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(54) Benævnelse: **BEHANDLINGSAPPARAT MED ET SYSTEM TIL STYRING AF STRØMNINGEN AF ET GASFORMIGT MEDIUM**

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Description

The present invention relates to the technical field of the topical or systemic, curative or preventive treatment of the body for therapeutic, esthetic and cosmetic applications in man and in beast, and more particularly the treatment of injured tissues, with or without breaking, with or without loss of substance.

In order to treat injured tissues or wounds, the prior art has proposed the application of dressings, and this presents the problems of contact between the dressing and the wound and the risk of microbial growth.

In order to avoid these problems, the prior art has proposed various treatment apparatuses aimed at exposing the injured tissues to a gaseous medium. For example, patent EP 2 309 954 describes a treatment apparatus comprising a cover able to be placed over or around an individual’s body part that is to be treated. This cover is equipped with an inlet for a gaseous medium and with an outlet for removing the gaseous medium present inside the cover.

Patent application US 2005/191372 describes a device for treatment with gaseous nitric oxide comprising a chamber, a source of nitric oxide, a control valve and a pump. The chamber can be of any shape and made of any material, and comprises an inlet and an outlet for the gas. As a preference, this inlet and this outlet are positioned some distance apart so as to increase the time spent by the gas passing through the chamber. A control system provides control over the flow of gas at the valve and at the pump. According to the embodiment depicted in **fig. 2**, a nozzle is fixed at the inlet in order to direct the nitric oxide onto the zone that is to be treated. According to the embodiment depicted in **fig. 4**, the chamber further comprises an agitator to create turbulent conditions inside said chamber. The agitator thus refreshes the nitric oxide in the region of the zone that is to be treated.

Patent FR 3 052 662 describes a system for generating a gaseous mixture for a wound treatment closure comprising a gaseous-mixture generator, a treatment enclosure, a device for adding an additional gas and/or an aerosol, and a control unit. The treatment enclosure is designed to be placed over and/or around a part of the body of a patient so as to generate a treatment zone. The treatment enclosure comprises an inlet and an outlet for the gaseous mixture. The control unit provides control of the gaseous-mixture generator and defines a flowrate, a temperature and a composition for the gaseous mixture that is to be delivered.

Patent application EP 2 260 825 describes a device for generating a gaseous mixture, made up of gas and of liquid, for treating a patient. According to a first embodiment, that device comprises a means for covering the zone that is to be treated with an inlet and an outlet for the gaseous mixture, an adhesive part, sources of gas and of liquid, and a control means controlling in particular the pressure and the temperature. The gaseous-mixture inlet may comprise a valve to give a nonreturn effect.

Patent US 4 224 941 describes a device for administering a gaseous mixture to the skin of a patient, comprising an adhesive compress, a cylindrical component connected to the adhesive compress via one of its sides and connected by the other of its sides to a bag, an inlet and an outlet for the gaseous mixture being situated on said bag. The inlet is connected to a gaseous-mixture source via a connector.

It is apparent from the documents of the prior art that an apparatus that exposes injured tissues to a gaseous medium is associated with a device providing control of the atmosphere prevailing inside the cover. In particular, the temperature needs to be controlled because the temperature window for the treatment is generally narrow. Furthermore, the tissues must not be exposed to high temperatures for lengthy periods. In

addition, in the therapeutic domain, it is important to control the oxygen concentration in order to limit, or even eliminate, the growth of aerobic or anaerobic bacteria.

The hygrometry of the injected gaseous medium is also controlled in order to optimize the regeneration of the injured tissues. In general, parameters such as the temperature, the hygrometry and the composition of the gaseous medium are controlled in such a way as to optimize the treatment to be performed on the injured tissues.

In practice, despite the control of the various parameters of the gaseous medium injected into the cover, it has been found that the changes to the injured tissues do not correspond to the change expected for the treatment applied. Aside from such a distortion in the expected results, the patient often feels pain or discomfort while the treatment is being carried out.

The applicant, to their credit, has discovered that the deficiencies obtained in the treatment originate not from the parameters adopted but rather are associated with the conditions under which the gaseous medium inside the treatment cover is applied. Specifically, it has been found that the atmosphere in contact with the injured tissues and prevailing inside the known treatment covers exhibits parameters the values of which do not correspond to the adopted or setpoint values.

The present invention seeks to overcome the disadvantages of the prior art by proposing a treatment apparatus according to Claim 1 aimed at exposing injured tissues to a gaseous medium inside a cover, and which is designed so that the conditions of application of the gaseous medium allow the treatment performed to be optimized.

In order to achieve such an objective, the treatment apparatus according to the invention comprises a cover able to be placed over or around part of the body of an individual such that the cover has a positioning zone for positioning said individual’s

body part, the cover being equipped with an inlet for a gaseous medium and with an outlet for removing the gaseous medium present in the cover. According to the invention, this apparatus comprises a system for controlling the flow of the gaseous medium in order to direct the gaseous medium entering the cover via the inlet away from the positioning zone and to homogenize the gaseous medium present inside the cover.

The treatment apparatus according to the invention prevents the gaseous medium from arriving directly onto the patient's skin and particularly onto the injured tissues, and this prevents the wound from drying out and allows it to heal, because the drying-out of the wound prevents such healing.

The apparatus according to the invention homogenizes the gaseous medium inside the cover before it comes into contact with the injured tissues. The flow of the gaseous medium inside the cover, according to a turbulent flow regimen, allows the atmosphere present inside the cover to be homogenized. This homogenization allows the parameters of the atmosphere in contact with the injured tissues to possess values corresponding to the adopted or setpoint values, this homogenization being obtained whatever the variations in these parameters.

Use of these conditions of application of the gaseous medium within the treatment cover means that the patient does not feel any pain or discomfort while the treatment is being performed.

