A vibrating insole with Bluetooth wireless components, vibrate motors, and built in rechargeable battery all integrated in the insole. Slip on insoles that vibrate the feet and are remotely activated via Bluetooth wireless cell phone application. The vibrate motors oscillate and uses vibration to massage the feet. A remote control application from a cell phone uses Bluetooth wireless technology to power on the vibrating motors of the insoles. Vibrate motors get electricity from rechargeable battery that is inside the insoles. Bluetooth wireless activates the vibrate motors and insoles continues vibrating to massage and relax the feet while wearing shoes. Vibrating insole can be used with any shoe allowing user with Bluetooth wireless cell phone to remote control the massaging motion of the vibrating insoles to massage the feet anywhere on the go. Vibrating insole can be slipped into any shoe allow users to remote activate via Bluetooth wireless or wireless radio frequency that powers on the vibrating motors to massages the feet while walking. Portable cordless shoe insole that vibrates and massage the feet inside the shoe.
Figure 3

90 Vibrating Insole Massage Feet
VIBRATING INSOLE WITH BLUETOOTH WIRELESS, RECHARGEABLE BATTERY, AND VIBRATE MOTORS INTEGRATED

FIELD OF THE INVENTION

[0001] The invention relates generally to insoles that slip into shoes, in more particularly, describes insoles with a Bluetooth wireless controller, vibrating motors, and rechargeable battery all integrated and remotely activated by a smartphone.

BACKGROUND OF THE INVENTION

[0002] Lots of people work on their feet and stand all day at their job. Standing and walking around at work will cause tiredness and fatigue on their feet. Ordinary shoe insoles only soften and cushion the bottom of the shoes, but they don’t massage the feet muscles.

[0003] Clearly there is a need to massage the feet at work during break or on the job. The ability to massage the feet without taking off your shoes and socks allows an individual to find relief at work. Insoles that can vibrate and massage the feet while inside the shoes would get rid of aching muscles, pain, fatigue, and pressure. Insoles that can vibrate and massage the feet will be convenient and inconspicuous at work.

[0004] Further, such a needed device would be easy to manufacture, use, and maintain allowing massaging of the feet not currently possible with insoles. The present invention fulfills these needs and provides further related advantages.

SUMMARY OF THE INVENTION

[0005] The invention provides insoles with a Bluetooth controller, vibrating motors, and rechargeable battery integrated into a shoe insole that is remotely activated by a smartphone. The Bluetooth vibrating insole is the first of its kind to use a smartphone to operate the vibrating motors inside the insole to massage the feet.

[0006] The present invention has certain advantages over gel cushion insoles. First the vibrating insoles have vibrating motors, a rechargeable battery, and Bluetooth wireless components all integrated inside the insole. The vibrating insoles are soft, lightweight, and comfortable to wear. Second the vibrating insoles have multi layers that sandwiches all the electrical components, battery, vibrating motors, Bluetooth devices and seals them like a gasket protecting the electronic devices from water and moisture. The vibrating insoles have a wireless features no other shoe insole have which allows the users to remotely stimulate their feet via Bluetooth wireless activation. The vibrating motors oscillate, and produce deep sonic wave to massage the feet. The vibrating wireless insoles is portable and convenient enough to massages the feet in the comfort of your shoes while at work either, walking, standing, sitting or anywhere that you want a feet massage. The present embodiment allows insoles to vibrate continuously to stimulate the feet using vibration and oscillating motion to relax the feet muscles.

[0007] The present invention can be used by any individual because it is portable, easily worn, comfortable to wear, convenient to turn on and be use anywhere. The user of the device does not have to worry about turning off the vibrating motors because the device has an auto shut off timer. The present device the vibrating insoles massage the feet inside the shoe never before possible with an insole. Other features and advantages of the present invention will become apparent from the following detailed description and accompanying drawings, show the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The accompanying drawings illustrate the invention in such drawings:

[0009] FIG. 1 is a top view perspective illustration of the invention, illustrating a pair of insoles with Bluetooth wireless controller, vibrating motors, and rechargeable battery all integrated in a insole for any shoe and can be activated by smartphone application. The shoe insole foot massager is cordless and battery operated with a wireless remote control.

[0010] FIG. 2 is a side view perspective of the invention, illustrating components for the vibrating insole which consist of Bluetooth wireless controller, vibrating motors, and rechargeable battery device all sandwich together between a bottom layer insole and top layer insole and remotely activated by smart phone application. The top layer and bottom layer produce a water tight seal gasket protecting all the electronic components. The dual layer insole acts like a shock absorber protecting all the electronic components from the user’s weight.

[0011] FIG. 3 is an exploded perspective view of the invention, illustrating components for the vibrating insoles which consists of Bluetooth wireless component, rechargeable battery, case housing device, vibrating motors, ac power cord charger, cell phone, and remote control.

[0012] FIG. 4 is a perspective view of the Bluetooth vibrating insole inside a shoe and how the user can use a smartphone to activate the vibrating foot massager.

