Number of documents: 14

RU2013110572	Method for monitoring an individual's motor load and insole for the implementation thereof HEALBE HILBI HIRUBI OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI OOO KHILBI
RU2013110574	Method for determining an individual's weight and insole for the implementation thereof HEALBE HIRUBI OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI OOO KHILBI
RU2522400	Method for determining a person's sleeping phase which is favourable for waking up HEALBE HILBI HIRUBI OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI OOO KHILBI
RU2577707	Method of determining amount of water supplied with food in human body OBSHCHESTVO S OGRANICHENNOJ OTVETSTVENNOSTJU KHILBI
WO2015133921	Device for measuring electrical parameters of portion of human body OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI
WO2015133920	Method for determining amount of energy entering human body with food OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI
WO2015133923	Sensor for measuring impedance of portion of human body OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI
WO2015133922	Device for registering human pulse wave signals and respiratory cycle signals OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI
RU2013110573	Method for feet vibro-massage and insole for implementing it OOO KHILBI
RU2012158200	Apparatus for detecting human pulse wave and breathing cycle signals OOO KHILBI
RU2012155820	Device for measuring electric parameters of individual's body area OOO KHILBI
RU2521254	Method for measuring amount of energy consumed by individual with food OOO KHILBI
RU2519955	Sensor for measuring impedance of human body section OOO KHILBI
RU2012106461	Method for determining glucose concentration in human blood HEALBE HIRUBI KHILBI OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU ALGORITM OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU KHILBI

Method for monitoring an individual's motor load and insole for the implementation thereof

RU2013110572

- **Patent Assignee**
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  GERASIMOV OLEG MIKHAILOVICH
  SOKOLOV EVGENY LVOVICH

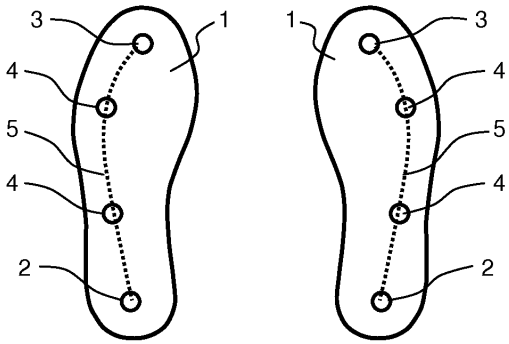
- **International Patent Classification**
  A43B-003/00 A43B-005/00 A43B-007/36 A43B-013/14 A43B-017/00 A61B-005/00 A61B-005/103 A61B-005/11 A61B-005/22 A63B-069/00 G01G-003/13 G01G-003/14 G01G-019/44 G01G-019/52 G06F-019/00
- **US Patent Classification**
  PCLO=036043000
- **CPC Code**
  A43B-003/00/05; A43B-005/00; A61B-005/103/6; A61B-005/11/18; A61B-005/6807; G01G-003/14 G01G-003/14; G01G-019/44; G01G-019/52 G01G-019/52;

- **Publication Information**
  RU2013110572 A 2014-09-10 [RU2013110572]
- **Priority Details**
  2013RU-0110572 2013-03-05
  2014WO-RU00137 2014-03-04

- **Fampat family**

RU2013110572	A	2014-09-10	[RU2013110572]
WO2014137244	A1	2014-09-12	[WO2014137244]
RU2531689	C1	2014-10-27	[RU2531689]
WO2014137244	A9	2014-12-24	[WO2014137244]
KR20150128764	A	2015-11-18	[KR20150128764]
US2015351484	A1	2015-12-10	[US20150351484]
CN105229432	A	2016-01-06	[CN105229432]
EP2966423	A1	2016-01-13	[EP2966423]
IN7984/DELNP/2015	A	2016-04-29	[IN2015DN07984]
JP2016513997	A	2016-05-19	[JP2016513997]

- **Abstract:**
  (EP2966423)
  A method for measurements of parameters characterizing human motor activity provides registration of signals generated by load sensors (2, 3, 4) mounted in shoe insoles (1), with each insole (1) having at least two load sensors (2, 3), one mounted near the heel, and the other near the toe of the foot. The specific type of motor activity is determined based on temporal correlation of load sensor signals from both insoles (1) and values thereof. Person's weight, including additionally carried weight, is determined by summing up signal values from said load sensors (2, 3, 4), with the specific type of motor activity considered; thereafter, person's motor stress is determined based on specified type of motor activity and person's weight, including additionally carried weight. The method enables a real-time monitoring of motor stress of a person at different types of motor activity, e.g. running, walking at different pace, standing, with person's weight, including additionally carried weight, taken into consideration.