According to one feature of the invention, the flow control system comprises a deflector modifying the direction of flow of the gaseous medium inside the cover, away from the positioning zone and creating a turbulent flow regimen.

According to a first embodiment, the deflector has an orientation surface for orienting the gaseous medium toward the internal surface of the cover and onto which the gaseous medium entering the cover via the inlet is directed.

According to a second embodiment, the deflector comprises a pipe with an elbow mounted on the inlet. Advantageously, the pipe with an elbow is mounted with the ability to rotate about its axis in order to regulate the orientation of the flow.

According to a preferred embodiment variant, the cover of the treatment apparatus according to the invention is equipped with a viewing device for viewing the positioning zone for said individual's body part, and the flow control system directs the gaseous medium toward the viewing device in order to defog same.

Specifically, the hygrometry level of the gaseous medium and the difference in temperature between the inside and the outside of the enclosure create conditions that encourage fogging, notably on the viewing device.

Channeling the gaseous medium toward the viewing system makes it possible to avoid or eliminate fogging so that therapeutic monitoring can be conducted effectively throughout the length of the treatment, whatever the temperatures inside and outside the cover.

It should be noted that the treatment apparatus according to the invention may comprise, by way of viewing device, a window created in the cover or an optical system with or without image capture.

In addition, the treatment apparatus according to the invention may further comprise a combination of at least one and/or the other of the following additional features:

- the inlet and the outlet are positioned side by side in divergent directions;
- the inlet and the outlet are created on a body that is removable with respect to the cover.

The treatment apparatus according to the invention aims to expose the injured tissues to a gaseous medium. In addition, the treatment apparatus according to the invention is designed to

incorporate a liquid into the treatment cover to facilitate the washing of the wound and/or to eliminate substrates exuded by said wound. This method is known as instillation. In another application, the liquid injected into the treatment cover may be a medicinal product which is brought into direct contact with the wound in a therapeutic context.

For this purpose, the inlet of the treatment cover is designed to be connected to a source supplying liquid medium and the treatment cover is provided with a discharge outlet for removing the liquid medium, this outlet corresponding to the outlet for the gaseous medium or to an additional outlet created in the treatment cover.

The treatment apparatus according to the invention aims to expose the injured tissues to a gaseous medium but also to a liquid medium.

Another object, which does not form part of the invention, is to propose a method for treating injured tissues using a treatment apparatus comprising a cover placed over or around a part of the body of an individual and equipped with an inlet for a gaseous medium and with an outlet for removing the gaseous medium present in the cover.

The method consists in controlling the flow of the gaseous medium in order to direct the gaseous medium away from the zone in which said individual’s body part is positioned, and to homogenize the gaseous medium present inside the cover.

Advantageously, the method consists in creating turbulence in the flow of the gaseous medium inside the cover.

As a preference, the method consists in directing the gaseous medium toward a viewing device for viewing the individual’s body part, so as to defog the viewing device.

According to a complementary method, which does not form part of the invention, a liquid medium is injected via the inlet of the cover and the liquid medium is removed from the cover via the gaseous-medium discharge outlet or via an additional outlet specific to the liquid medium.

According to one implementation, the method consists in orienting a pipe with an elbow mounted on the inlet of the cover so as to inject the liquid medium into the zone in which said individual's body part is positioned.

Various other features will become apparent from the description given hereinbelow with reference to the attached drawings which, by way of nonlimiting examples, depict embodiments of the subject matter of the invention in accordance with the claims.

Figure 1 is a perspective view of one embodiment of a treatment apparatus according to the invention.

Figure 2 is an exploded perspective view of the embodiment of the treatment apparatus illustrated in **fig. 1.**

Figure 3 is a side elevation in cross section of the treatment apparatus according to the invention, designed for treating part of an individual's leg.

Figure 4 is a view from above of the lower part of the treatment apparatus according to the invention.

Figures 5 and **6** are perspective views partially sectioned on lines V-V and VI-VI, respectively, showing the lower part of the treatment apparatus according to the invention.

Figure 7 shows other embodiments of a treatment apparatus according to the invention.

Figure 8 illustrates another embodiment of a treatment apparatus according to the invention, employing a gaseous medium and a liquid medium.

The **figures** depict an apparatus **1** according to the invention comprising a treatment cover **2**, able to be placed over or around an individual's body part **3** that has injured tissues to be treated with a gaseous medium in the general sense. In the example illustrated in **figs. 1** to **6**, the treatment cover **2** is intended to be placed around an individual's body part that is to be treated and, in particular, around an individual's leg **3**. **Figs. 7** and **8** illustrate another embodiment for which the treatment cover **2** is able to be placed over an individual's body part **3**, such as an individual's arm or thorax.

Of course, the treatment apparatus **1** according to the invention comprises a cover **2** of which the shape and dimensions are suited to the body part **3** that is to be treated. Whatever the body part **3** that is to be treated, the treatment cover **2** has a positioning zone **Z** to ensure that the injured tissues of said individual's body part can be in contact with the gaseous medium present inside this treatment cover **2**. It should be understood that the positioning zone **Z** corresponds to the volume occupied by the injured tissues that are to be treated and possibly by a body part that does not need to be treated but is situated around or in the continuation of the injured tissues. The sizing of the treatment cover **2** takes account of this positioning zone **Z** so that when this zone **Z** is occupied by the body part **3** that is to be treated, the cover has, for the gaseous medium, a volume suited to performing the treatment on the injured tissues.

In the example illustrated in **figs. 1** to **6**, the treatment cover **2** takes the form of an elongate casing, open at one end for the passage of the arm or of the leg, whereas in the example illustrated in **figs. 7** and **8**, the treatment cover **2** takes the form of a cloche that rests on an individual's body part. In the case of the example illustrated in **figs. 1** to **6**, the positioning zone **Z** for positioning the body part **3** that is to be treated is

situated in the internal volume of the treatment cover **2** and some distance from this cover and corresponds to the volume occupied by the leg, as illustrated in **fig. 3**. In the example illustrated in **figs. 7** and **8**, this positioning zone **Z**, which closes the treatment cover **2**, extends opposite or facing the treatment cover and corresponds to a surface of the thorax or a surface of the arm.

