects of the present disclosure become apparent upon consideration of the following detailed description of aspects thereof, especially when taken in conjunction with the accompanying drawings, and wherein:

[0016]. Figure 1 is a diagrammatic representation, in accordance with an aspect of the present disclosure;

DETAILED DESCRIPTION

[0017]. The following description provides specific details of certain aspects of the disclosure illustrated in the drawings to provide a thorough understanding of those aspects. It should be recognized, however, that the present disclosure can be reflected in additional aspects and the disclosure may be practiced without some of the details in the following description.

[0018]. The various aspects including the example aspects are now described more fully with reference to the accompanying drawings, in which the various aspects of the disclosure are shown. The disclosure may, however, be embodied in different forms and should not be construed as limited to the aspects set forth herein. Rather, these aspects are provided so that this disclosure is thorough and complete, and fully conveys the scope of the disclosure to those skilled in the art. In the drawings, the sizes of components may be exaggerated for clarity.

[0019]. It is understood that when an element or layer is referred to as being "on," "connected to," or "coupled to" another element or layer, it can be directly on, connected to, or coupled to the other element or layer or intervening elements or layers that may be present. As used herein, the term

"and/or" includes any and all combinations of one or more of the associated listed items.

[0020]. The subject matter of example aspects, as disclosed herein, is described with specificity to meet statutory requirements. However, the description itself is not intended to limit the scope of this patent. Rather, the inventor/inventors have contemplated that the claimed subject matter might also be embodied in other ways, to include different features or combinations of features similar to the ones described in this document, in conjunction with other technologies.

[0021]. A facial muscle motor point simulator is disclosed for training, evaluation, and rehabilitation in neuromuscular therapy. The apparatus includes an anatomically accurate three-dimensional facial model constructed from bio-simulative materials mimicking human skin, muscle, and nerve pathways. Strategically embedded conductive elements represent facial motor points and are stimulated by an integrated electrical stimulation system with adjustable parameters. A multimodal feedback system provides real-time visual, tactile, and audio responses to guide accurate motor point localization and stimulation. The simulator further includes a digital interface for anatomical visualization, performance tracking, and interactive training modules. Optional features include integration with augmented reality (AR), electromyography (EMG) sensing, and manual palpation for tactile skill development. Portable and wireless, the system supports educational, clinical,

and research applications in physiotherapy, neurology, and facial rehabilitation.

[0022]. Facial muscle dysfunction is a prevalent clinical issue encountered in patients recovering from neurological disorders, traumatic injuries, or post-surgical interventions. Conditions such as Bell's palsy, facial nerve paralysis, and stroke-induced facial paresis can result in impaired facial expressions, compromised speech and eating function, and reduced quality of life.

[0023]. One of the most effective therapeutic strategies for restoring facial muscle activity is motor point stimulation, which involves applying electrical impulses to specific anatomical locations where motor nerves penetrate muscle tissue. This technique promotes muscle re-education, improves strength, and enhances neuroplasticity, thereby facilitating recovery. However, despite its clinical value, the accurate identification and stimulation of facial motor points require significant anatomical knowledge, manual dexterity, and clinical experience.

[0024]. Current training methods for motor point stimulation are limited and often inadequate. Physiotherapy students and novice practitioners typically lack access to live patients or high-fidelity anatomical models. Existing educational tools, such as static diagrams or simplified manikins, fail to replicate the complexity of facial anatomy and do not provide real-time feedback or interactive learning experiences. Moreover, incorrect stimulation

techniques can result in patient discomfort, ineffective treatment, or unintended muscle activation.

[0025]. Accordingly, there is a pressing need for a realistic, interactive, and safe training platform that enables learners to practice motor point localization and stimulation without relying on live patients. Such a tool should accurately represent human facial anatomy, offer responsive feedback, and support variable stimulation parameters to simulate real-world clinical conditions.

[0026]. The present invention addresses these limitations by providing a Facial Muscle Motor Point Simulator designed for comprehensive training and rehabilitation. The system integrates anatomically precise structures, embedded motor points, adjustable electrical stimulation, and multimodal feedback to create a realistic and effective learning environment. This invention facilitates skill development, enhances treatment accuracy, and supports diverse applications in education, therapy, and research.

[0027]. The present invention provides a Facial Muscle Motor Point Simulator designed to facilitate the training, assessment, and rehabilitation of facial muscle stimulation techniques. The simulator replicates the anatomical and physiological characteristics of the human face, offering users a realistic and interactive environment to practice motor point localization and electrical stimulation.