Method for determining an individual's weight and insole for the implementation thereof

RU2013110574

- **Patent Assignee**
  HEALBE HIRUBI OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI OOO KHILBI
- **Inventor**
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  MISJUCHENKO IGOR LEONIDOVICH
  GERASIMOV OLEG MIKHAILOVICH

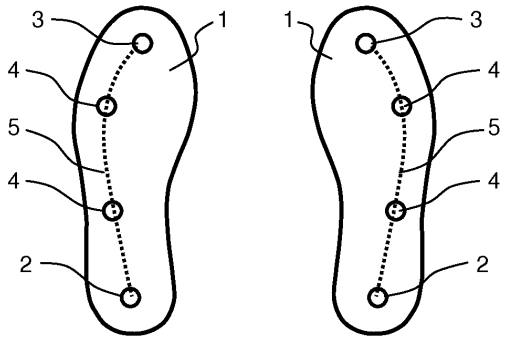
- **International Patent Classification**
  A43B-003/00 A43B-013/14 A43B-017/00 A61B-005/103 A61B-005/11 A61B-005/22 G01G-003/13 G01G-019/44 G01G-019/52 G06F-019/00
- **US Patent Classification**
  PCLO=702175000
- **CPC Code**
  A43B-003/00/05; A43B-017/00; A61B-005/103/6; A61B-005/103/8 A61B-005/103/8; A61B-005/11/23; G01G-019/44 G01G-019/44; G01G-019/52

- **Publication Information**
  RU2013110574 A 2014-09-10 [RU2013110574]
- **Priority Details**
  2013RU-0110574 2013-03-05
  2014WO-RU00138 2014-03-04

- **Fampat family**

RU2013110574	A	2014-09-10	[RU2013110574]
WO2014137245	A1	2014-09-12	[WO2014137245]
RU2531697	C1	2014-10-27	[RU2531697]
KR20150122235	A	2015-10-30	[KR20150122235]
US2015359460	A1	2015-12-17	[US20150359460]
CN105229433	A	2016-01-06	[CN105229433]
EP2966422	A1	2016-01-13	[EP2966422]
JP2016508818	A	2016-03-24	[JP2016508818]

- **Abstract:**
  (EP2966422)
  A method for measuring parameters, such as human weight, together with additionally carried weight, in motion. The method provides registration of signals generated by load sensors disposed in shoe insoles; whereat each insole has at least two load sensors, with one mounted near the heel region and the other near the toe region of foot. The specific type of motor activity is determined based on temporal correlation of the load sensor signals from both insoles and values thereof. The person's weight, including additionally carried weight, is determined by summing up load sensor signals, for a specific type of motor activity. The invention provides for the measurement of person's weight, including additionally carried weight, in real time for different types of motor activity, such as running, walking at different pace, standing.



Method for determining a person's sleeping phase which is favourable for waking up

RU2522400

- **Patent Assignee**
  HEALBE HILBI HIRUBI OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI OOO KHILBI
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  SVIRYAEV YURY VLADIMIROVICH

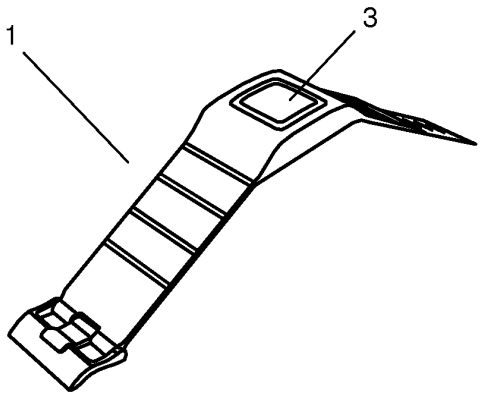
- **International Patent Classification**
  A61B-005/00 A61B-005/02 A61B-005/0205 A61B-005/024 A61B-005/0452 A61B-005/0456 A61B-005/08 A61B-005/103 A61B-005/11 A61B-005/16 A61B-008/02 G04C-003/00 G04G-013/02 G06F-019/00
- **US Patent Classification**
  PCLO=600484000
- **CPC Code**
  A61B-005/0205; A61B-005/024/38; A61B-005/0452; A61B-005/0456; A61B-005/08/16; A61B-005/11; A61B-005/4812; A61B-005/681; A61B-005/7235; G04C-003/00/1; G04G-013/02/3 G04G-013/02/3;

- **Publication Information**
  RU2522400 C1 2014-07-10 [RU2522400]
- **Priority Details**
  2013RU-0116790 2013-04-05
  2014WO-RU00237 2014-04-02

- **Fampat family**

RU2522400	C1	2014-07-10	[RU2522400]
WO2014163537	A1	2014-10-09	[WO2014163537]
KR20150129765	A	2015-11-20	[KR20150129765]
CN105142515	A	2015-12-09	[CN105142515]
US2016007931	A1	2016-01-14	[US20160007931]
EP2982299	A1	2016-02-10	[EP2982299]
IN9404/DELNP/2015	A	2016-02-19	[IN2015DN09404]
JP2016517729	A	2016-06-20	[JP2016517729]