In the example illustrated in **figs. 1** to **6**, the treatment cover **2** takes the form of a rigid casing made up for example of a bottom shell **2a** and of a top shell **2b**, which shells are intended to be assembled with one another to form, via their wall, a closed enclosure accessible via a passage **5** for the introduction of the body part **3** that is to be treated. The elongate cover **2** also has a proximal end **2p** in which the passage **5** is created, and a distal end **2d** situated opposite the proximal end **2p**. In the example illustrated in **figs. 7** and **8**, the treatment cover **2** takes the form of a shell of hemispherical shape.

According to a preferred embodiment variant, the cover **2** is equipped with a device **7** for viewing the positioning zone **Z** for said individual's body part **3**. According to the example illustrated in **figs. 1** to **6**, the cover **2** comprises, by way of viewing device **7**, a window created in the top shell **2b** and, more specifically, on the top face of the top shell **2b**. The presence of the window **7** allows the condition of the injured tissues to be observed, and their progress monitored. In the example illustrated in **figs. 7** and **8**, the cover **2** is made from a transparent or translucent material in order to form the viewing device. Of course, it may be conceivable to create a window on the cloche-shaped enclosure illustrated in **figs. 7** and **8**.

The treatment cover **2** may be equipped with a viewing device **7** of a type different than a window as illustrated in the drawings. For example, the viewing device may be produced in the form of an optical system with or without image capture, such as a CCD sensor, an endoscope, a camera or an optical fiber.

In the conventional way, the treatment cover **2** is equipped with an inlet **8** for a gaseous medium and with an outlet **9** for removing the gaseous medium present inside the cover **2.** The inlet **8** allows a gaseous medium of any suitable nature, such as, for example, oxygen-enriched or oxygen-impoverished air, to be introduced into the treatment cover **2.** Typically, the inlet **8** is connected to an external circuit connected to a treatment machine which has not been depicted but is known per se and that allows a gaseous medium of which the various parameters such as, for example, the temperature, the hygrometry, the oxygen concentration or the pressure are controlled to be injected into the treatment cover.

In the example illustrated in **figs. 1** to **6,** the inlet **8** opens to the outside of the treatment cover, on the top shell **2b,** at the distal end **2d,** so as to be connected to the external circuit connected to the treatment machine.

The outlet **9** is connected, via an external circuit that has not been depicted, to a suction system that allows some of the atmosphere contained inside the treatment cover **2** to be removed in order to create circulation in the treatment cover **2.** The outlet **9** is configured in such a way as to extract the homogenous atmosphere prevailing inside the cover rather than the gaseous medium that has just entered via the inlet **8.** In the example illustrated in **figs. 1** to **6,** the outlet **9** is produced in the form of a duct **10** created in each of the lateral walls of the treatment cover, with its inlet situated at the proximal end **2p** and opening, via an outlet that is common to the outside of the treatment cover **2,** on the top shell **2b,** at the distal end **2d.** According to this embodiment variant, the inlet **8** and the outlet **9** open side by side, to the outside of the treatment cover, on the top shell **2b.**

According to the invention, the apparatus **1** comprises a system **11** for controlling the flow of the gaseous medium inside the treatment cover **2** and designed to direct the gaseous medium entering the cover via the inlet **8** away from the positioning

zone **Z** and to homogenize the gaseous medium present inside the cover **2**. The treatment cover **2** is therefore equipped with the system **11** that provides control over the flow of the gaseous medium inside the treatment cover **2**.

The flow control system **11** directs the gaseous medium away from the positioning zone **Z** thus preventing the gaseous medium from impinging directly at high speed on the patient's skin, notably on the injured tissues. Channeling the gaseous medium away from the positioning zone **Z**, namely away from said individual's body part that is to be treated, prevents the wound from drying out and allows it to heal. As will be explained in the following portion of the description, the flow control system **11** channels the gaseous medium particularly toward the treatment cover **2**. The gaseous medium entering via the inlet **8** is thus directed directly toward the cover.

The flow control system **11** also homogenizes the gaseous medium inside the cover before it comes into contact with the injured tissues. The flow control system **11** creates turbulence in the flow of the gaseous medium in the treatment cover **2** so as to homogenize the atmosphere present inside the cover. Having the gaseous medium flow in a turbulent regimen and away from the positioning zone **Z** makes it possible to obtain an atmosphere that is homogenous before it comes into contact with the injured tissues. The result of this is that the atmosphere in contact with the injured tissues conforms to the desired parameters.

The system **11** for controlling the flow of the gaseous medium may be produced in any suitable way for directing the gaseous medium away from the positioning zone **Z** and for homogenizing the gaseous medium present inside the cover **2**. In general, the flow control system **11** comprises a deflector that alters the direction of flow of the gaseous medium inside the cover **2**, away from the positioning zone **Z** and creating a turbulent flow regimen.

In the embodiment illustrated in **figs. 1** to **6**, the control system **11** comprises a deflector **12** onto which the gaseous medium

entering the treatment cover via the inlet **8** is directed. The gaseous medium enters the treatment cover **2** at a velocity suited to ensuring a turbulent flow regimen. Typically, the gaseous medium has, at the inlet **8**, a velocity high enough to allow the incoming stream to spread throughout the volume of the treatment enclosure.

