

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:
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1. APPLICANT(S):

Sr.No.	Name	Nationality	Address	Country	State
1	University of Engineering and Management Kolkata	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal

2. INVENTOR(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Souvik Ghosh	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal
2	Ritam Chatterjee	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal
3	Raima Ghosh	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal
4	Saikat Sarkar	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown,	India	West Bengal

			Kolkata, West Bengal 700160		
5	Moubani Kuchlyan	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal
6	Abhinav	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal
7	Adrish Ghosh	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal
8	Anirban Das	India	University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160	India	West Bengal

3. TITLE OF THE INVENTION: Carefree Sole, a multi medicated waterproof device, triggered to stimulate foot nerve points for treatment and relief through vibrator motors

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

University Area, Plot, Street Number 03, Action Area III, B/5,
Newtown, Kolkata, West Bengal 700160

Telephone No.: 03323572969

Fax No.: 03323578302

Mobile No:

E-mail: souvikrock17@gmail.com

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

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention
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6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE APPLICATION:

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

7. PARTICULARS FOR FILING DIVISIONAL APPLICATION

Original (first) Application Number	Date of Filing of Original (first) Application
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8. PARTICULARS FOR FILING PATENT OF ADDITION:

Main Application / Patent Number:	Date of Filing of Main Application
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9. DECLARATIONS:**(i) Declaration by the inventor(s)**

I/We, Souvik Ghosh, Ritam Chatterjee, Raima Ghosh, Saikat Sarkar, Moubani Kuchlyan, Abhinav, Adrish Ghosh, Anirban Das, 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: 22.12.2020

(b) Signature(s) of the inventor(s): SR, RC, RG, SS, NK, A, AB, AD

(c) Name(s): Souvik Ghosh, Ritam Chatterjee, Raima Ghosh, Saikat Sarkar, Moubani Kuchlyan, Abhinav, Adrish Ghosh, Anirban Das

(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: University of Engineering and Management Kolkata

(iii) Declaration by the applicant(s)

- The Complete specification relationg 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.

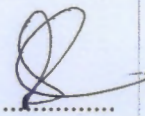
10. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION:

Sr.	Document Description	FileName
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1	COMPLETE SPECIFICATION	complete specification.pdf
2	DRAWINGS	Drawings.pdf

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

Dated this(Final Payment Date): 22.12.2020

Signature: 

Name: Satyajit Chakrabarti

To The Controller of Patents

The Patent office at KOLKATA

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FORM 18

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

REQUEST/EXPRESS REQUEST FOR EXAMINATION OF APPLICATION FOR PATENT

[See section 11B and rules 20(4) (ii),24B (1) (i)]

1. APPLICANT(S)/OTHER INTERESTED PERSON(S):

- (a) Name :1. University of Engineering and Management Kolkata
(b) Nationality :1 .India
(c) Address :1 .University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160
(d) Date Of Publication Under Section 11A :29/07/2022 00:00:00

2. STATEMENT IN CASE OF REQUEST FOR EXAMINATION MADE BY THE APPLICANT(S)

I/We University of Engineering and Management Kolkata hereby request that my/our application for patent invention number 202131003595 filed on 27 Jan 2021 for the titled CAREFREE SOLE, A MULTI MEDICATED WATERPROOF DEVICE, TRIGGERED TO STIMULATE FOOT NERVE POINTS FOR TREATMENT AND RELIEF THROUGH VIBRATOR MOTORS shall be examined under section 12 and 13 of the Act.

4. ADDRESS FOR SERVICE

University Area, Plot, Street Number 03, Action Area III, B/5, Newtown, Kolkata, West Bengal 700160

Dated this(Final Payment Date) 09/08/2022

Signature
Name of the Signatory

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

A. Chatterjee

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1. Title of Invention:-Carefree Sole, a multi medicated waterproof device, triggered to stimulate foot nerve points for treatment and relief through vibrator motors

Inventors:

Souvik Ghosh, BCA, souvikrock17@gmail.com

Ritam Chatterjee, BCA, ritam2021@gmail.com

Raima Ghosh, BCA, raimaghosh821@gmail.com

Saikat Sarkar, BCA, saikatsarkar.832001@gmail.com

Moubani Kuchlyan, BCA, moubanikuchlyan2015@gmail.com

Abhinav, CSE, abhinav33303@gmial.com

Adrish Ghosh, ECE, adhishghosh@gmail.com

Anirban Das, CSE, anirban-das@live.com

2. Field of invention:-

- Here our field of invention is a sole that provides treatment to the patients having blood circulation problems, pain in several joints/ organs, it also helps from stress relief which is an important problem in this century.
- This device works on rechargeable battery power which is placed in a different compartment, it can be connected with the sole. It don't matters on the height of the shoe it is flexible. These device is waterproof.
- This soles will be provided in different sizes according to universal shoe size.
- The acupressure method works by vibrator motors, which are placed in certain positions in the sole, so that they can stimulate the nerves of specific organs in the body.
- There will be dedicated Application to use this device.
- The application will access Bluetooth of the user device and connect with the sole to operate it.
- While registering in the application the user have to answer some question about his health & body problems, analyzing those information our application will determine some special vibrating patterns for that specific user.
- Except that there are many default vibration patterns based on the nerves connected to different organs. Continuous vibration is not good for body, so this has a specific time limit for every vibration patterns.
- There are two main things our device is going to cover
 1. Blood Circulation
 2. Acupressure
- **The organs we are trying to stimulate by Acupressure are:**
 1. Sinus
 2. Heart
 3. Lungs

4. Thyroid/Assist thyroid
5. Adrenal Glands
6. Kidney
7. Spinal cord
8. Nervous system
9. Eyes

- **The organs we are trying to cure by Blood circulation are:**

Sinus, Heart, Lungs, kidney, Spinal cord, Left knee, knee joint, Testes, Genitalia, Mitral Valve, Pituitary Gland, Left shoulder.

3. Object of Invention:

This invention will provide perfect treatment to the patients having blood circulation problems, pain in joints or organs and many more.

This device has highly programed circuit in it to vibrate the motors in specific pattern & connect it with phone.

This device works on battery power which is placed in different compartments, it can be connected with the sole. It won't effect on the height or width of the shoe as the sole is adjustable.

Continuous vibration is not good for body, so this has a specific time limit for every vibration patterns.

There will be a dedicated application as well for using this device .While registering the application , the user have to answer specific questions about his or her problems related with pain so that our application can determine the problem.

The application will access Bluetooth of the mobile devices and connect with theCarefree sole to operate it.

4. Summary of Invention:

The Carefree Sole will execute different patterns of vibrations using motors and Arduino to stimulate nerves and muscles of different organs of a body. These will help to get relief from back pain, sinus headache, joint pain, etc. The sole is designed in a way so that no one could get hurt after putting the sole in the shoe. The security provided will be accurate and convenient. It is easy to recharge the battery of it.

5. Statement of the invention:

- ❖ **Some special cure and the detailed procedure are explained below:-**

- **Sinus:-**

Effects:-

1. Headache
2. Fever
3. Pain in the teeth & ears
4. Nasal Stuffiness
5. Sore throat
6. Facial tenderness

How our device is going to help-

If we use acupressure it is proved that we can get a massive relief from sinus pain. It is not possible to get relief from the sinus completely. Acupressure improves blood flow and relaxes muscles in sinus, and increase the mucus flow. So by using this device someone can be cured from massive headache, pain in the tooth & ears, and nasal stuffiness.

- **Heart:-**

Effects-

1. Chest pain
2. Chest pressure
3. Angina
4. Not proper blood circulation by heart can cause joint pain, weakness in body.
5. Numbness

How our device is going to help-

Hence heart is connected with Accelerans&vagus nerve, it is scientifically proved that Acupressure improves function in heart failure patient. It can bring good health effects. UCLA (University of California Los Angeles) researchers found the treatment significantly lower stress and improves heart function in very critical patients too. Besides that in some cases it also cured heart blockage.

- **Lungs:-**

Effects-

1. Trouble Breathing
2. Coughing up blood or mucus.
3. Pain and discomfort when breathing.

How our device is going to help-

Acupressure is routinely used on variety of COPD patients. So our device cures the pain and relaxes muscles in lungs, so breathing is easier too. Circulating blood properly the discomfort will be cured.