[0028]. The simulator comprises a multilayer anatomical model constructed from medical-grade, bio-simulative materials. The outermost layer is

composed of silicone that mimics the texture, elasticity, and appearance of human skin. Beneath this lies a muscle layer embedded with conductive patches that represent motor points corresponding to key facial muscles. These motor points are positioned with anatomical accuracy to simulate real-life clinical scenarios involving muscles such as the frontalis, orbicularis oculi, zygomaticus major and minor, orbicularis oris, and buccinator.

[0029]. A network of conductive wiring is integrated within the model to represent the pathways of the facial nerve (cranial nerve VII), which innervates the facial muscles. This nerve pathway layer supports precise electrical conduction and highlights nerve responses during simulation exercises. The simulator's structure is supported by a rigid base designed to maintain realistic facial contours while ensuring durability during repeated use.

[0030]. The embedded electrical stimulation system delivers low-voltage, high-frequency pulses to the motor points. Stimulation parameters—including amplitude, frequency, and pulse duration—are fully adjustable, enabling users to replicate a variety of clinical conditions and therapy protocols. Predefined stimulation modes can simulate pathologies such as Bell's palsy, post-stroke paralysis, or post-surgical facial weakness.

[0031]. A multimodal feedback system enhances the training experience by providing real-time visual, tactile, and audio responses. LED indicators illuminate when motor points are correctly stimulated, vibration modules

mimic muscle contractions for tactile confirmation, and auditory cues provide instructional guidance and feedback. Together, these systems reinforce correct technique and accelerate learning.

[0032]. The simulator includes a touch-enabled digital interface, allowing users to visualize underlying muscle structures, motor points, and nerve pathways in real time. The interface offers preloaded tutorials, interactive training modules, and clinical case studies. It also captures and analyzes performance metrics such as stimulation accuracy, electrode placement consistency, and duration of therapy sessions, allowing both learners and instructors to track progress over time.

[0033]. To accommodate a range of users and settings, the simulator is designed with portability and wireless connectivity in mind. A built-in rechargeable lithium-ion battery provides extended use, while Bluetooth and USB-C connectivity allow integration with mobile devices, computers, or cloud-based platforms for remote training and data logging.

[0034]. Advanced features may include compatibility with augmented reality (AR) or virtual reality (VR) systems, which enable immersive visualization of anatomical structures and enhance the learning environment. An optional manual palpation module introduces a tactile training feature, simulating the resistance of real tissue to help users develop the ability to locate motor points through touch.

[0035]. This invention addresses a critical gap in medical and therapeutic education by providing a safe, reusable, and anatomically accurate platform for mastering facial muscle stimulation techniques. It supports applications across physiotherapy, neurology, cosmetology, and clinical research, making it a versatile tool for both skill acquisition and innovation in neuromuscular rehabilitation.

[0036]. In addition to its core functionality, the Facial Muscle Motor Point Simulator includes customizable features that allow it to adapt to users with varying skill levels and educational goals. Novice users can select guided training modes with visual overlays and step-by-step instructions, while experienced clinicians may access advanced settings to simulate complex patient scenarios. The system supports both manual and automated stimulation sequences, enabling training in basic localization as well as fine-tuned therapy techniques.

[0037]. The simulator is equipped with a software suite that extends its capabilities beyond hardware functionality. This software provides high-resolution 3D anatomical models, interactive tutorials, clinical simulations, and an intelligent performance dashboard. The dashboard collects session data, such as the precision of electrode placement, response time, and stimulation quality, and generates reports for self-assessment or instructor feedback. These analytics aid in identifying areas of strength and improvement, fostering a data-driven approach to clinical skill development.

[0038]. To enhance realism and application, the simulator includes simulated clinical cases. These may involve scenarios such as unilateral facial drooping due to nerve injury, synkinesis following Bell's palsy, or targeted rehabilitation after maxillofacial surgery. Instructors and researchers can also program custom scenarios with defined goals and performance benchmarks, providing a controlled environment to test therapy outcomes and stimulation protocols.

[0039]. The simulator's adaptability extends to cosmetic and aesthetic training applications. It can be used to demonstrate the effects of neuromuscular stimulation on facial toning, support training for Botox injection sites, or explore how dermal fillers interact with facial muscle dynamics. This cross-disciplinary utility makes the simulator suitable for cosmetology programs, dermatology residencies, and plastic surgery training.

[0040]. For home rehabilitation purposes, the simulator provides a patient-friendly interface that enables customized therapy sessions under remote supervision. Healthcare professionals can remotely monitor therapy progress through synchronized cloud storage and adjust treatment plans based on patient performance data. This makes the device a valuable asset for tele-rehabilitation and post-discharge recovery programs.