As is more specifically apparent in **figs. 2**, **4** and **6**, the inlet **8** comprises a well **13** created in the top shell **2b** and opening to the outside of the treatment cover. This well **13** is also created in the bottom shell **2a**, being extended by a deflection duct **14** opening to the inside of the treatment cover **2**. This deflection duct **14** is delimited between the deflector **12** and the internal surface **15** of the top shell **2b**. The deflector **12** is created inside the treatment cover **2**, at the distal end **2d** thereof.

According to one advantageous embodiment feature, the deflector **12** has an orientation surface **12a** for orienting the gaseous medium toward the internal surface of the treatment cover. In the example illustrated, the deflector **12** directs the gaseous medium in such a way that its flow follows the internal surface of the top shell **2b**, from its lower part to its upper part and from its distal part **2d** toward its proximal part **2p**.

Advantageously, the deflector **12** has an orientation surface **12a** situated facing the wall **15** of the treatment cover and delimiting the deflection duct **14**. This orientation surface **12a** has an axis of extension **A** which, with the axis **B** of the inlet **8**, makes an angle comprised between 10 and 170°.

According to another advantageous embodiment feature, this orientation surface **12a** of the deflector is planar or curved and may or may not have turned-up edges.

In instances in which the treatment cover **2** is equipped with a viewing device **7**, the flow control system **11** directs the gaseous medium toward the viewing device in order to defog it. As is

apparent from **figs. 1** to **6**, the flow of gaseous medium from the inlet **8** is directed in such a way as to brush across the window **7** and defog same.

It is apparent from the foregoing description that the gaseous medium that enters the distal end **2d** of the treatment cover **2** is channeled toward the wall of the top shell **2b**, from its lower part to its upper part, being directed toward the proximal part **2p** of the treatment cover, exhibiting a turbulent flow as indicated in **fig. 3**. The extraction of the gaseous medium present in the treatment cover **2** is performed at the proximal part **2p**, via the ducts **10** connected to the outlet **9**.

In the embodiment illustrated in **figs. 7** and **8**, the flow control system **11** comprises, by way of deflector, a pipe or duct with an elbow 12_1 for admitting the gaseous medium and mounted on the inlet **8** in order to direct the gaseous medium away from the positioning zone **Z** and to homogenize the gaseous medium present in the cover **2**. According to this embodiment, the treatment cover **2** takes the form of a hollow casing of elongate or hemispherical shape, provided with a rim **2r** that comes to bear against the individual's body. This rim **2r** can be used to secure the apparatus to the body using, for example, a strap or a cuff **18**.

The treatment cover **2** is provided with an inlet **8** equipped with a pipe or a duct with an elbow 12_1, mounted to direct the gaseous medium away from the positioning zone **Z** and to homogenize the gaseous medium present inside the cover **2**. As the positioning zone **Z** extends in the plane passing through the rim via which the treatment cover is supported, the inlet **8** is created in the vicinity of this rim with the pipe directed toward the wall of the cover, namely in the opposite direction to the plane passing through the support rim **2r**. The pipe or duct with an elbow 12_1 delivers the gaseous medium at a velocity suitable for obtaining turbulent flow inside the treatment cover **2**.

The pipe or duct with an elbow 12_1 is designed to direct the gaseous medium toward the viewing device consisting, in the example illustrated in **figs. 7** and **8**, of all or part of the treatment cover **2** designed to form a window.

According to one advantageous embodiment feature, the inlet **8** and the outlet **9** are positioned side by side but in divergent directions so as to allow the gaseous medium inside the treatment cover **2** to circulate. With such an arrangement, the inlet **8** and the outlet **9** are arranged on a body, not depicted, mounted removably with respect to the treatment cover **2**. Thus, this inlet **8** and the outlet **9** can be fitted to different treatment covers **2** having shapes suited to the body parts that are to be treated.

In instances in which the treatment apparatus comprises a device for viewing the individual's body part, the method consists in directing the gaseous medium toward a device for viewing the individual's body part in order to defog the viewing device.

It is apparent from the foregoing description that the treatment apparatus **1** according to the invention allows injured tissues to be exposed, inside a cover, to a gaseous medium while ensuring that the conditions of application of the gaseous medium optimize the treatment performed. According to one advantageous embodiment, the treatment apparatus **1** according to the invention also allows a liquid medium of any type, such as a physiological liquid in the context of the cleaning of a wound or an active medicinal liquid in the case of a specific treatment, also to be incorporated into the treatment cover **2**.

According to this embodiment which is illustrated in **fig. 8**, the inlet **8** of the treatment apparatus **1** is designed to be connected to a liquid-medium supply source. The injection of the liquid medium can be achieved using the external circuit used for injecting the gaseous medium and also connected to this liquid-medium supply source. The liquid medium may be injected using a specific circuit communicating with a liquid-medium supply

source and connected, upstream of the inlet **8**, to the external circuit used for injecting the gaseous medium.

The cover **2** is provided with a discharge outlet for the liquid medium and which corresponds either to the gaseous-medium outlet **9** as illustrated in the drawings by the cover worn on the arm of an individual or else to an additional outlet **19** specifically for the extraction of the liquid medium. This additional outlet **19** is of course placed at the lowest point of the cover as illustrated in the drawings by the cover worn on the thorax of an individual. Of course, the cover **2** is mounted in a fluidtight manner on an individual's body part using the strap or the cuff **18** and/or a sealing strip added at the rim **2r**.

According to one advantageous feature of this embodiment, the pipe or duct with an elbow 12_1 that forms the deflector is mounted with the ability to rotate about its axis in order to adjust the orientation of the flow inside the cover **2**. This pipe or duct with an elbow 12_1 can be manipulated from outside the cover using any suitable means such as a knurled ring **20** mounted securely on an extension of the pipe with an elbow 12_1 projecting out from the cover. This knurled ring **20** is guided in rotation on a coupling **21** mounted fixedly and fluidtightly on the cover.