- **Abstract:**
  (EP2982299)
  A pulse wave signal is registered and an occurrence of human limb movements detected during sleep using a pulse wave sensor and an accelerometer. The values of RR intervals and respiratory rate are measured at preset time intervals ” t i based on pulse wave signal. Mean P 1 , minimal P 2 , and maximal P 3 values of RR intervals, the standard deviation of RR intervals P 4 , average respiratory rate P 5 and average number of limb movements P 6 are determined based on the above measured values. Function value F (” t i) is determined thereafter as: F ” ¢ t i - K 1 ¢ P 1 - K 2 ¢ P 2 - K 3 ¢ P 3 + K 4 ¢ P 4 + K 5 ¢ P 5 + K 6 ¢ P 6 , where K 1 - K 6 are weight coefficients characterizing the contribution of the corresponding parameter to function value F (” t i) ; whereat the onset and termination of sleep phase favorable to awakening is determined by increments of function F (” t i).



Method of determining amount of water supplied with food in human body RU2577707

- **Patent Assignee**
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- **Inventor**
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  ELOKHOVSKIJ VLADIMIR JUREVICH
  KOLONITSKIJ DMITRIJ IVANOVICH

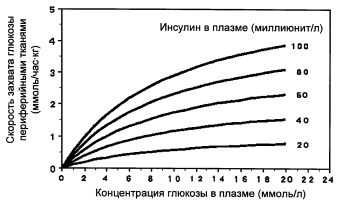
- **International Patent Classification**
  G01N-033/48 G01N-033/487
- **Publication Information**
  RU2577707 C1 2016-03-20 [RU2577707]
- **Priority Details**
  2015RU-0111990 2015-04-02
- **Fampat family**

RU2577707	C1	2016-03-20	[RU2577707]

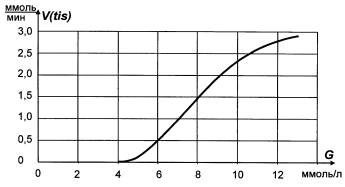
- **Abstract:**
  (RU2577707)
  FIELD: medicine.SUBSTANCE: invention relates to diagnostic medicine, namely to measurement of water balance in human body. For this purpose, the amount of water supplied with food in the human body at the moment of time t, is determined as a value proportional to the total amount of glucose, entered in human blood to the moment of time t, defined as sum of said amount of glucose, entered in human blood for each time interval from the first tto I - t. After meals periodically through time intervals tconcentration of glucose Gis measured in human blood and said time interval tThusdetermining glucose concentration increment Gin blood, increase in amount of blood plasma glucose G(pl), amount of glucose G(tis), supplied in insulin dependent tissue, the amount of glucose G(met), spent on metabolic processes in the body, and the amount of glucose G(tm), spent on metabolic processes in insulin-dependent tissues. Based on the obtained data, the amount of glucose G(), entered in human blood for the given time interval t, according to formula G()=G (pl)+G(tis)+G(met)-G(tm).EFFECT: invention provides the possibility of determining the quantity of water supplied with food in the human body, regardless of its composition and at any period of time taking into account individual characteristics at digestion of food products.12 cl, 2 dwg, 1 ex

1/1

Способ определения количества воды, поступившей с пищей в организм человека



Фиг. 1



Фиг. 2

Device for measuring electrical parameters of portion of human body
WO2015133921

- **Patent Assignee**
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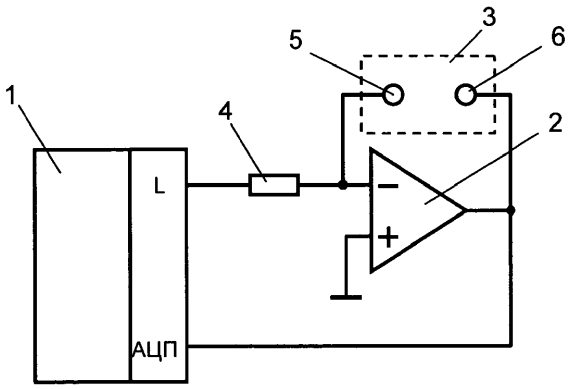
  RUBIN MIKHAIL SEMENOVICH
  SOKOLOV EVGENY LVOVICH

- **International Patent Classification**
  A61B-005/053
- **CPC Code**
  A61B-005/053/1
- **Publication Information**
  WO2015133921 A1 2015-09-11 [WO2015133921]
- **Priority Details**
  2014WO-RU00139 2014-03-04
- **Fampat family**

WO2015133921	A1	2015-09-11	[WO2015133921]