[0041]. The system's ergonomic design ensures ease of use in diverse environments, from academic classrooms and clinical training centers to research laboratories and home-based therapy setups. The lightweight and

portable structure is complemented by a long-lasting battery, allowing uninterrupted use during workshops, outreach programs, or mobile clinics in low-resource settings.

[0042]. The Facial Muscle Motor Point Simulator represents a significant advancement in the field of neuromuscular training and rehabilitation. By integrating anatomically accurate facial structures, embedded motor points, adjustable electrical stimulation, and multimodal feedback mechanisms, the invention offers a comprehensive and immersive platform for learning, practicing, and refining facial motor point stimulation techniques.

[0043]. This simulator addresses long-standing challenges in physiotherapy and clinical education by eliminating reliance on live patients, reducing the risk of error during early training, and providing a safe, repeatable, and interactive environment. Its adaptability for use in educational institutions, rehabilitation centers, cosmetic clinics, and remote healthcare settings further enhances its value and accessibility.

[0044]. The invention also serves as a foundation for ongoing research in facial nerve recovery, neuroplasticity, and evidence-based therapy development. Its potential integration with AR/VR, telemedicine, and advanced analytics positions it as a future-ready solution for both practitioners and researchers.

[0045]. In conclusion, the Facial Muscle Motor Point Simulator bridges the gap between theoretical knowledge and clinical practice. It not only improves

the accuracy and confidence of healthcare professionals but also contributes meaningfully to patient recovery and quality of life through improved therapeutic outcomes.

DIGITALLY SIGNED#####
MADHU SMITA (IN/PA-3454) and
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Registered Patent Agents on behalf of the Applicant(s)

Claims:

I/We Claim:

1. An apparatus for simulating facial muscle motor point stimulation, comprising:

    a) a three-dimensional anatomical model of a human face formed with bio-simulative materials that mimic skin elasticity, muscle structure, and nerve pathways;

    b) embedded conductive elements positioned at anatomically accurate motor points of facial muscles;

    c) an electrical stimulation system configured to deliver user-adjustable pulses to the motor points, wherein the stimulation parameters include amplitude, frequency, and pulse duration;

    d) a multimodal feedback system including:

    i) visual indicators that activate upon correct stimulation of motor points;

    ii) tactile feedback via vibration modules simulating muscle contractions;

    iii) audio cues to assist in training; and

    e) an integrated user interface configured to display anatomical overlays, track stimulation accuracy, and provide real-time feedback.

2. The apparatus as claimed in claim 1, wherein the anatomical model includes a nerve pathway layer composed of conductive wiring that simulates facial nerve branches and responds to stimulation.
3. The apparatus as claimed in claim 1, wherein the user interface includes pre-loaded training modules and case-based scenarios simulating clinical conditions such as Bell’s palsy and post-stroke facial paralysis.

4. The apparatus as claimed in claim 1, further comprising electromyography (EMG) sensors that detect and display simulated muscle activation in response to electrical stimulation.
5. The apparatus as claimed in claim 1, wherein the apparatus is configured for integration with augmented reality (AR) or virtual reality (VR) environments to visually guide users in locating motor points.
6. The apparatus as claimed in claim 1, further comprising a manual palpation module that simulates tissue resistance, enabling users to practice tactile identification of motor points.
7. The apparatus as claimed in claim 1, wherein the system is portable and includes a rechargeable battery and wireless connectivity module for remote training and data synchronization.
8. The apparatus as claimed in claim 1, wherein the system is configured to store and analyze user performance data, including accuracy of electrode placement, stimulation duration, and technique consistency.

Dated this May 06, 2025

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ABSTRACT

FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION

A facial muscle motor point simulator is disclosed for training, evaluation, and rehabilitation in neuromuscular therapy. The apparatus includes an anatomically accurate three-dimensional facial model constructed from bio-simulative materials mimicking human skin, muscle, and nerve pathways. Strategically embedded conductive elements represent facial motor points and are stimulated by an integrated electrical stimulation system with adjustable parameters. A multimodal feedback system provides real-time visual, tactile, and audio responses to guide accurate motor point localization and stimulation. The simulator further includes a digital interface for anatomical visualization, performance tracking, and interactive training modules. Optional features include integration with augmented reality (AR), electromyography (EMG) sensing, and manual palpation for tactile skill development. Portable and wireless, the system supports educational, clinical, and research applications in physiotherapy, neurology, and facial rehabilitation.