Using the knurled ring **20**, the inlet **8** can be oriented either upward (toward the window) or downward (toward the wound) according to the fluidic substrate (liquid or gas) employed by the user. It should be noted that the continuation of the pipe or duct with an elbow 12_1 may have a telescopic nature so that it can be extended lengthwise to make the orientation of the inlet **8** easier.

When a liquid (medicinal and/or washing, etc. liquid) is administered, the treatment apparatus according to the invention allows the stream of liquid to be directed onto the wound in order to facilitate the cleaning of the wound or to apply therapeutic or antibacterial elements thereto. The gaseous-medium inlet **8** may thus be used for injecting liquids of all

types: physiological liquid in the context of the cleaning of a wound, medicinally active liquid in the case of a specific treatment.

The apparatus according to the invention offers the ability to perform a method of treating injured tissues that consists in controlling the flow of the gaseous medium in order to direct the gaseous medium away from the zone **Z** in which said individual's body part is positioned, but also in injecting a liquid medium via the inlet **8** of the cover and in removing a liquid medium from the cover via the gaseous-medium discharge outlet **9** or via an additional outlet **19**. The method, which does not form part of the invention, advantageously consists in orienting the pipe or duct with an elbow $\mathbf{12_1}$, which is mounted on the inlet **8**, for injecting the liquid medium into the zone **Z** in which the individual's body part exhibiting the injured tissues is positioned.

Patentkrav

1.Apparat til behandling af beskadiget væv, hvilket apparat omfatter:

- et hus (2), der er beregnet til at blive placeret på eller omkring en del af en persons krop, således at huset (2) har et placeringsområde (Z) til personens kropsdel, idet huset (2) er forsynet med et indløb (8) til et gasformigt medium og et udløb (9) til udledning af det gasformige medium, der forefindes i huset
- et system (11) til styring af strømningen af det gasformige medium, kendetegnet ved, at styresystemet (11) omfatter en deflektor (12, 12_1), hvilken deflektor (12, 12_1) ændrer strømningsretningen af det gasformige medium, der trænger ind i huset gennem indløbet (8) uden for placeringsområdet (Z) og skaber en hvirvelstrømningstilstand for at homogenisere det gasformige medium, der forefindes i huset (2).

2.Behandlingsapparat ifølge det foregående krav, kendetegnet ved, at deflektoren (12) har en overflade (12a) til at justere det gasformige medium i retning af den indvendige overflade af huset, på hvilken ledes det gasformige medium, der trænger ind i huset gennem indløbet (8).

3.Behandlingsapparat ifølge krav 1, kendetegnet ved, at deflektoren (12_1) omfatter et knærør, der er monteret på indløbet (8).

4.Behandlingsapparat ifølge krav 3, kendetegnet ved, at deflektoren (121) omfatter et knærør, der er monteret drejeligt omkring sin akse, for at justere strømningsretningen.

5.Behandlingsapparat ifølge et af de foregående krav, kendetegnet ved, at huset (2) er forsynet med en anordning (7) til visning af placeringsområdet (Z) for personens kropsdel, samt ved, at systemet til styring af strømningen (11) leder det gasformige medium mod visningsanordningen (7) for at sikre dens afdugning.

6.Behandlingsapparat ifølge et af de foregående krav, kendetegnet ved, at indløbet (8) og udløbet (9) er anbragt side om side i divergerende retninger.

7.Behandlingsapparat ifølge det foregående krav, kendetegnet ved, at indløbet (8) og udløbet (9) er anbragt på et legeme, der er aftageligt i forhold til huset.

8.Behandlingsapparat ifølge et af kravene 5 til 7, kendetegnet ved, at det som visningsanordning (7) omfatter et skueglas, der er indrettet i huset, eller et optisk system med eller uden billedoptagelse.

9.Behandlingsapparat ifølge et af de foregående krav, kendetegnet ved, at indløbet (8) er beregnet til at blive forbundet med en kilde til tilførsel af et flydende medium, samt ved, at huset (2) er forsynet med et udløb til udledning af det flydende medium, hvilket svarer til udløbet (9) for det gasformige medium eller til et yderligere udløb (19), der er indrettet på huset.