- **Abstract:**
  (WO2015133921)
  The device allows for measuring the impedance of a portion of the body, and for measuring the active resistance and the potential difference between areas of skin. The device includes two electrodes positioned on a human body, an operational amplifier and a microcontroller. The conductive electrodes are connected to a negative feedback circuit of the operational amplifier, a non-inverting input of which is connected to a zero potential, an output is connected to an analogue-to-digital converter of the microcontroller, and an inverting input is connected by means of a resistor to an input-output port of the microcontroller. In a mode for measuring the impedance of a portion of the human body, the microcontroller forms a signal of a given frequency at the output of the input-output port; in a mode for measuring the active resistance of human skin, the microcontroller forms a DC voltage signal at the output of the input-output port; and in a mode for measuring the potential difference between areas of skin on the human body, the microcontroller provides for the disabling of the input-output port. The device is characterized in having a simple design and in being easy to control when measuring various electrical parameters of a portion of the human body.



Фиг. 1

Method for determining amount of energy entering human body with food
WO2015133920

- **Patent Assignee**
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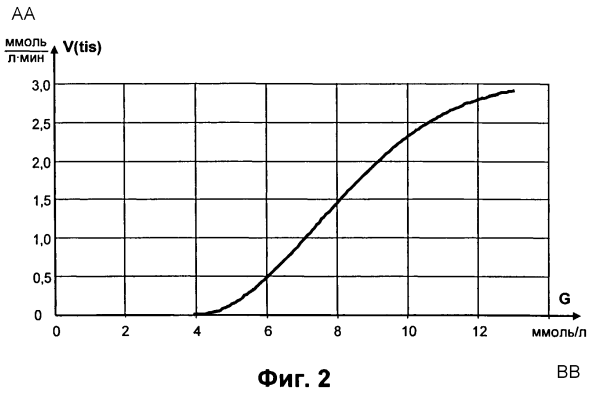
  ELOKHOVSKIY VLADIMIR YUR EVICH
  KOLONITSKY DMITRY IVANOVICH

- **International Patent Classification**
  A61B-005/00 G01F-019/00 G01N-033/50
- **CPC Code**
  A61B-005/145/32; A61B-005/4866 G01N-033/66;
- **Publication Information**
  WO2015133920 A1 2015-09-11 [WO2015133920]
- **Priority Details**
  2014WO-RU00136 2014-03-04
- **Fampat family**
  WO2015133920 A1 2015-09-11 [WO2015133920]

- **Abstract:**
  (WO2015133920)
  A person's blood glucose concentration (Gi) is measured periodically after beginning to eat, at a time interval (ti), and the following factors are determined over a designated time interval (ti): the increase in the amount of glucose in the blood plasma (G(pl) i), the amount of glucose entering insulin-dependent tissues (G(tis) i), the amount of glucose expended on metabolic processes in the body (G(met) i), and the amount of glucose expended on metabolic processes in insulin-dependent tissues (G(tm) i). Then, the amount of glucose which entered the body (G() i) over a given time interval (ti) is determined using G() i =((G(met) i -G(tm) i)+G(tis) i +G(pl) i)/K 4, where K 4 is a coefficient which takes into account the amount of glucose which enters the blood, with the exception of the glucose detained in the liver, which is then used for determining the amount of energy which enters the body with food over the given time interval (ti). The method allows for taking measurements while eating and for determining the amount of energy entering the body over small intervals of time, tracking how much energy is received over time while taking into consideration the individual characteristics of a person's body in accordance with the absorption of specific food products. The invention can be used in creating technical means for monitoring a person's functional state, and specifically for monitoring a person's weight.



Фиг. 2

AA: mmol/L*min
BB: mm

Sensor for measuring impedance of portion of human body
WO2015133923

- **Patent Assignee**
  OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI
- **Inventor**
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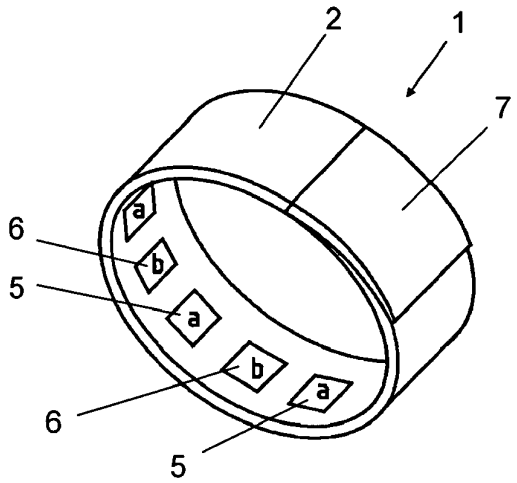
  SOKOLOV EVGENY LVOVICH

