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HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

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(54) **Title:** ASSEMBLY FOR TREATING THE HUMAN BODY

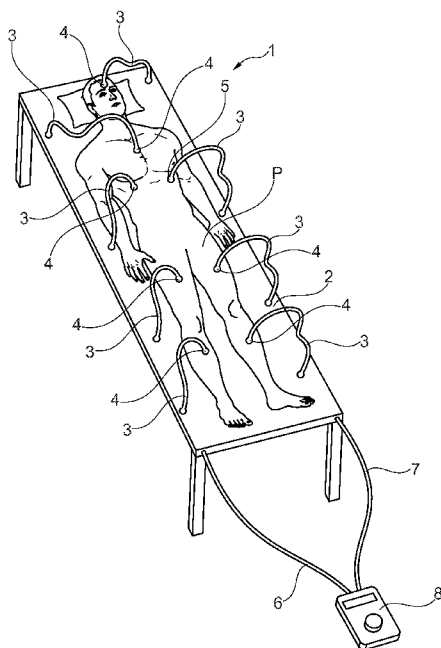


Fig. 1

(57) **Abstract:** The invention relates to an assembly for treating the human body, which assembly comprises : - at least one magnet which is configured to be arranged on a site on the human body to be treated; - a number of vibrating devices, which are configured to be arranged at diverse sites on the human body in order to stimulate the diverse sites with vibrations; and - a control which is coupled to at least the number of vibrating devices, wherein the control controls the number of vibrating devices independently of each other.



Assembly for treating the human body

The invention relates to an assembly for treating the human body.

5 Diverse devices and assemblies for treating the human body are known in the prior art. CN 106038165 for instance shows a treatment table with six robot arms, which are each provided with a massage gun. The robot arms can be controlled independently of each other and so provide
10 different parts of the human body with vibrations simultaneously. With such an assembly a person can be given a massage in automated manner.

 The drawback of robot arms is that they can easily injure a person when a robot arm performs a wrong movement.
15 Such a device can therefore not be used in practice for treating the human body, since the usual safety requirements cannot be met.

 The inventor has discovered that medical complaints such as pain, reduced strength, stamina and mobility may
20 result from skin defects. Skin defects are for instance understood to mean scars, burns, birthmarks and tattoos. The brain's perception of the skin changes as a result of the defects, and a miscommunication occurs between the brain and the affected area. This miscommunication causes the brain to
25 send out the wrong signals, which may result in pain, reduced strength, stamina and mobility in the same or in a different area.

 Such problems can be treated by stimulating the skin defect area causing the complaints, this resolving the
30 miscommunication. This treatment consists of a combination of magnetic field at the site where communication is disrupted or interrupted, and a mechanically pulsating stimulation of the skin is applied to a related site on the human body.

For a good treatment it is necessary for a large number of related sites to be stimulated. Each site must be stimulated with a vibration for several seconds. This can make a treatment lengthy and labour-intensive.

5 It is now an object of the invention to reduce or even obviate the above stated drawbacks.

This object is achieved with an assembly according to the preamble, which assembly comprises:

- at least one magnet which is configured to be
10 arranged on a site on the human body to be treated;
- a number of vibrating devices, which are configured to be arranged at diverse sites on the human body in order to stimulate the diverse sites with vibrations; and
- a control which is coupled to at least the number
15 of vibrating devices, wherein the control controls the number of vibrating devices independently of each other according to a preprogrammed programme.

With the assembly according to the invention it is possible to arrange the at least one magnet at the site where
20 communication is disrupted or interrupted and to arrange the vibrating device at the diverse related sites requiring stimulation.

Subsequently, the control can be activated and the vibrating devices can be controlled according to a
25 preprogrammed programme, whereby the treatment is further performed automatically. The amplitude can here preferably also be adjusted with the programme.

With the assembly it is possible to perform a programme of thousands of sequences, which can for instance
30 treat Long Covid or improve mobility in hand and foot joints. Such long programmes cannot be performed manually.

In an embodiment of the assembly according to the invention the at least one magnet is an electromagnet, which

electromagnet is coupled to the control for controlling the electromagnet.