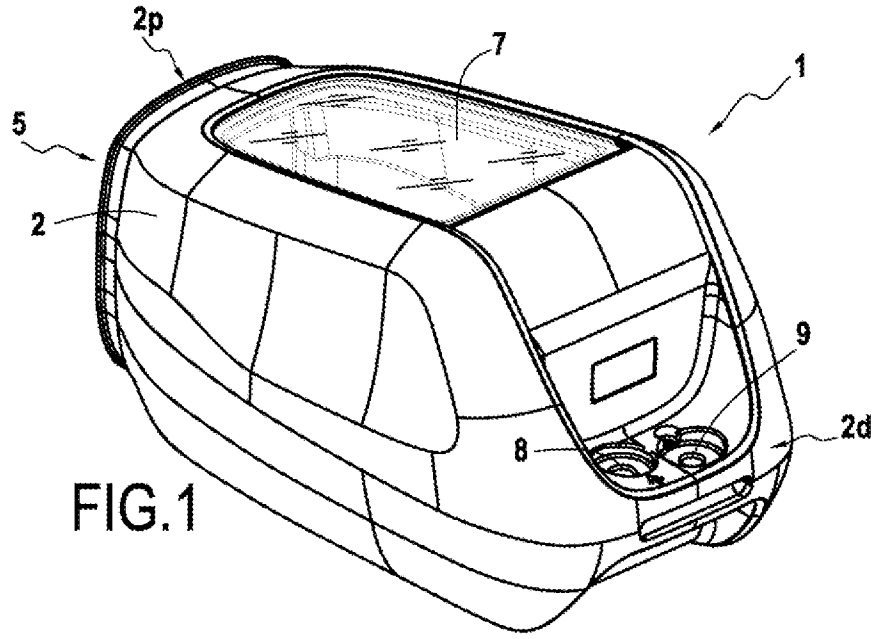

FIG.1

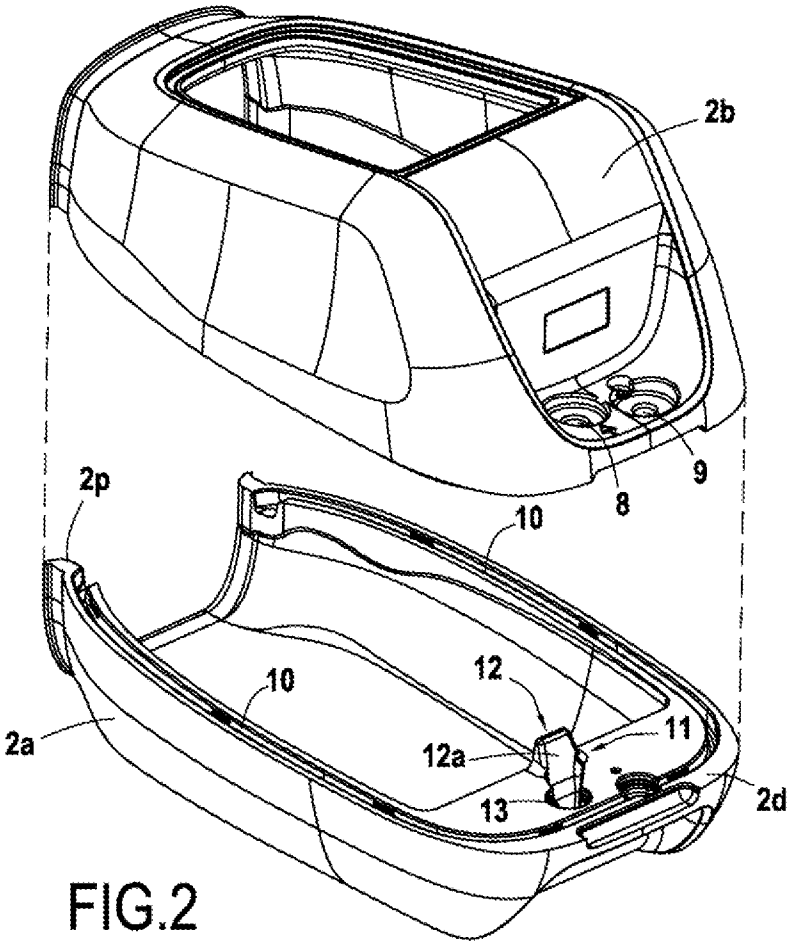

FIG.2

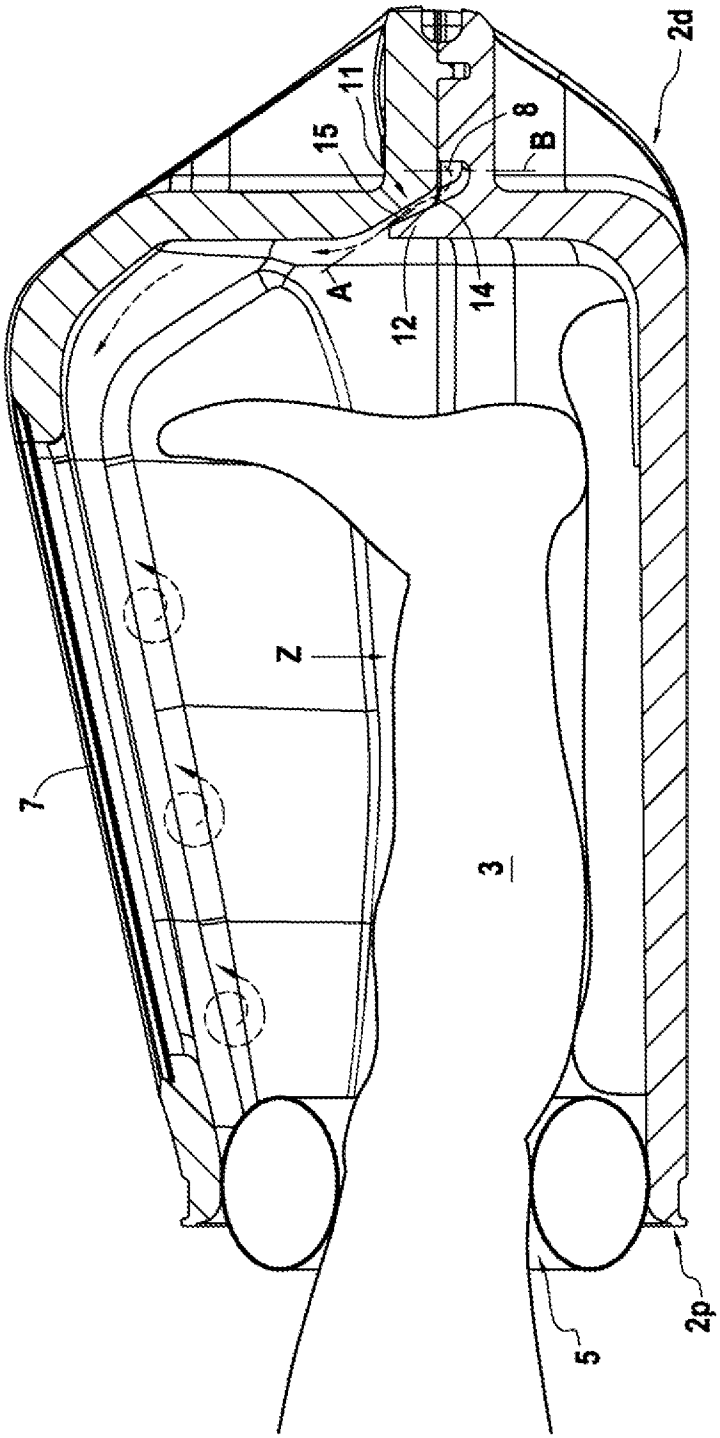