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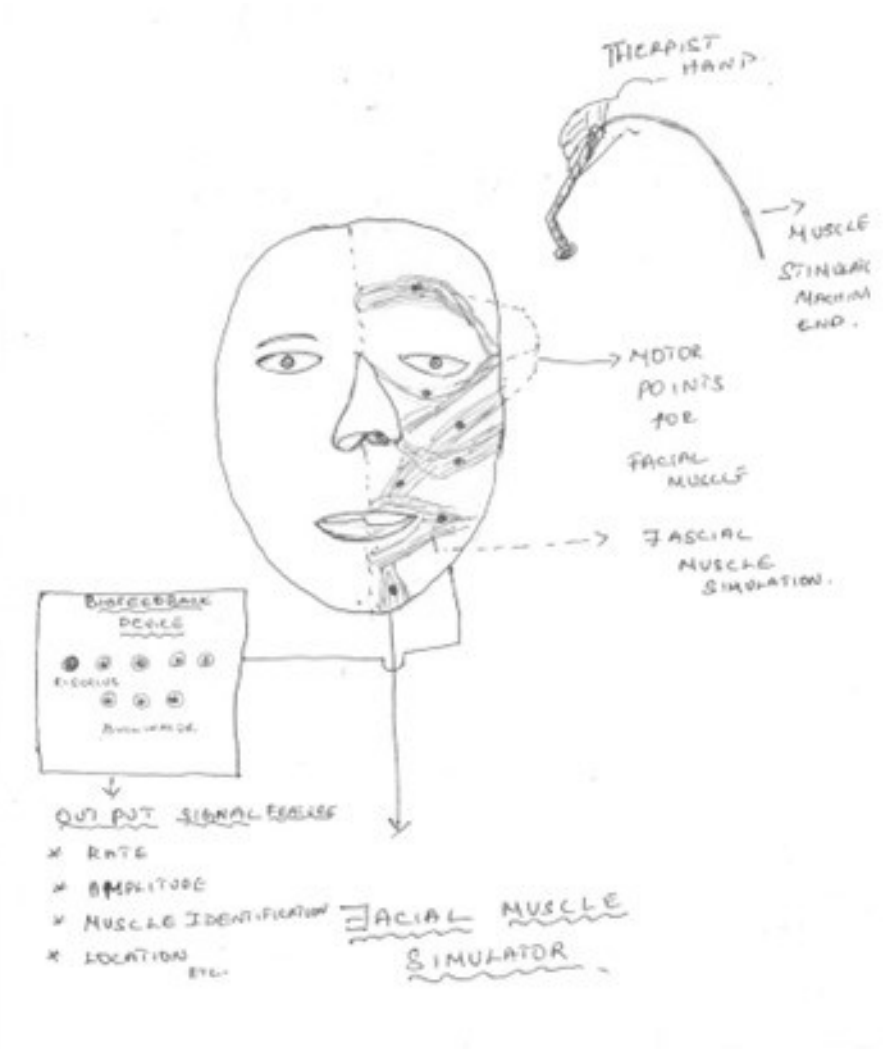

Figure 1

DIGITALLY SIGNED#####
MADHU SMITA (IN/PA-3454) and
PREM CHARLES I (IN/PA – 3311)
Registered Patent Agents on behalf of the Applicant(s)

FORM 3

THE PATENT ACT, 1970
(39 of 1970)
AND
THE PATENTS RULES, 2003
STATEMENT AND UNDERTAKING UNDER SECTION 8
[(See section 8; Rule 12)]

1. Name of the applicant(s).	I/We **Sri Devaraj Urs Academy of Higher Education and Research, Sri Devaraj Urs Academy of Higher Education and Research, Kolar – 563101, Karnataka, India.,** Applicant Type **- EI** , hereby declare:
2. Name, address and nationality of the joint applicant.	(i) that I/We who have made the application for patent number **202541043964** in India, dated **06/05/2025 18:31:51**., alone / jointly with ....., (ii) that I/We have not made any application for the same/substantially the same invention outside India Or (iii) that I/We have made for the same/ substantially same invention, application(s) for patent in the other countries, the particulars of which are given below:

Name of the country	Date of application	Application No.	Status of the application	Date of publication	Date of disposal
NA	NA	NA	NA	NA	NA

3. Name and address of the assignee	(i) that the rights in the application(s) filed in India has/have been assigned to **None. Rights remained with the Applicant**. (ii) that I/We undertake that upto the date of grant of the patent by the Controller, I/We would keep him informed in writing regarding the details of corresponding applications for patents filed outside India in accordance with the provisions contained in section 8 and rule 12. Dated this **6th** day of **May 2025**
4. To be signed by the applicant or his authorized registered patent agent.	Signature(s) .....
5. Name of the natural person who has signed.	.....
	To The Controller of Patents, The Patent Office, at **New Delhi**
Note: ” Strike out whichever is not applicable; ”	