- **International Patent Classification**
  A61B-005/053
- **CPC Code**
  A61B-005/053; A61B-005/6824; A61B-2562/043
- **Publication Information**
  WO2015133923 A1 2015-09-11 [WO2015133923]
- **Priority Details**
  2014WO-RU00141 2014-03-04

- **Fampat family**

WO2015133923	A1	2015-09-11	[WO2015133923]

- **Abstract:**
  (WO2015133923)
  A sensor (1) includes a first electrode, a second electrode, and an electrode holder (2); both electrodes are sectional, wherein the sections (5) of the first electrode and the sections (6) of the second electrode are alternatingly arranged in a single row on an inner surface of the holder, which holder can be secured around a person's wrist in such a way that the sections of both electrodes are adjacent to the wrist. Each section of both electrodes has a contact surface of at least 1 cm2. The electrode holder (2) can be, for instance, in the form of a flexible band which is secured to the wrist using a fastener (7), in the form of a bracelet having pivotally interconnected sections, and in the form of cuffs which stretch around the wrist. The design of the sensor provides for heightened sensor sensitivity by increasing the reliability of the contact between the sensor electrodes and a person's skin, including during motion of the hand, and also by increasing the area of the sensors and optimizing the path through which current flows between sensor sections via a portion of the person's body.



Фиг. 1

Device for registering human pulse wave signals and respiratory cycle signals
WO2015133922

- **Patent Assignee**
  OBSHCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU HILBI
- **Inventor**
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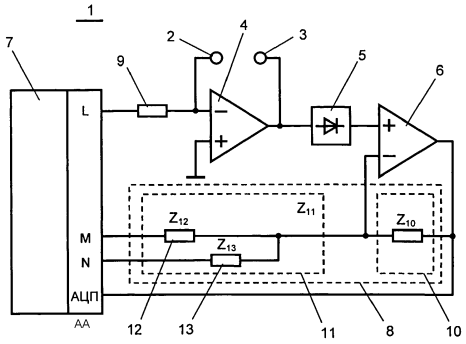
  RUBIN MIKHAIL SEMENOVICH
  SOKOLOV EVGENY LVOVICH

- **International Patent Classification**
  A61B-005/0205 A61B-005/053
- **CPC Code**
  A61B-005/0205; A61B-005/053; A61B-005/08
- **Publication Information**
  WO2015133922 A1 2015-09-11 [WO2015133922]
- **Priority Details**
  2014WO-RU00140 2014-03-04
- **Fampat family**
  WO2015133922 A1 2015-09-11 [WO2015133922]

- **Abstract:**
  (WO2015133922)
  A device includes two electrodes (2, 3) positioned on a human body, two operational amplifiers (4, 6), an amplitude detector (5), a microcontroller (7) and a switchable frequency-dependent voltage divider (8) consisting of an upper shoulder (10) and of a lower shoulder (11). The microcontroller forms a high-frequency carrier signal at the output of a first input-output port (L), which signal is then fed to an inverting input of the first operational amplifier (4), in the negative feedback circuit of which the electrodes (2, 3) are positioned. The signal from the output of the first operational amplifier, after isolating the envelope in the amplitude detector, is fed to the input of the second operational amplifier (6), and is then fed from the output thereof to the input of an analogue-to-digital converter of the microcontroller. The second operational amplifier (4) and the switchable frequency-dependent voltage divider (8) form an active bandpass filter having an upper cutoff frequency determined substantially by the parameters of the upper shoulder of the switchable frequency-dependent voltage divider, and having a lower cutoff frequency determined substantially by the parameters of the lower shoulder of the switchable frequency-dependent voltage divider, wherein said lower shoulder of the switchable frequency -dependent voltage divider is formed by two circuits which are able to be connected to a zero potential via the microcontroller by means of an input-output port (M) or an input-output port (N). The frequency characteristics of such a filter, when connecting the port (M) to a zero potential, allow for registering a signal in a frequency band corresponding to the frequency band of a pulse wave signal; the frequency characteristics of the filter when connecting the port (N) to a zero potential allow for registering a signal in a frequency band corresponding to the frequency band of a respiratory cycle signal.