FIG.3

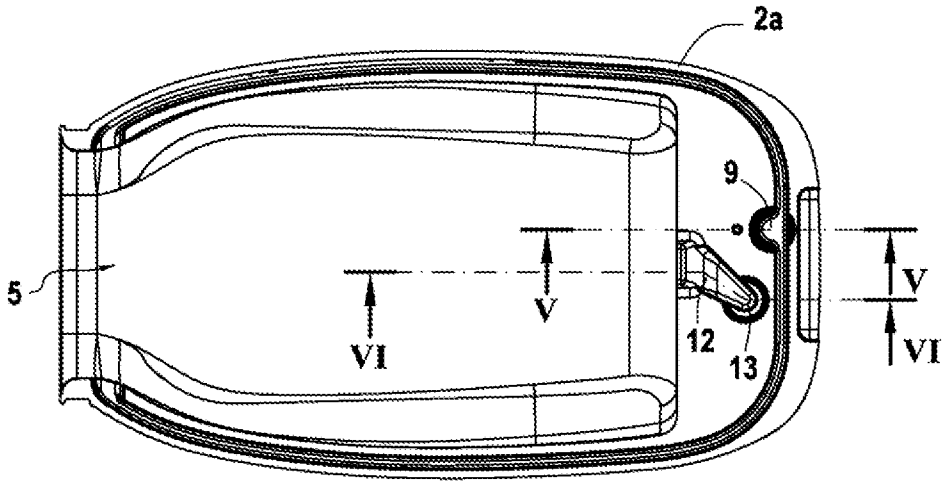

FIG.4

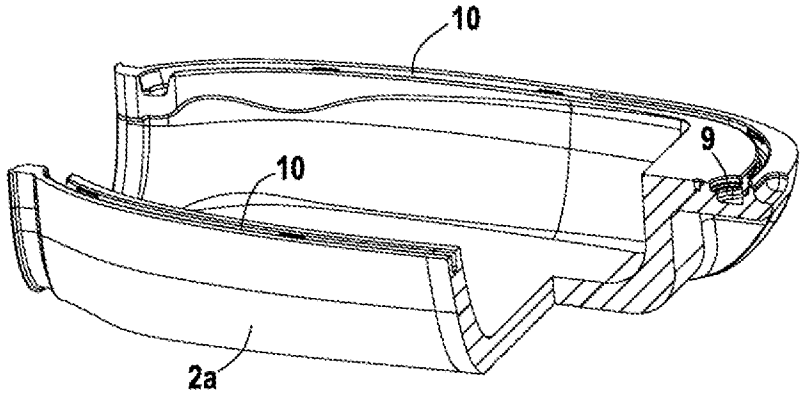

FIG.5

