

## (54) Title of the invention : NERVE CONTRACTION ANALYSIS WITH PULSE ELECTRO THERAPY

(51) International classification :A61N 013600, A61N 013620, A61N 070000, A61P 110200, D01D 050000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

1)V R Lenin

Address of Applicant :2/191 - Ganapathi Nagar, Karumanur Post, Mallasamudram Via, Tiruchengode T K, -----

2)Paavai Engineering College

3)Dr.G.Balaji

4)M.Raja

5)R.Muthukumar

6)G.Deivamani

7)K.Araivanandhapandiyan

8)B.Hemachandran

9)M.Karthick

10)K.Kavinkumar

11)S.Vengatraman

12)G.Vignesh

13)R.Arun Kumar

14)M.Subash

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

1)Dr.G.Balaji

Address of Applicant :HoD/EEE, Paavai Engineering College, Namakkal. Namakkal -----

2)M.Raja

Address of Applicant :Assistant professor/EEE, Paavai Engineering College, Namakkal. Namakkal -----

3)R.Muthukumar

Address of Applicant :Assistant professor/EEE, Paavai Engineering College, Namakkal. Namakkal -----

4)G.Deivamani

Address of Applicant :Assistant professor/EEE, Paavai Engineering College, Namakkal. Namakkal -----

5)K.Araivanandhapandiyan

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

6)B.Hemachandran

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

7)M.Karthick

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

8)K.Kavinkumar

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

9)S.Vengatraman

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

10)G.Vignesh

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

11)R.Arun Kumar

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

12)M.Subash

Address of Applicant :UG Student/EEE, Paavai Engineering College, Namakkal. Namakkal ---

## (57) Abstract :

The electrical signals passing through the muscles are captured by an electromyography (EMG) examination. This aids in the detection of any illness that may harm the muscles and nerves, as well as its presence and location. Along with an NCV exam, an electromyography (EMG) test is frequently conducted. Nerve dysfunction and damage are evaluated using a nerve conduction velocity (NCV) exam. This method assesses the rate at which electrical impulses traverse the peripheral nerves. (This nerve helps you to control your muscles and experience the senses). Compared to damaged nerves, healthy nerves transmit electrical signals more rapidly and with greater force. The NCV test aids medical professionals in distinguishing between injuries to the myelin membrane and nerve fibres. A doctor can distinguish between a nerve disorder and a situation where a nerve injury has affected the muscles by using this information. In this endeavour, the patient's live EMG is recorded using the NCV test, and the nerve disorder is identified based on the NCV range. Here, EMG, NCV, Sweat, and Nerve Dispersion System are the factors used. The use of embedded systems is based on their benefits, such as their built-in processor, simple operation, risk-free CPU, lack of a linguistic barrier, and redundant controller. For pain alleviation, pulse electrotherapy systems are used. PET can be used to address the specific nerve disorder that was identified here. A multivibrator with a low duty rate is used to prevent patient burns. In order to prevent data theft, mobile IoT is the final IoT technology used here. A doctor who is mobile can quickly get the patient's information.

No. of Pages : 8 No. of Claims : 1