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FORM 5

THE PATENT ACT, 1970
(39 of 1970)
&
THE PATENTS RULES, 2003

DECLARATION AS TO INVENTORSHIP

[See section 10(6) and rule 13(6)]

1. NAME OF APPLICANT(S) **Sri Devaraj Urs Academy of Higher Education and Research**,

hereby declare that the true and first inventor(s) of the invention disclosed in the complete specification filed in pursuance of my/our application numbered **202541043964** dated **06/05/2025** is/are

2. INVENTOR(S)

Name	Country	Nationality	Address
Dr. Senthil Kumar E	India	India	S/o. Mr. Elumalai, Professor, R. L. Jalappa College of Physiotherapy, Sri Devaraj Urs Academy of Higher Education and Research, Kolar – 563101, Karnataka, India.
Vyshnavi P B	India	India	D/o. Mr. P. V. Bhaskar, Physiotherapist, R. L. Jalappa College of Physiotherapy, Sri Devaraj Urs Academy of Higher Education and Research, Kolar – 563101, Karnataka, India.
Sandhya	India	India	D/o. Mr. B. Murali, Physiotherapist, R. L. Jalappa College of Physiotherapy, Sri Devaraj Urs Academy of Higher Education and Research, Kolar – 563101, Karnataka, India.

Dated this. **06/05/2025**Day of **2025**

Signature

Name of the signatory

3. DECLATRATION TO BE GIVEN WHEN THE APPLICATION IN INDIA IS FILED BY THE APPLICANT(S) IN THE CONVENTION COUNTRY:--

We the applicant(s) in the convention country hereby declare that our right to apply for a patent in India is by way of assignment from the true and first inventor(s).

Dated this. **06/05/2025**.Day of **2025**

Signature

Name of the signatory

4. STATEMENT (to be signed by the additional inventor(s) not mentioned in the application form)

I/We assent to the invention referred to in the above declaration, being included in the complete specification filed in pursuance of the stated application.

Dated this(Final Payment Date):----------

Signature

Name of the signatory

This form is electronically generated.

FORM 28
THE PATENT ACT, 1970
(39 OF 1970)
&
The Patents Rules, 2003
TO BE SUBMITTED BY SMALL ENTITY /STARTUP/EDUCATIONAL INSTITUTION
[See rules 2 (fa), 2(fb), 2(ca) and 7]

We, **SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH,** an **INDIAN EDUCATIONAL INSTITUTION** recognised by **UNIVERSITY GRANTS COMMISSION,** the applicant in respect of the patent application no **2025410**_____ hereby declare that we are an educational institution in accordance with rule 2(ca) and submit the following document(s) as proof:

i) Notification of May 25th, 2007 issued by UGC and MHRD.

The information provided herein is correct to the best of our knowledge and belief.

Dated this 6th Day of May, 2025

SIGNATURE:

DIGITALLY SIGNED#####
MADHU SMITA (IN/PA-3454) and
PREM CHARLES I (IN/PA – 3311)
Registered Patent Agents on behalf of the Applicant(s)

To,

The Controller of Patents,

The Patent Office, at Chennai

UNIVESRITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110002

विश्वविद्यालय अनुदान आयोग
बहादुर शाह जफर मार्ग
नई दिल्ली – 110 002

No.F.6-24/2006 (CPP-I) June, 2007

20 JUN 2007

NOTIFICATION

In exercise of the powers conferred by Section 3 of the University Grants Commission Act, 1956, the Central Government on the recommendation of the Commission has declared Sri Devraj Urs Academy of Higher Education and Research, Tamaka, Kolar, Karnataka, comprising Sri Devraj Urs Medical College, Tamaka, Kolar, Karnataka, as a 'Deemed to be University' for the purpose of the aforesaid Act, from the date of disaffiliation of 'Sri Devraj Urs Medical College', Tamaka, Kolar, Karnataka, from Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka.

2. This declaration is subject to the conditions mentioned at S.No.2 of the endorsement of this notification.

3. The Ministry of Human Resource Development or the University Grants Commission will not provide any Plan and Non-Plan grants to Sri Devraj Urs Academy of Higher Education and Research or any of its constituent institutions.