5 Giving the magnet an electromagnet form and coupling it to the control makes it possible during the treatment to adjust the magnetic field strength to the site where communication is disrupted or interrupted. When two or more electromagnets are provided in the assembly, it is possible to treat more sites with disrupted or interrupted communication. These sites can here be treated one by one by switching the
10 electromagnets on in succession and then controlling the vibrating devices to stimulate the corresponding sites.

In a preferred embodiment of the assembly according to the invention each magnet and each vibrating device is accommodated in a separate housing, wherein positioning means
15 are arranged on each housing for the purpose of positioning the housing against the human body.

By accommodating each magnet and each vibrating device in a separate housing it is simple to arrange each element at precisely the correct position on the human body.

20 In a further embodiment of the assembly according to the invention the positioning means comprise a fastening strap, such as an elastic strap or a double-sided hook and loop fastening tape. The housing with a magnet or vibrating device therein can hereby be positioned reliably on the human
25 body, and a movement of the human body will not cause the housings to shift relative to the body.

In yet another embodiment of the assembly according to the invention the positioning means comprise an elongate adjustable element, such as a gooseneck or a bendable metal
30 wire, wherein one end of the elongate adjustable element is arranged on the housing in question.

With such an elongate adjustable element the housing with a magnet or vibrating device therein can be positioned

very accurately on a site on the human body, and moreover at any desired angle.

Yet another preferred embodiment of the assembly according to the invention further comprises a frame, particularly a treatment table, on which a person can lie
5 down, and wherein the other end of each elongate adjustable element is arranged on the frame.

A person can lie on a treatment table comfortably and without moving for a longer period of time. This makes it
10 simple to position the at least one magnet and the number of vibrating devices properly by means of the elongate adjustable elements and subsequently start the treatment, wherein the control controls at least the number of vibrating devices.

These and other features of the invention are
15 further elucidated with reference to the accompanying drawings.

Figure 1 shows a schematic perspective view of a first embodiment of an assembly according to the invention.

Figure 2 shows a schematic perspective view of a
20 second embodiment of an assembly according to the invention.

Figure 1 shows a first embodiment of an assembly 1 according to the invention. The assembly 1 has a treatment table 2 on which a person P lies. Elongate adjustable elements in the form of goosenecks 3 are arranged on the longitudinal
25 edges of treatment table 2. Arranged on the free outer end of each gooseneck 3 is a housing 4, 5, in which a vibrating device or a magnet is arranged. In the figure the housing 5 is placed with the magnet on the chest of the patient P, and the remaining housings 4 with vibrating device are placed at
30 various other sites on the body of the patient P.

The vibrating devices and magnets are connected to a control 8 via cables which run via the goosenecks 3, the treatment table 2 and the wiring looms 6, 7. The control 8 can

then control the vibrating devices and magnet according to a programme corresponding with the complaints of the patient P.

Figure 2 shows a second embodiment of an assembly 20 according to the invention. This assembly 20 is portable in that the vibrating devices 21 and magnet 22 are arranged in separate housings, which can be attached to the body of a patient P by means of a fastening strap 23.

Each vibrating device 21 and magnet 22 is connected via cables 24 to a control 25, so that the control 25 can control the vibrating devices 21 and magnet 22 in accordance with a suitable programme.

Claims

1. Assembly for treating the human body, which assembly comprises:

- 5 - at least one magnet which is configured to be arranged on a site on the human body to be treated;
- a number of vibrating devices, which are configured to be arranged at diverse sites on the human body in order to stimulate the diverse sites with vibrations; and
- 10 - a control which is coupled to at least the number of vibrating devices, wherein the control controls the number of vibrating devices independently of each other according to a preprogrammed programme.

2. Assembly according to claim 1, wherein the at least one magnet is an electromagnet, which electromagnet is coupled to the control for controlling the electromagnet.

3. Assembly according to claim 1 or 2, wherein each magnet and each vibrating device is accommodated in a separate housing, wherein positioning means are arranged on each housing for the purpose of positioning the housing against the human body.

4. Assembly according to claim 3, wherein the positioning means comprise a fastening strap, such as an elastic strap or a double-sided hook and loop fastening tape.

25 5. Assembly according to claim 3, wherein the positioning means comprise an elongate adjustable element, such as a gooseneck or a bendable metal wire, wherein one end of the elongate adjustable element is arranged on the housing in question.

30 6. Assembly according to claim 5, further comprising a frame, particularly a treatment table, on which a person can lie down, and wherein the other end of each elongate adjustable element is arranged on the frame.