Фиг. 1

AA ADC (analogue-to-digital converter)

Method for feet vibro-massage and insole for implementing it
RU2013110573

- **Patent Assignee**
  OOO KHILBI
- **Inventor**
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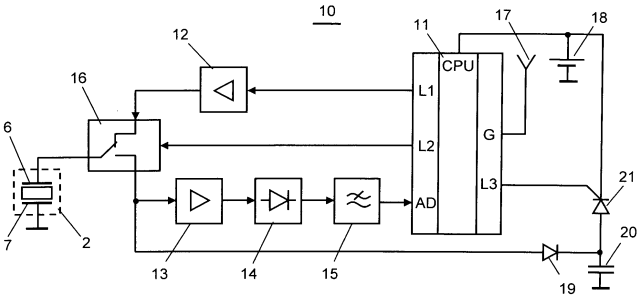
  MISJUCHENKO IGOR LEONIDOVICH

- **International Patent Classification**
  A61H-001/00 A61H-023/00
- **Publication Information**
  RU2013110573 A 2014-09-10 [RU2013110573]
- **Priority Details**
  2013RU-0110573 2013-03-05

- **Fampat family**

RU2013110573	A	2014-09-10	[RU2013110573]
RU2533021	C2	2014-11-20	[RU2533021]

- **Abstract:**
  (RU2533021)
  FIELD: medicine.SUBSTANCE: feet vibro-massage is performed with the use of a piezoelectric transducer mounted in an insole put on feet. The piezoelectric transducer is alternatively activated in a vibration mode by supplying an alternating electrical excitation signal and in an electrical signal generation mode actuated by a foot pressing on the piezoelectric transducer. The piezoelectric transducer is switched from the electrical signal generation mode to the vibration mode, provided the above electrical signal generated by the foot pressure on the piezoelectric transducer is less than the specified value. The insole is designed for implementing the method; it comprises at least one piezoelectric transducer configured to operate in the mechanic vibration generation mode to give the feet vibro-massage, when supplying the alternating electrical excitation signal on the piezoelectric transducer, and in the electrical signal generation mode actuated by the foot pressure on the piezoelectric transducer.EFFECT: inventions enable providing the automatic switching on and off of the vibrators depending on varying the individual's physical activity type, simplifying facilities designed for implementing the method.8 cl, 4 dwg



Фиг. 3

Apparatus for detecting human pulse wave and breathing cycle signals RU2012158200

- **Patent Assignee**
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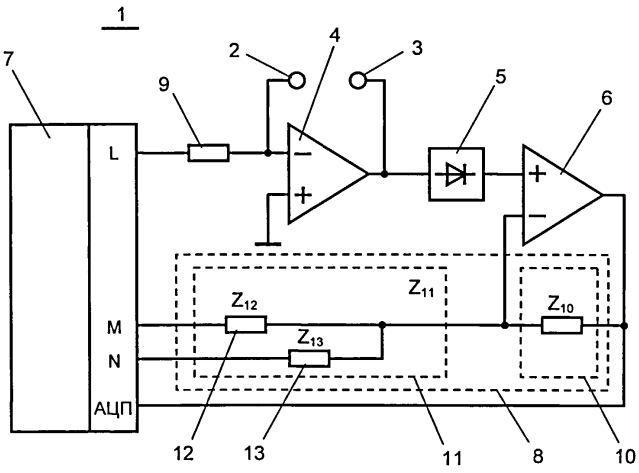
  SOKOLOV EVGENIJ L VOVICH

- **International Patent Classification**
  A61B-005/0205 A61B-005/0295 A61B-005/053
- **Publication Information**
  RU2012158200 A 2014-06-27 [RU2012158200]
- **Priority Details**
  2012RU-0158200 2012-12-24

- **Fampat family**

RU2012158200	A	2014-06-27	[RU2012158200]
RU2523133	C1	2014-07-20	[RU2523133]

- **Abstract:**
  (RU2523133)
  FIELD: physics.SUBSTANCE: apparatus (1) for detecting pulse wave and breathing cycle signals of a person has two current-conducting electrodes (2, 3) to be attached to the human body, a first (4) and a second (6) operational amplifier, an amplitude detector (5), a switched frequency-dependent voltage divider (8) and a microcontroller (7). The electrodes (2, 3) are connected in the negative feedback circuit of the first operational amplifier (4). The microcontroller (7) is configured to generate a high-frequency carrier signal at the output of a first input/output port (L). The upper (10) and lower (11) arms of the voltage divider (8) are formed by two circuits, having a common end at the mid-point of the voltage divider and two separate ends. The second operational amplifier (6) and the voltage divider (8) form an active band-pass filter with upper and lower cut-off frequencies defined by parameters of the upper (10) and lower (11) arms of the voltage divider (8), respectively. The frequency response of such a filter when the second input/output port (M) of the microcontroller (7) is connected to zero potential enables signal detection in a frequency band which corresponds to the frequency band the pulse wave signal, and enables signal detection in the frequency band corresponding to the frequency band of the breathing cycle signal when the third input/output port (N) of the microcontroller (7) is connected to zero potential.EFFECT: detecting pulse wave and breathing cycle signals of a person based on measuring the impedance of a body area using a simple non-adjustable electrical circuit.14 cl, 12 dwg