- **Thyroid/ Assist thyroid/ Pituitary Gland/ Adrenal Glands:-**

Effects-

1. High blood pressure.
2. Hair Thinning.
3. Gall stones.
4. Dry skin.
5. It can affect your metabolism, mental function energy level etc.
6. Muscle bone weakness.
7. Depression.
8. Weight gain
9. Gigantism
10. Erectile dysfunction.

How our device is going to help-

Acupressure is a possible treatment for these. Some experts believe it is beneficial. By stimulating nerves of these organs our device can increase the production of hormones little by little.

- **Kidney:-**

Effects-

1. Weak bones.
2. Nerve damage.
3. High blood sugar.
4. Complication during pregnancy.
5. Malnutrition.

How our device is going to help-

With perfect routine care our device can provide short-term symptom relief, depressive mood, and fatigue sleep of patients. It also helps for stress relief.

- **Spinal cord:-**

Effects-

1. Extreme Back Pain.
2. Numbness.
3. Loss of bladder.
4. Paralysis in any part of body.
5. Pain in fingers, toe, feet.

How our device is going to help-

Acupressure regenerates neurons and promotes biological process responsible for motor function recovery after spinal cord injuries. So our device can may prevent paralysis (in initial stages) by stimulating repairs. It also helps to cure back pain slowly.

- **Eyes:-**

Effects-

1. Eye pain.
2. Dry eyes.
3. Lack of sleep.

How our device is going to help-

By stimulating the nerve of eyes our device relaxes the muscles of eyes, so the pain will be cured. And by stress relief it also helps to sleep, & prevent dry eyes.

6. Brief description of the accompanying drawing

FIGURE1: Here the figure shows different points on the foot where different types of nerves are connected.

FIGURE2: Here the figure shows the points of main body parts like brain, heart, lungs, shoulders, stomach, pancreas, kidney, intestine, anus, testes.

FIGURE3: Here the figure shows the sole of the shoe, where the circuit will be implemented.

FIGURE4: Important pressure points of human body of the left foot are pointed where the vibrators will be placed.

FIGURE5: On left foot 36 points are there which shows the nerve points.

FIGURE6: It is the shoe which have some patent features.