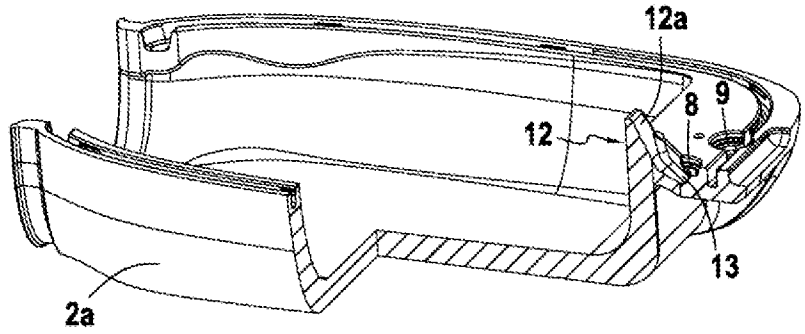

FIG.6

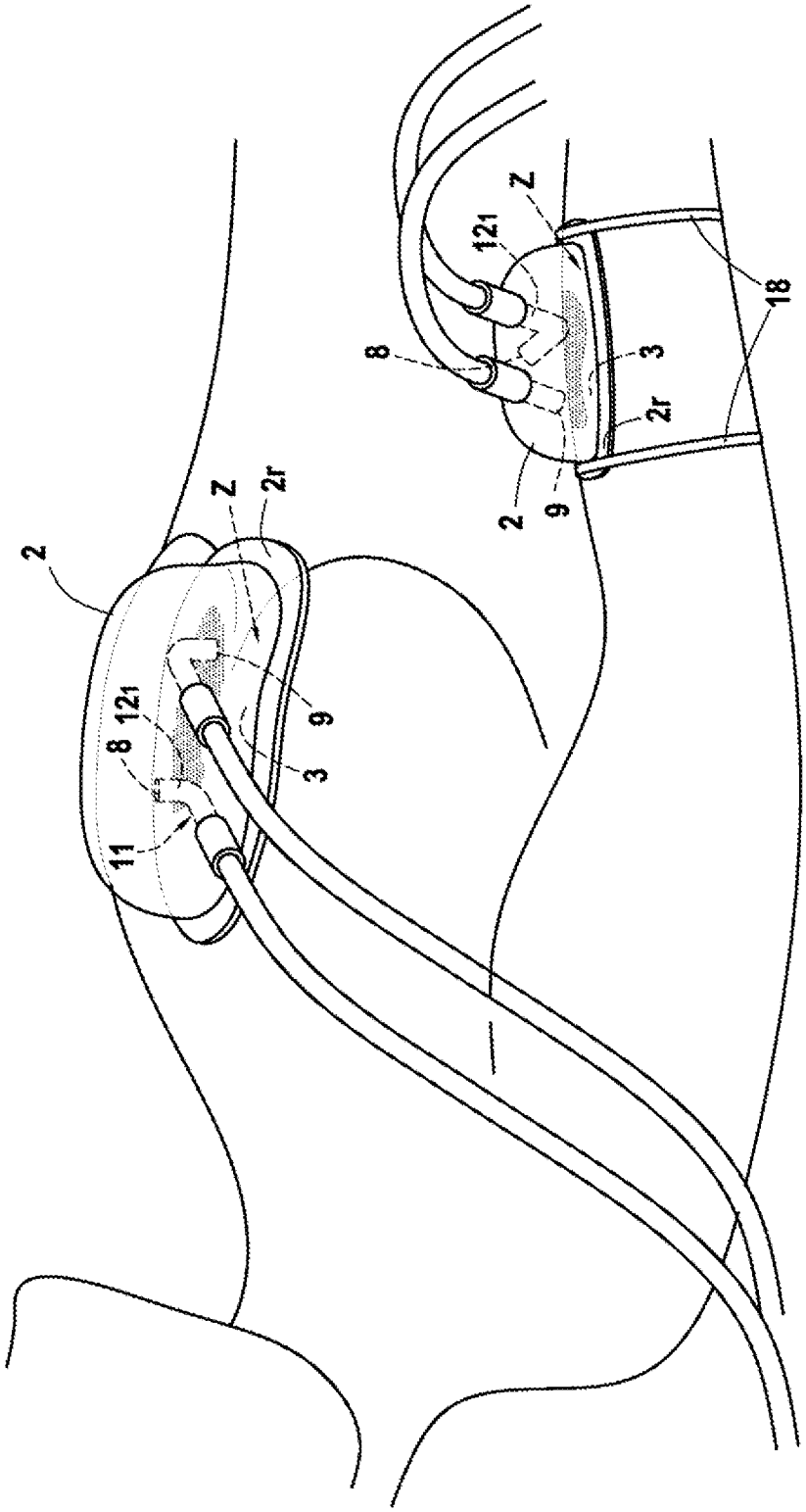

FIG.7

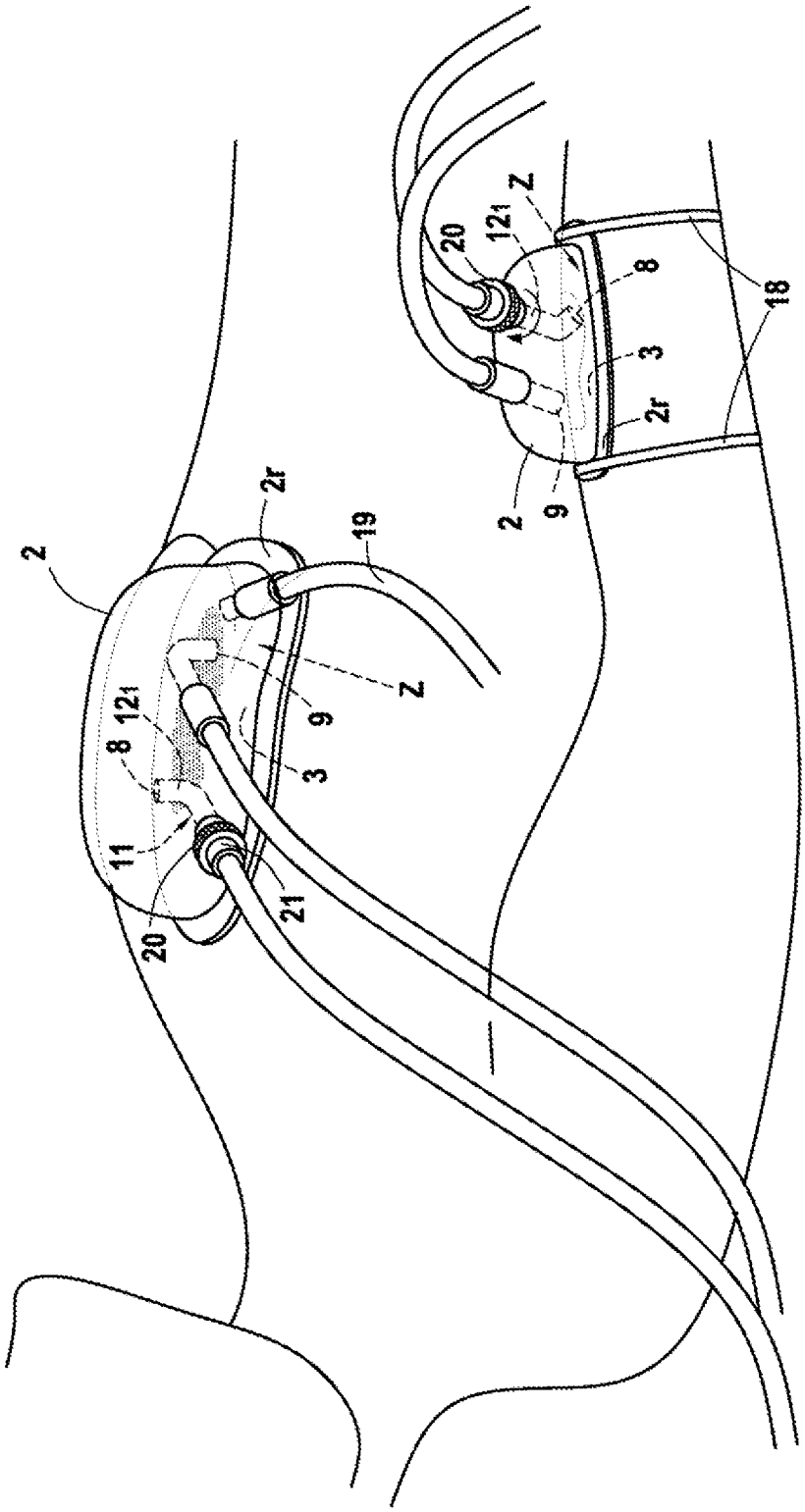

FIG.8