Фиг. 1

Device for measuring electric parameters of individual's body area
RU2012155820

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- **Priority Details**
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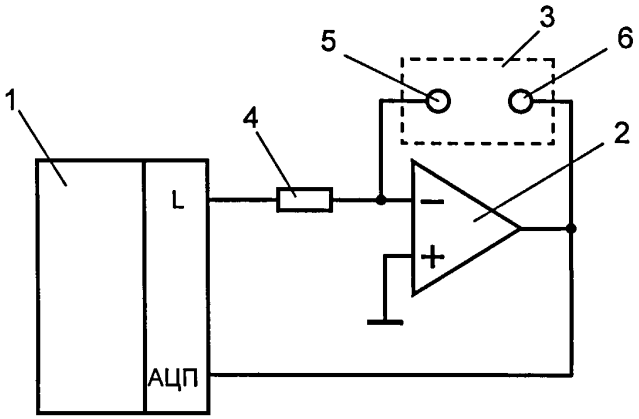
- **Fampat family**

RU2012155820	A	2014-06-27	[RU2012155820]
RU2522949	C1	2014-07-20	[RU2522949]

- **Abstract:**
  (RU2522949)
  FIELD: medicine.SUBSTANCE: device for measuring electric parameters of an individual's body area (3) comprises two conducting electrodes (5, 6) placed on the individual's body, an operating amplifier (2) and a microcontroller (1). The microcontroller (1) is configured to operate in the mode of the individual's body area impedance measurement, in the mode of the individual's skin resistance measurement and in the mode of the individual's body area potential measurement. The electrodes (5, 6) are connected to a negative feedback circuit of the operating amplifier (2), a non-inverting terminal of which is connected to the zero potential, and an output is connected to an input of an analogue-to-digital converter of the microcontroller (1), while an inverting terminal is connected through a resistor (4) to an in/out port (L) of the microcontroller (1). In the mode of the individual's body area impedance measurement, the microcontroller (1) provides forming a signal of a pre-set frequency whereat the impedance is measured, on the output of the in/out port (L). In the mode of the individual's skin resistance measurement, the microcontroller (1) provides forming a DC voltage signal on the output of the in/out port (L). In the mode of the individual's body area potential measurement, the microcontroller (1) provides switching off the in/out port (L).EFFECT: more accurate measurement of the electric parameters of the individual's body areas by switching the microcontroller modes without change of the electrodes and their body position.9 cl, 12 dwg



Фиг. 1

Method for measuring amount of energy consumed by individual with food
RU2521254

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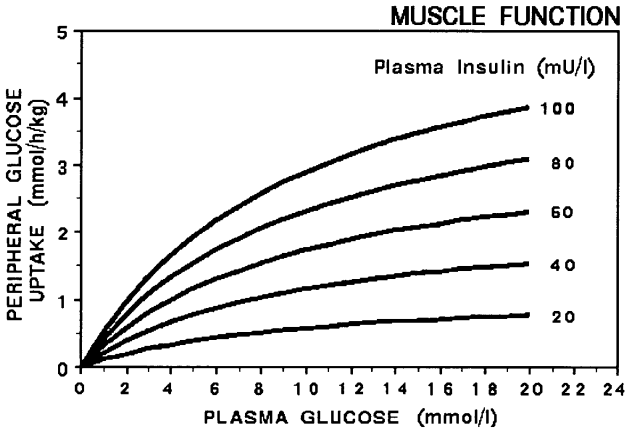
- **Priority Details**
  2012RU-0155819 2012-12-17

- **Fampat family**

RU2521254	C1	2014-06-27	[RU2521254]

- **Abstract:**
  (RU2521254)
  FIELD: medicine.SUBSTANCE: after beginning a meal, a human blood glucose concentration Gis intermittently measured over a period of time ?t, and a blood plasma glucose gain ?G(pl)i, an amount of glucose received by insulin-dependent tissues ?G(tis), an amount of glucose consumed by the metabolic processes ?G(met), an amount of glucose consumed by the metabolic processes in the insulin-dependent tissues ?G(tm)are determined over the above period of time ?t. That is followed by measuring an amount of glucose ?G(?)consumed by an individual over the above period of time ?t, as ?G(?)=((?G(met)-?G(tm))+?G(tis)+?G(pl))/K, wherein Kis a coefficient taking into account the amount of blood glucose, except for liver glucose that provides a basis to calculate the amount of energy consumed by the individual with food over the above period of time ?t.EFFECT: method enables measuring during meals and assessing the amount of energy consumed by the individual over small periods of time, controlling the energy consumption through time taking into account the individual characteristics of specific digestion.11 cl, 2 ex, 4 dwg