7, Claims

1. We want to claim the concept of acupressure using vibrational devices inside the sole of the shoe.

2. We want to claim the customized circuit design of the system

3. We want to claim the use of customized design and idea of the Android for controlling the sole.

4. We want to claim the customized design and idea of the sole which can be placed inside any shoe/ shoes.

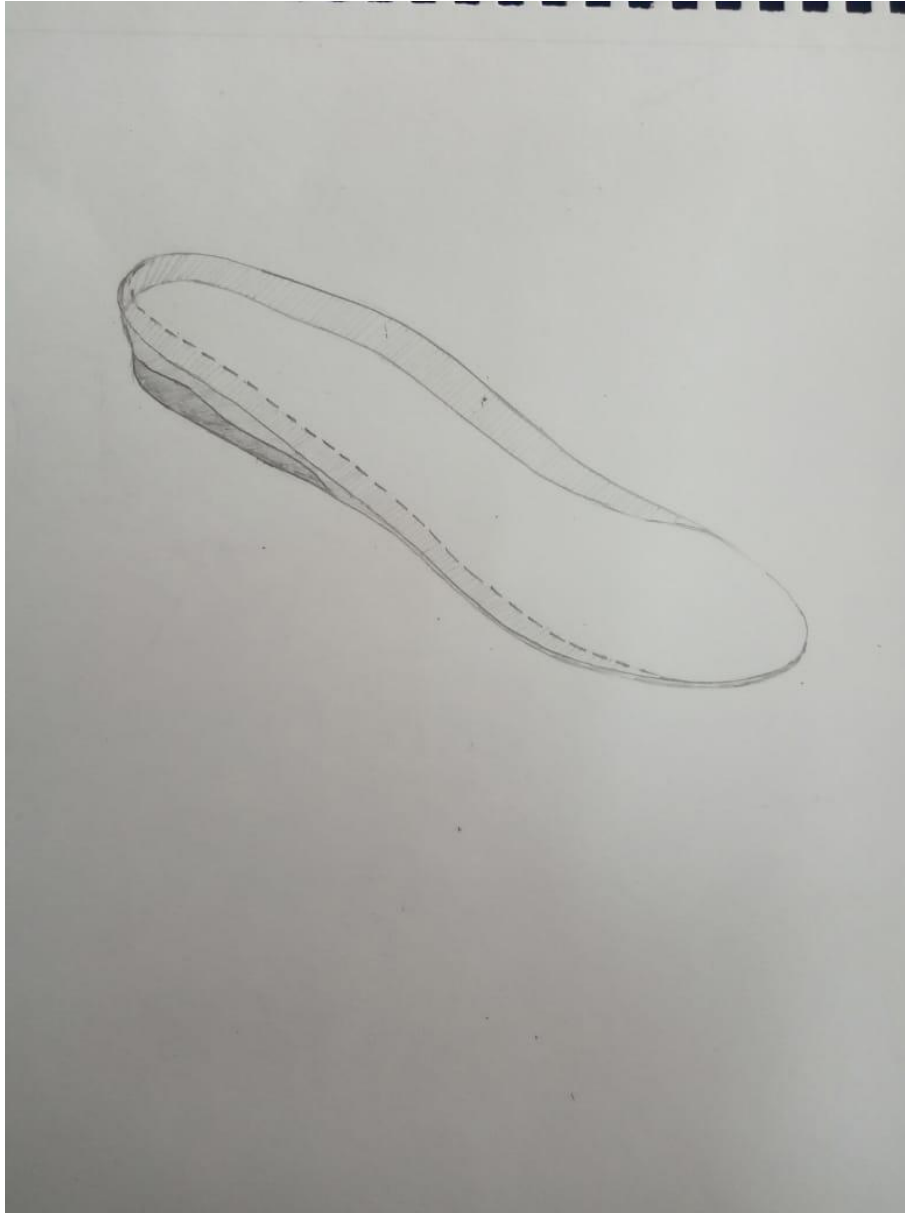
5. We want to claim the overall output of this output/device.

8. Abstract:-

This device is designed with a programmed Arduino circuit and a battery, some vibrator motors placed in specific places to stimulate nerves. This is a waterproof device, it is easy to recharge. This device can be controlled by an application via Bluetooth. There are many default vibration patterns there in that application. By vibrating this device stimulates specific nerves of different organs and improve the rate of blood flow there, relax muscles too. This device also helps to get relief from body pain, knee joint pains, sinus headache by giving a proper massage to the nerves. This device will also give relief from any kind of problems or stress in a person. Continuous vibration is not good for body, so this has a specific time limit for every vibration patterns.

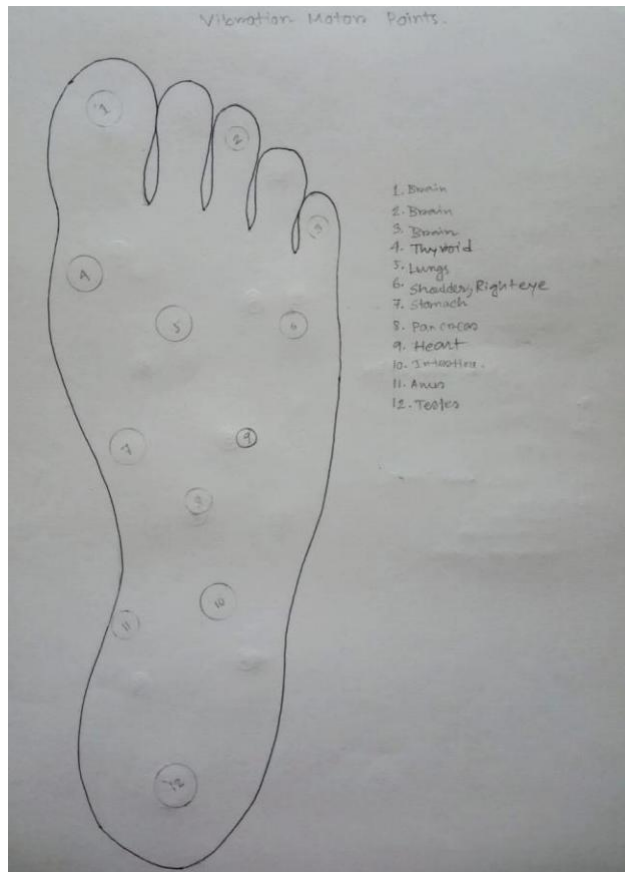
CAREFREE SOLE

Figure 1: The sole where the circuit will be implemented and the vibrator will be placed on the pressure point...