(Urmil Gulati)
Under Secretary

Copy forwarded to :-

1. The Vice-Chancellor, Rajiv Gandhi University of Health Sciences, 4th 'T' Block, Jayanagar, Banaglore-560 041, Karnataka

2. Chairman, Sri Devraj Urs Academy of Higher Education and Research, Tamaka, Kolar-536101, Karnataka. The declaration made in para 1 of this notification relating to conferment of status of deemed-to-be-university will be subject to the following conditions:-

(a) The 'Deemed-to-be-University' shall finalise its Memorandum of Association (MoA) and Rules immediately in conformity with the University Grants Commission's Model MoA and Rules for the Deemed to be Universities and get it approved by the UGC.

(b) The management of Sri Devraj Urs Medical College, Tamaka should legally vest with Sri Devraj Urs Academy of Higher Education and Research.

(c) The moveable as well as immovable assets, including that of Sri Devraj Urs Medical College should be legally transferred in the name of the Trust formed for management of the deemed-to-be-university institution through a valid deed registered under the Indian Registration Act, in the interest of future of students, members of faculty, employees and for maintaining the standards of higher education.

(d) The deemed-to-be-university institution or its constituent unit shall not offer any course/programme that has not been approved by the Ministry of Health and Family Welfare or other relevant Ministries and/or the relevant Statutory Councils such as Medical Council of India, etc.

(e) The deemed-to-be-university institution or its constituent unit shall not offer/award, as the case may be, any degrees that are not specified by the UGC. The deemed-to-be-university institution will continue to ensure that the nomenclature of the degrees awarded by it are specified by the UGC under Section 22 of the UGC Act,1956.

(f) The deemed-to-be-university institution shall award degrees to only those students who are admitted/enrolled with it or its constituent unit subsequent to the date of this notification.

(g) As for those students who are already enrolled with the institution concerned prior to the date of this notification, they shall continue to be enrolled with the present affiliation university, namely, Rajiv Gandhi University of Health Sciences, Bangalore, which shall have to agree to examine and grant degrees to them on successful completion of the courses/ programmes they are pursuing at present in the teaching institutions of the deemed-to-be-university institution.

(h) The deemed-to-be-university institution shall regularly obtain the requisite 'renewal' of approval / permission of Ministry of Health and Family Welfare and other relevant Statutory Councils, as the case may be, well within the prescribed time limit, in respect of the courses offered, intake capacity of students, etc.

(i) The deemed-to-be-university institution and its constituent unit shall start/offer, as the case may be, the courses/programmes in accordance with the relevant prescribed norms and guidelines of the UGC and the relevant statutory professional regulatory Councils, such as Medical Council of India (MCI), Indian Nursing Council (INC), Dental Council of India (DCI), AICTE, etc.

(j) The 'Deemed-to-be-University' as well as its constituent institutions shall strictly abide by all the norms and guidelines as laid down by the UGC and other Statutory Councils such as Medical Council of India, etc. from time to time, as are applicable to institutions notified as 'Deemed-to-be-Universities.

The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary & Higher Education, Shastri Bhawan, New Delhi-110 001

4. The Principal Secretary (Higher Education), Education Department, Government of Karnataka, M.S.Building, 5th Floor, Bangalore-560 001

5. PS to Chairman, UGC, New Delhi

6. The Joint Secretary (NET) UGC, New Delhi

7. The Joint Secretary (DU), UGC, New Delhi

8. Secretary General, Association of Indian Universities, AIU House, 16 Kotla Marg, New Delhi-110 002

9. Member Secretary, AICTE, IG Sports Complex, I.P.Estate, New Delhi-110 002

10. All Regional Offices of UGC

11. Senior Statistical Officer, UGC, 35, Ferozeshah Road, New Delhi

12. All Sections in the UGC Office

13. Guard File

(Urmil Gulati)
Under Secretary

(TO BE PUBLISHED IN THE GAZETTE OF INDIA PART-I, SECTION-1)

(1)

No.F.9-36/2006-U.3(A)
Government of India
Ministry of Human Resource Development
Department of Higher Education

Shastri Bhawan, New Delhi,
Dated the 25th May, 2007.

NOTIFICATION

In exercise of the powers conferred by Section 3 of the University Grants Commission (UGC) Act, 1956, the Central Government, on the advice of the University Grants Commission, hereby declare Sri Devaraj Urs Academy of Higher Education and Research, Tamaka, Kolar, Karnataka, comprising Sri Devaraj Urs Medical College, Tamaka, Kolar, Karnataka, as a 'Deemed-to-be-University' for the purposes of the aforesaid Act, from the date of disaffiliation of 'Sri Devaraj Urs Medical College', Tamaka, Kolar, Karnataka, from Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka.