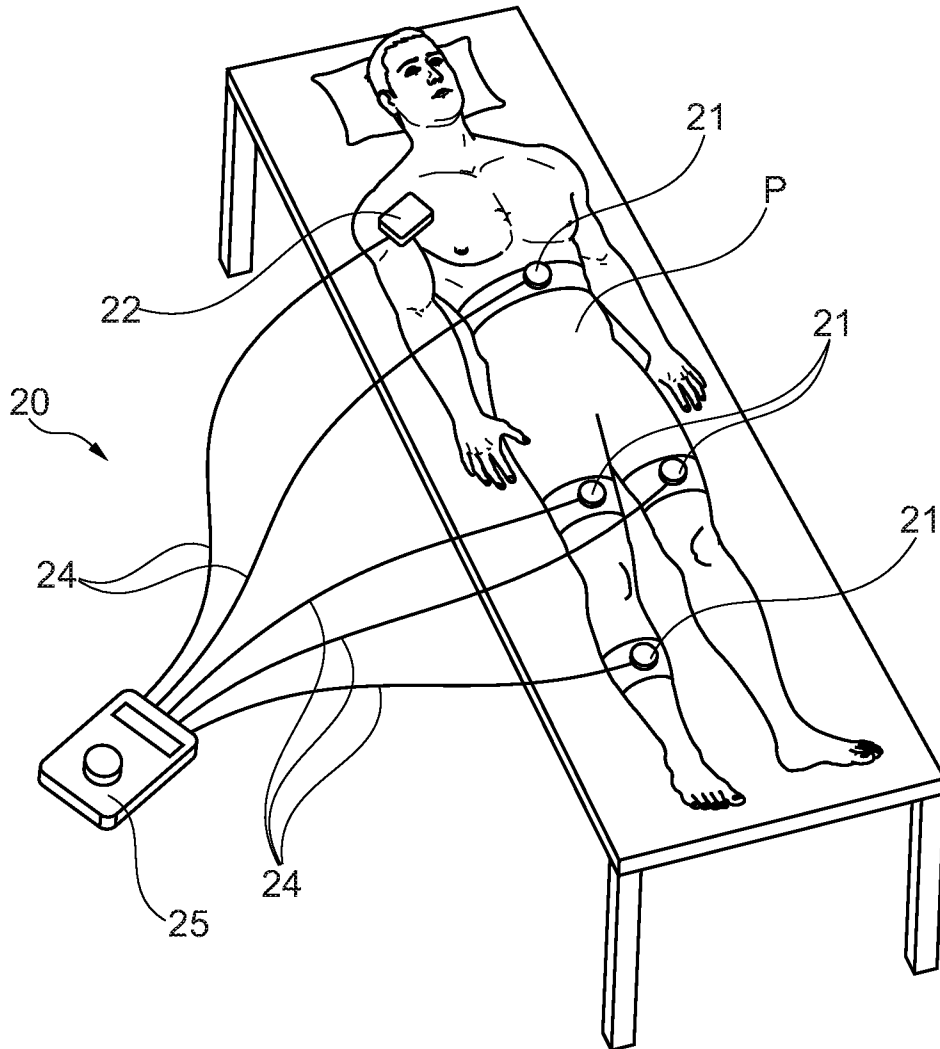


Fig. 2

INTERNATIONAL SEARCH REPORT

International application No PCT/NL2024/050287

A. CLASSIFICATION OF SUBJECT MATTER
 INV. A61N2/00 A61H23/02
 ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
A61H A61N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2015/130036 A1 (UNIV DONGGUK GYEONGJU CAMPUS IND ACAD COOP FOUND [KR]) 3 September 2015 (2015-09-03)	1 - 4
Y	paragraphs [0146] - [0168]; figures 1-12 -----	5, 6
X	US 2014/066925 A1 (HOWARD RHEYNARD [US]) 6 March 2014 (2014-03-06)	1, 2
X	US 2019/151604 A1 (HARPER RONALD M [US] ET AL) 23 May 2019 (2019-05-23)	1, 2
Y	CN 106 821 718 A (XU JIAGUO) 13 June 2017 (2017-06-13)	5, 6
	paragraphs [0015] - [0023]; figures 1-2 -----	

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Teissier, Sara
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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