Фиг. 1

Sensor for measuring impedance of human body section
RU2519955

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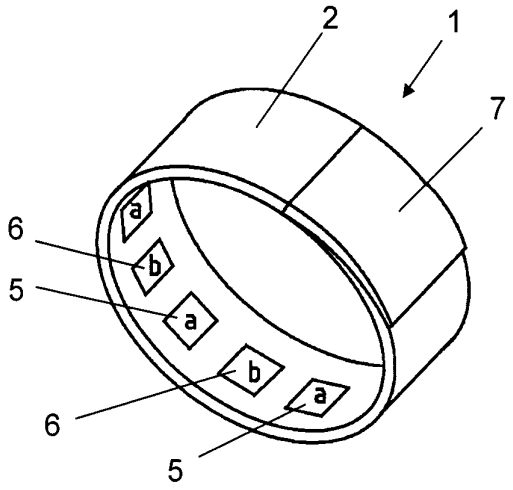
  2012RU-0155821 2012-12-17
- **Fampat family**

RU2519955	C1	2014-06-20	[RU2519955]

- **Abstract:**
  (RU2519955)
  FIELD: measurement equipment.SUBSTANCE: sensor 1 for measuring impedance of a human body section includes the first and the second electrodes and electrode holder 2. Electrodes consist of sections. Sections 5 and 6 of the first and the second electrodes are located alternately in one row on the inner surface of the holder. The holder is intended to be fixed around human wrists so that sections of both electrodes can touch the wrist. Each electrode has at least three sections. Contact area of each section is at least 1 cm. The electrode holder is made in the form of a flexible strip or a bracelet having sections that are hinged between themselves, which is fixed on the wrist by means of clasp 7, or in the form of a cuff covering the wrist. A signal converter of the sensor is also arranged in the electrode holder.EFFECT: use of the invention will allow improving stability of a measurement signal and sensitivity of a sensor owing to improving contact reliability of sensors with human skin and optimising a current passage way between sections of sensors.7 cl, 7 dwg



Фиг. 1

Method for determining glucose concentration in human blood
RU2012106461

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- **International Patent Classification**
  A61B A61B-005/05 A61B-005/053 A61B-005/145 G01N-027/02 G06F-019/00
- **US Patent Classification**
  PCLO=600347000
- **CPC Code**
  A61B-005/053 A61B-005/053/1; A61B-005/053/5; A61B-005/053/7; A61B-005/053; A61B-005/145/28; A61B-005/145/32 A61B-005/145/32; A61B-005/145; A61B-005/1477; G01N-027/02 G01N-027/02;

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  2012RU-0106461 2012-02-24
  2013WO-RU00144 2013-02-22

- **Fampat family**

RU2012106461	A	2013-08-27	[RU2012106461]
WO2013125987	A1	2013-08-29	[WO2013125987]
RU2518134	C2	2014-06-10	[RU2518134]
KR20140126402	A	2014-10-30	[KR20140126402]
EP2818108	A1	2014-12-31	[EP2818108]
CN104302229	A	2015-01-21	[CN104302229]
US2015073242	A1	2015-03-12	[US20150073242]
JP2015512672	A	2015-04-30	[JP2015512672]
EP2818108	A4	2015-11-18	[EP2818108]
HK1204537	A1	2015-11-27	[HK1204537]

- **Abstract:**

(EP2818108)
The method involves measurement of impedance for human body region at high frequency (Z HF) and low frequency (Z LF) by means of electrodes fastened to a human body. An estimate for the volume of fluid contained in the tissues of a human body region is derived based on Z HF value. An estimate for the volume of extracellular fluid contained in the tissues of a human body region is derived based on Z LF value. The increment of metabolic component of the volume of extracellular fluid (with the said metabolic component being connected with synthesis and utilization of energy carriers in the human body) is determined by calculating the increment of the volume of all fluid as compared to the value obtained from the previous measurement, calculating the increment of the volume of extracellular fluid as compared to the value obtained from the previous measurement, and subsequent calculation of difference between the said increment of the volume of all fluid and increment of the volume of extracellular fluid. A value of increment of glucose concentration is derived via normalization of the said increment of metabolic component of extracellular fluid volume. Glucose concentration in human blood G(t k) is determined by summing up the said value of glucose

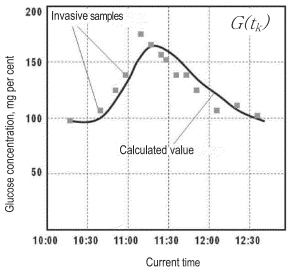

Fig. 1A

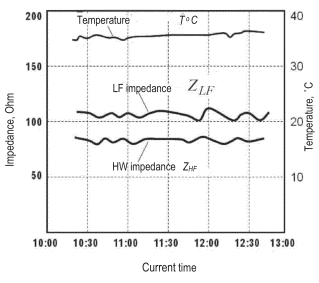

Fig. 1B

concentration increment and value of glucose concentration in blood derived at the previous stage of measurements. The method allows determining glucose concentration in human blood non-invasively and with high accuracy.