2. This declaration is subject to the conditions mentioned at Sl. No. 5 of the endorsement of this notification.

3. Government of India or the University Grants Commission will not provide any Plan or Non Plan grants to Sri Devaraj Urs Academy of Higher Education and Research or any of its constituent institutions.

(Sunil Kumar)
Joint Secretary to the Government of India

The Manager,
Government of India Press,
Faridabad (Haryana).

Copy to: -

1. The Secretary, University Grants Commission, Bahadurshah Zafar Marg, New Delhi -110002.

2. The Secretary, Medical Council of India, Pocket - 14, Sector - 8, Dwarka Phase-I, New Delhi - 110075.

3. Vice Chancellor, Rajiv Gandhi University of Health Sciences, 4th 'T' Block, Jayanagar, Bangalore - 560041, Karnataka.

4. Under Secretary(ME-P.II), Ministry of Health and Family Welfare (Department of Health & Family Welfare), Nirman Bhavan, New Delhi - 110001.

5. Chairman, Sri Devaraj Urs Academy of Higher Education & Research, Tamaka, Kolar - 536101, Karnataka. The declaration made in para 1 of this notification relating to conferment of status of deemed-to-be-university will be subject to the following conditions:-

(a) The 'Deemed-to-be-University' shall finalise its Memorandum of Association (MoA) and Rules immediately in conformity with the University Grants Commission's Model MoA and Rules for the Deemed to be Universities and get it approved by the UGC.

(b) The management of Sri Devaraj Urs Medical College, Tamaka should legally vest with Sri Devaraj Urs Academy of Higher Education & Research.

(c) The movable as well as immovable assets, including that of Sri Devaraj Urs Medical College should be legally transferred in the name of the Trust formed for management of the deemed-to-be-university institution through a valid deed registered under the Indian Registration Act, in the interest of future of students, members of faculty, employees and for maintaining the standards of higher education.

(d) The deemed-to-be-university institution or its constituent unit shall not offer any course/programme that has not been approved by the Ministry of Health and Family Welfare or other relevant Ministries and/or the relevant Statutory Councils such as Medical Council of India, etc.

(e) The deemed-to-be-university institution or its constituent unit shall not offer/award, as the case may be, any degrees that are not specified by the UGC. The deemed-to-be-university institution will continue to ensure that the nomenclature of the degrees awarded by it are specified by the UGC under Section 22 of the UGC Act, 1956.

25/5

(f) The deemed-to-be-university institution shall award degrees to only those students who are admitted/enrolled with it or its constituent unit subsequent to the date of this notification.

(g) As for those students who are already enrolled with the Institution concerned prior to the date of this notification, they shall continue to be enrolled with the present affiliating university, namely, Rajiv Gandhi University of Health Sciences, Bangalore, which shall have to agree to examine and grant degrees to them on successful completion of the courses / programmes they are pursuing at present in the teaching Institutions of the deemed-to-be-university institution.

(h) The deemed-to-be-university institution shall regularly obtain the requisite 'renewal' of approval / permission of Ministry of Health and Family Welfare and other relevant Statutory Councils, as the case may be, well within the prescribed time limit, in respect of the courses offered, intake capacity of students, etc.

(i) The deemed-to-be-university institution and its constituent unit shall start/offer, as the case may be, the courses/programmes in accordance with the relevant prescribed norms and guidelines of the UGC and the relevant statutory professional regulatory Councils, such as Medical Council of India(MCI), Indian Nursing Council(INC), Dental Council of India(DCI), AICTE, etc.

(j) The 'Deemed-to-be-University' as well as all its constituent institutions shall strictly abide by all the norms and guidelines as laid down by the UGC and other Statutory Councils such as Medical Council of India, etc. from time to time, as are applicable to institutions notified as 'Deemed-to-be-Universities'.

6. Press Information Bureau, Shastri Bhawan, New Delhi-110001.

7. The Secretary-General, Association of Indian Universities, A.I.U. House, 16, Kotla Marg, New Delhi - 110002.

8. Director(Administration) & Web Master, Department of Higher Education, Shastri Bhavan, New Delhi. It is requested that suitable instructions may be issued to CMIS to upload this notification on the website (Home site) of the Department.

9. Guard file / Notification file.

Madhukar Sinha
29.05.13
(Madhukar Sinha)
Director

FORM 9

THE PATENT ACT, 1970
(39 of 1970)
&
THE PATENTS RULES, 2003

REQUEST FOR PUBLICATION

[See section 11A (2) rule 24A]

I/We **Sri Devaraj Urs Academy of Higher Education and Research** hereby request for early publication of my/our [Patent Application No.] TEMP/E-1/48779/2025-CHE

Dated **06/05/2025 00:00:00** under section 11A(2) of the Act.

