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Inventors	Leon M. Silverstone
Original Assignee	Synaptic Corporation
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Method for inducing electroanesthesia using high frequency, high intensity transcutaneous electrical nerve stimulation

US 6351674 B2

ABSTRACT

A non-invasive method of treating, controlling or preventing medical, psychiatric or neurological disorders is provided using transcutaneous electrical stimulation. A plurality of stimulation frequency parameters are used ranging from a relatively high frequency, for example about 40,000 Hertz, to a relatively low frequency, for example about 250 Hertz. The entirety of frequency parameters may be administered at each of a plurality of stimulation intensity levels. In particular, stimulating may begin at a first highest frequency parameter and a first lowest intensity parameter with the stimulation frequency parameter incrementally decreasing to the lowest frequency parameter. Then the frequency parameter is returned to the highest frequency parameter, and the intensity parameter increased to a next higher intensity parameter, and again stimulating through the plurality of frequency parameters from the highest frequency to the lowest frequency. The method described herein is useful in treating, controlling and/or preventing various disease states and disorders, and has been found to be particularly effective in administering nerve block electroanesthesia.

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Inventors	Leon M. Silverstone
Original Assignee	Silverstone Leon M
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	Patent Citations (33), Non-Patent Citations (1), Referenced by (1), Classifications (6), Legal Events (2)
External Links:	USPTO , USPTO Assignment , Espacenet

Non-invasive method and apparatus for the treatment of viral infections

US 7983747 B2
 ABSTRACT

A device for treating viral infections. Embodiments of the device can include a housing, a power supply component disposed inside the housing, an electrical signal source, and a disposable head for connecting with the housing in a detachable manner. The disposable head can comprise an application surface for application to the skin or mucosa of a patient, and at least two embedded electrodes adapted for respectively connecting with the at least two output terminals of the electrical signal source. The device may include at least four embedded electrodes. The electrical signal source generates electrical pulses, and these electrical pulses are applied to the patient through the embedded electrodes of the disposable head.

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Inventors	Leon M. Silverstone
Original Assignee	Synaptic Corporation
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External Links:	USPTO , USPTO Assignment , Espacenet

Method and apparatus for treating chronic pain syndromes, tremor, dementia and related disorders and for inducing electroanesthesia using high frequency, high intensity transcutaneous electrical nerve stimulation

US 6161044 A
ABSTRACT

Provided herein is a non-invasive method of treating, controlling or preventing medical, psychiatric or neurological disorders, using transcutaneous electrical stimulation. The method employs a plurality of stimulation frequency parameters, ranging from a relatively high frequency, for example about 40,000 Hertz, to a relatively low frequency, for example about 250 Hertz, the entire plurality of frequency parameters being administered at each of a plurality of stimulation intensity levels. In particular, the method involves stimulating at a first highest frequency parameter and a first lowest intensity parameter, incrementally decreasing the stimulation frequency parameter a lowest frequency parameter, increasing the frequency parameter to the highest frequency parameter and increasing the intensity parameter to a next highest intensity parameter, and again stimulating through the plurality of frequency parameters from the highest frequency to the lowest frequency. The method described herein is useful in treating, controlling and/or preventing various disease states and disorders, including without limitation, tremor disorders, such as essential tremor and Parkinson's disease, dementia disorders, such as Alzheimer's disease and painful degenerative disorders, such as reflex sympathetic dystrophy and fibromyalgia.

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Inventors	Michael W. O'Neill , Leon M. Silverstone , Michael E. Halleck
Original Assignee	Sion Technology, Inc.
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	Patent Citations (10), Referenced by (85), Classifications (19), Legal Events (12)
External Links:	USPTO , USPTO Assignment , Espacenet

Dental anesthesia apparatus

US 4924880 A

ABSTRACT

Apparatus is disclosed for achieving improved dental anesthesia utilizing electronic stimulation applied through electrodes positioned inside the mouth of a patient. Each electrode includes an insulating base of foam material with an adhesive at one side thereof to retain one end of an electrical lead in contact with an electrically conductive elastomer, which elastomer has a surrounding outer layer of adhesive for maintaining the elastomer positioned inside the mouth of a patient. A transcutaneous nerve stimulator is utilized to generate the stimulating output signal, which signal may be a pulsed DC signal, an AC signal, a pulsed DC signal followed by an AC signal, or various other combinations of such signals, and the pulsed DC signal is offset to a fixed quiescent DC level above a zero voltage reference when applied to the patient. A threshold intensity for application of the stimulating output signal may be selected at the main unit of the apparatus by the operator, and increases in intensity of the stimulating output signal may be controlled remotely from the main unit by the patient, with the selected intensity being displayed at the main unit both digitally and by a bar graph.

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Inventors	Leon M. Silverstone
Original Assignee	Leon M. Silverstone
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External Links: USPTO , USPTO Assignment , Espacenet	

Method and apparatus for treatment of viral diseases

US 8532758 B2

ABSTRACT

An apparatus and method for treating viral infections delivers electrical stimulation to the skin or mucosa of a patient. The electrical stimulation is applied as a series of electrical pulses having different electrical characteristics. The apparatus may include a housing having at least two electrodes supplied with both AC and DC voltage, and powered by a battery. The electrodes are designed so as to maximize contact with the patient.

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Inventors	Leon M. Silverstone
Original Assignee	Silverstone Leon M
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External Links: USPTO , USPTO Assignment , Espacenet	

Method and apparatus for treatment of viral diseases

US 7272440 B2

ABSTRACT

An apparatus and method for treating viral infections delivers electrical stimulation to the skin or mucosa of a patient. The electrical stimulation is applied as a series of electrical pulses having different electrical characteristics. The apparatus may include a housing having at least two electrodes supplied with both AC and DC voltage, and powered by a battery. The electrodes are designed so as to maximize contact with the patient.

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Inventors	Leon M. Silverstone , Fred M. Slingo
Original Assignee	Leon M. Silverstone , Fred M. Slingo
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	Patent Citations (18), Non-Patent Citations (3), Referenced by (1), Classifications (13), Legal Events (8)
External Links: USPTO , USPTO Assignment , Espacenet	

Methods and apparatus for molecular induction technology to create changes in the energetic characteristics of various materials, and their use in the production of molecular changes in other media

US 6585896 B2

ABSTRACT

A process and an apparatus are provided for altering the biological, chemical, and molecular activity of primary materials, such as metals and ceramics, in order to confer atypical energetic effects on the so-altered primary materials. Such primary material is bombarded by varying frequencies of energy from an array of sources, causing vibrational excitation of the primary material at the molecular level which changes the molecular nature of the so-treated material. The primary material is then effective in altering the biological, chemical, and molecular activity of secondary materials brought in close proximity thereto. The invention sets forth a process and apparatus for producing water-purifying tools and a process and apparatus for purifying water.