

Title (en)  
WIRELESS ELECTROSTIMULATING APPLICATOR, METHOD FOR GENERATING ELECTROSTIMULATING PULSES AND USE OF THE SYSTEM FOR A PAIN THERAPY

Title (de)  
DRAHTLOSES ELEKTROSTIMULATIONSGERÄT, VERFAHREN ZUM ERZEUGEN VON ELEKTROSTIMULIERENDEN PULSEN UND VERWENDUNG DES SYSTEMS FÜR EINE SCHMERZTHERAPIE

Title (fr)  
APPLICATEUR D'ÉLECTROSTIMULATION SANS FIL, PROCÉDÉ DE GÉNÉRATION D'IMPULSIONS D'ÉLECTROSTIMULATION ET UTILISATION DU SYSTÈME POUR UNE THÉRAPIE CONTRE LA DOULEUR

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Application  
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Abstract (en)  
[origin: WO2021071373A1] The first object of the invention is a wireless electrostimulating applicator, wherein the electrostimulating applicator includes an actuating module containing a module power supply system, a communication and control system and actuating system, the system further includes an application which controls the operation of the electrostimulating applicator, characterized in that the power supply system of the electrostimulating applicator contains a lithium-polymer battery (1) connected to the battery wireless charging system (2) which is connected to the voltage stabilizer of 3,3V (4), converter increasing the voltage to +95V (5) and a battery voltage measurement system (3), wherein the battery voltage measurement system (3) is connected to a microcontroller (6), the communication and control system includes a control microcontroller (6) which communicates via BLE interface (8) with the software on a PC or mobile device and the actuating system includes a set of controlled electric current sources (7), generating stimulation currents of adjustable intensity from which the electric current is directed to the electrodes (10), with which the skin resistance control system (9) coupled with the microcontroller is connected (6), wherein the stimulation current, generated by the actuating system, is in the form of pulses with an amplitude from -6mA to 6mA and repetition frequency from 1Hz to 200Hz. Moreover, the invention also relates to a method of generating electrostimulation pulses, a transdermal electrostimulation system, and the use of the pain therapy system.

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Citation (search report)  
• [Y] WO 2013142785 A1 20130926 - UNDERWOOD WENDELL MARTIN [US]  
• [Y] WO 2015071850 A1 20150521 - UNIWERSYTET MEDYCZNY IM. PIASTÓW ŚLĄSKICH WE WROCŁAWIU [PL]  
• [X] US 2018125689 A1 20180510 - PEREZ RAUL E [US], et al  
• See references of WO 2021071373A1

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