Dated this(Final Payment Date):----------
Signature
Name of the signatory

To,
The Controller of Patents,
The Patent Office,
At Chennai

This form is electronically generated.

தமிழ்நாடு तमिलनाडु TAMILNADU

DS 115720

I. Pream Charless
Krishnagiri.

12 2 APR 2025

V. RADHA
S.V.L. No: 3936/B1/2000
163-A, Salem Road
KRISHNAGIRI-635 001

STAMP DUTY FOR
APPLICATION No: 202541043964

FORM 26

THE PATENTS ACT, 1970

(39 OF 1970)

&

THE PATENT RULES, 2003

FORM FOR AUTHORIZATION OF A PATENT AGENT/OR ANY PERSON IN A MATTER OF PROCEEDING UNDER THE ACT

(See Section 127 and 132; rule 135)

POWER OF ATTORNEY

I / we,

NAME(S) OF APPLICANT(S)	NATIONALITY	ADDRESS
Sri Devaraj Urs Academy of Higher Education and Research	Indian	Sri Devaraj Urs Academy of Higher Education and Research, Kolar – 563101, Karnataka, India.

hereby authorize, Prem Charles I (INPA3311) and Madhu Smita (INPA3454), Registered Patent Agents with address for communication at Allinnov Research and Development Private Limited, #360A, First Floor, Senthur Murugan Kovil Street, Opp. S.M. Mahal, Oldpet, Krishnagiri - 635001, Tamil Nadu, India, to act on our behalf in connection with Patent filing and further prosecution, filing of assignments and any document related thereto, with reference to our patent application/ reference no. 202541043964 dated 06-05-25 and all further patent applications filed by them in future, on our behalf and request that all notices, requisitions and communications relating thereto may be sent to such person at the above address unless otherwise specified. They are also authorized to substitute another attorney / agent to attend hearings (if any) in relation to the patent. We hereby revoke all previous authorizations, if any, in respect of same matter or proceeding. We hereby assent to the action already taken by the said persons in the above matter.

Dated - 07-05-25

Registrar

Sri Devaraj Urs Academy of Higher Education and Research

Sri Devaraj Urs Academy of Higher Education and Research
Tamaka, Kolar - 563 103.

To,

The Controller of Patents

The Indian Patent Office

At Chennai, Kolkata, Delhi, Mumbai

Welcome Madhu Smita Sign out

Controller General of Patents, Designs & Trade Marks
G.S.T. Road, Guindy, Chennai-600032
Tel No. (091)(044) 22502081-84 Fax No. 044 22502066
E-mail: chennai-patent@nic.in
Web Site: www.ipindia.gov.in

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G.A.R.6
[See Rule 22(1)]
RECEIPT

Docket No 45898

Date/Time 2025/05/06 18:31:51

To
Madhu Smita

UserId: madhusmita

#01, Dwarka Sector 14

CBR Detail:

Sr. No.	App. Number	Ref. No./Application No.	Amount Paid	C.B.R. No.	Form Name	Remarks
1	E-106/9050/2025/CHE	202541043964	0	-----	FORM28	
2	202541043964	TEMP/E-1/48779/2025-CHE	1600	27272	FORM 1	FACIAL MUSCLE MOTOR POINT SIMULATOR FOR NEUROMUSCULAR TRAINING AND REHABILITATION
3	E-12/10373/2025/CHE	202541043964	2500	27272	FORM 9	----

TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
N-0001662888	Online Bank Transfer	0605250052512	4100.00	1475001020000001

Total Amount : ₹ 4100.00
Amount in Words: Rupees Four Thousand One Hundred Only

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Docket No 45920

Date/Time 06/05/2025

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Madhu Smita

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Sr. No.	App. Number	Ref. No./Application No.	Amount Paid	C.B.R. No.	Form Name	Remarks
1	202541043964	E-5/4057/2025/CHE	0	-----	FORM 5	
2	202541043964	E-3/9176/2025/CHE	0	-----	FORM 3	

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Docket No 46471

Date/Time 07/05/2025

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Madhu Smita

User Id: madhusmita

#01, Dwarka Sector 14

Sr. No.	App. Number	Ref. No./Application No.	Amount Paid	C.B.R. No.	Form Name	Remarks
1	202541043964	E-45/5907/2025/CHE	0	-----	FORM 26	

Total Amount : ₹ 0
Amount in Words: Rupees Only

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