[0013] FIG. 5 is a view of how the inductive charging method is use to recharge the battery inside the Bluetooth vibrating insole.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0014] FIG. 1 shows a pair of insoles for shoes with a vibrate motors 40 embedded inside the insole which is powered by a rechargeable battery 20. The Bluetooth wireless circuit board 10 is housed in a case with the battery 20. The wireless antenna 11 and wireless receiver 12 is part of the casing that holds the Bluetooth circuit board and battery 10.

[0015] The battery 20 sends direct current electricity through the electrical wires 50 to each vibrating motors 40. The vibrating motors produce oscillating motion that shake the feet to relax the feet muscles.

[0016] To operate the vibrating insoles a remote control application 80 from a cell phone uses Bluetooth wireless signal 81 sent to the wireless antenna 11 and receiver 12 that activates the electricity flow to the vibrate motors. An alternative way to turn on the vibrate motor without a smart phone is using an RF (radio frequency) key chain remote 82. The vibrating insoles are convenient to use because it can be remotely controlled on off by Bluetooth cell phone 80. The Bluetooth components 10 has an auto shut off timer after several minutes of massaging the feet it shuts of automatically.

[0017] FIG. 2 is a side split perspective of the vibrating insoles 40 containing the bottom layer which holds the Bluetooth wireless device 10 and rechargeable battery 20 and is seated into the bottom layer 60. The top layer insole 70 is a soft cushion material when placed on top of the bottom layer 60 seals the electronic components to form a water tight seal.
The bottom layer 60 is made from a gel material that protects and seals the Bluetooth wireless controller 10 and battery 20. The remote application from the smart phone can detect the Bluetooth insole and can remote start the vibrating motors 40 to massage the feet. The top layer 70 can be peeled off from the bottom layer to allow user to reach in and manually push the on off button if no smart phone with application is around. Peeling off the top layer 70 allows user to take out Bluetooth electronic component device 10 and recharge the battery 20. [0018] FIG. 3 is an exploded view perspective of what the case 35 that holds the Bluetooth wireless circuit board 10 and the rechargeable battery 20. The case 35 uses inductive wireless charging and has a power prong hole to plug the ac/dc power charger. The power adapter 90 charges the battery allowing the direct current to travel through the electrical wires 50 to the vibrating motors 40. The housing component of the case 35 is inductive meaning you can recharge the battery using wireless inductive charging method for convenience. An alternative way is to pull out the Bluetooth case 35 and plug in the power cord directly for charging.

Insole of claim 1, that uses Bluetooth wireless or type of wireless radio frequency controller to remote start the vibrating motors inside the portable shoe insoles that massages the feet while walking; ability to vibrate and massage feet muscles inside the shoes using electricity from battery to power on the vibrate motors, vibrating motion stimulate provide deep tissue massage to every part of feet, toes, arch, heel, ankle; relieves feet of aching muscles, soreness, and fatigue.

2. Insole of claim 1 with remote activation via Bluetooth wireless that uses an application from a cell phone to remote activate the vibrating motors allow the user to turn on vibrating motors via wireless radio frequency; also has an alternative push button on the housing of the battery when push in button activate vibrating motors; a water proof gasket housing that holds the Bluetooth circuit board and rechargeable battery electrical source for the vibrate motors; the vibrating insole device has an auto shut off feature timer that shuts off and can be manually turned off by user.

3. Insole of claim 1 with electrical wire that transfer electricity to the vibrate motors from the rechargeable battery in the case housing component of the circuit board; conductive wire connecting the case battery housing device to all vibrate motors in the insoles.

4. Insole of claim 1 with a bottom layer where Bluetooth device and rechargeable battery case components are placed into the bottom layer of the heal and arch of the insole; rechargeable battery case can be removed to replace bad battery; an ac/dc power plug can be plug into the case to recharge the battery; the housing case for the battery is also a conductive and can be used for wireless inductive charging by placing the insole or shoes on top of a wireless base charger; removing the Bluetooth case component and placing it on a wireless charging base.

5. Insole of claim 1 with a top layer soft cushion that is replaceable and an waterproof where the top layer acts like a gasket that seals the bottom layer from any water; top layer can be peeled off to remove the Bluetooth controller component that holds the Bluetooth circuits and rechargeable battery.

6. Insole of claim 1 integrate vibrate motors, rechargeable battery, Bluetooth wireless, and wireless charging all inside an insole to slip into a shoe; allows user to remote activate vibration to give feet muscles a massage while wearing shoes, standing, walking; creates therapeutic massage benefit, convenient to use, comfortable to wear, simple to maintain and easy to operate.

7. Insole of claim 1, portable, cordless, electric vibrating motor with battery inside get insole and uses wireless radio frequency from a remote controller to power on electric vibrating motors.

8. Insole of claim 1 that uses multiple layers of cushion and gel that forms a gasket seal between the layers that protects all electrical devices when worn inside a shoe.

9. Insole of claim 1, portable vibrating massage insole that can be slip into any shoe allows user to get a massage while walking or standing at the same time.

* * * * *