CAREFREE SOLE

Figure 2: Important pressure points of human body on RIGHT FOOT are pointed where the vibrator will be placed...



CAREFREE SOLE

Figure 3: on RIGHT FOOT 36 points which define points of the nerves....



CAREFREE SOLE

Figure 4: important pressure points of human body of the LEFT FOOT are pointed where the vibrators will be placed...

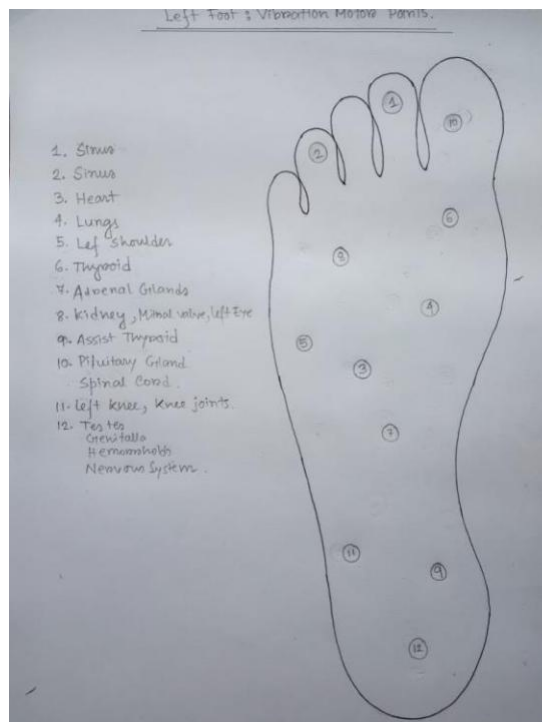
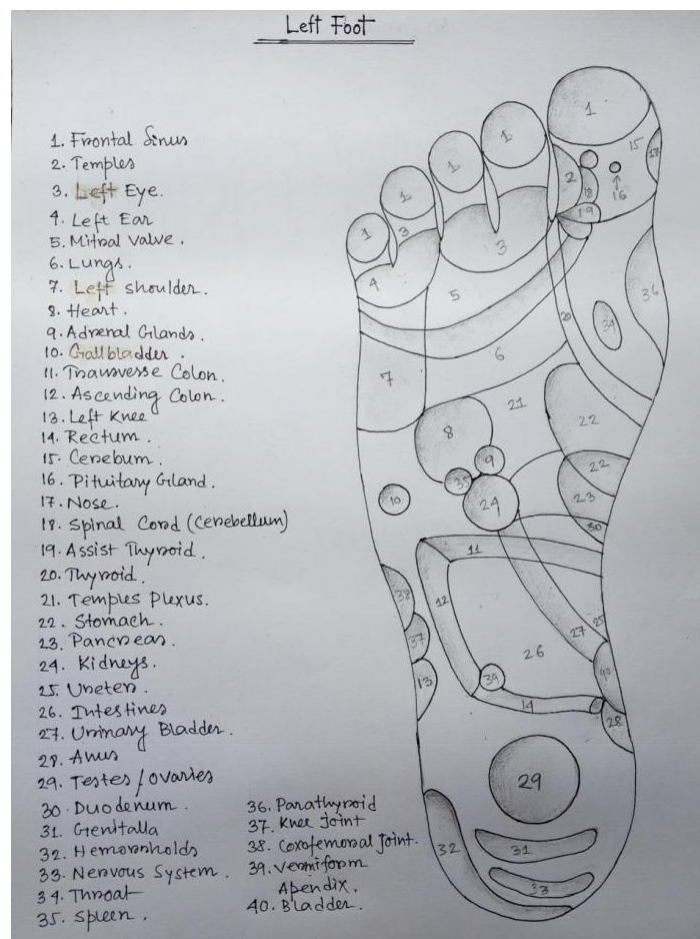


Figure 5: on LEFT FOOT 36 point which define points of nerves....



CAREFREE SOLE

Figure 6: proto type with some of the patented feature...

