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(54) BATHROBE - UNDERWEAR DRYER

TROCKNER FÜR BADEMANTEL UND UNTERWÄSCHE

SÉCHOIR POUR PEIGNOIRS DE BAIN ET SOUS-VÊTEMENTS

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JP-U- H01 128 799

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Description

[0001] The object of this invention is a device for hanging bathrobes, underwear, garments and the like.

[0002] More in particular, the object of this invention is a garment hanger provided with means suitable for eliminating or reducing the unpleasant sensation of cold caused by the contact of a user's skin with the cold and/or wet fabric of a bathrobe, or more in general, of garments or the like. Hereinafter, for simplicity of description, the term "garments" denotes bath linen, such as bathrobes and towels, underwear but also any other type of clothing for household purpose and not.

[0003] The invention therefore falls within the field of household appliances, in particular in that of devices used for having sufficiently warm garments immediately before they are worn. Such field is substantially monopolised by heated towel rail (which, as known, also have the function of room heating) and to a lesser extent, by hangers and supports provided with heating means (generally electrical resistors) for warming and/or drying the garments hung thereon.

[0004] By way of an example, reference shall be made to documents CN201223236, CN201180234, CN201206220 and/or CN2557559, the objects whereof actually are hangers and/or supports for clothes and underwear comprising electrical resistors suitable for yielding heat to an air flow intended for heating and/or drying the hung underwear. To this end, said hangers and/or supports comprise an integrated fan for drawing said air flow and slots, obtained on the frame thereof, and such as to ensure the passage thereof towards the cold and/or wet underwear.

[0005] As already mentioned, towel rails are much more widespread for warming cold and/or wet garments so as to make the use thereof more comfortable, therefore it is not necessary to describe them further. As known, said electrical or fluid-circulation towel rails are mainly designed for room heating but they may also support, hanging on the elements thereof or on special handles, towels, bathrobes or garments that therefore benefit from the heat generated thereby.

[0006] It is clear that such possibility may advantageously be used only in some periods of the year (in the "cold season"), especially when said towel rails are kept switched on for a long time to reach the temperature desired by the user in a specific room. It is therefore clear that the warming of the garments thereon is subject to room heating and as a consequence, it is not always ensured although it is desired by the user (for example while coming out of a shower box or a bath tub); it is therefore unlikely, as well as economically disadvantageous, that said towel rails are switched on to this end when their use for said room heating is not required.

[0007] The already mentioned hangers and/or supports, on the other hand, are more suitable, the use whereof, however, appears to be more difficult both from an aesthetical point of view, as they do not fit well in the

room they are used in, and because they require the presence of additional support elements whereon they can be hung, for example hooks and/or tubular elements fixed to the wall or on doors and cabinets of furniture. JP-5 H1-128799 U1 discloses a further prior art.

[0008] The object of this invention is to obviate at least a part of the drawbacks described above, by providing a device for hanging garments provided with means suitable for the warming and/or drying thereof.

[0009] More in particular, the object of this invention is a garment hanger suitable for eliminating or at least reducing the unpleasant sensation of cold caused by the contact of the skin with the cold and/or wet fabric of said garments.

[0010] A further object of this invention is to provide a garment hanger provided with low energy consumption heating means.

[0011] A further object is to provide a garment hanger provided with heating means with good aesthetics and 20 easy to integrate with the room it is intended to be used in. These and other objects, which will be clear hereinafter, are achieved with a warming garment hanger according to the annexed main claims.

[0012] Other advantages may be further achieved by 25 the additional features of the dependent claims.

[0013] Further features of this invention will appear 30 more clearly from the following description of a preferred embodiment thereof, according to the patent claims and illustrated, by way of a non-limiting example, in the annexed drawings, wherein:

- figure 1 shows an exploded view of the warming garment hanger according to the invention.
- figures 2a and 2b respectively show an axonometric top and bottom view of the garment hanger according to the invention.

[0014] The features of the finding shall now be described using the references contained in the figures.

[0015] With reference to the annexed figures, reference numeral 1 globally denotes the warming device suitable for warming and/or drying the garments hung thereon. For simplicity of description, hereinafter said warming device shall also be referred to as "warming garment hanger" or, equally, "garment hanger".

[0016] As clearly shown in figure 1, said garment hanger 1 is provided with a first "fixing block" 2, a second "warming block" 3 and an aesthetical cover 4 the components and purposes whereof shall be described in detail hereinafter.

[0017] The fixing block 2 therefore comprises a support 21 fixable to the wall by known fixing means (by way of a non-limiting example, screws inserted in through holes 211 obtained on said support 21 and intended for being received into corresponding wall blocks), a sleeve 22 for the connection thereof to cover 4 and a jointing element 23 (hereinafter, connection 23) between said support 21 and sleeve 22.

[0018] Said connection 23 may be removably connected to support 21, for example by tenon 231 of the inside face 233 thereof and corresponding mortise 212 on support 21 (in figure 1, a T recess).

[0019] Sleeve 22 fits on the opposite face 234 of the same connection 23, for example by interference on neck 232.

[0020] A connector 24 is seated into said connection 23 for the electrical supply of garment hanger 1 and a condenser 25 (schematically shown in figure 1) suitable for dampening voltage fluctuations of the electrical system said connector 24 is connected to (through a power supply cable of the known type, not shown). An opening 235 is obtained on the side surface of connection 23 that allows inserting and connecting the above power supply cable to electrical connector 24.

[0021] As already mentioned and according to a preferred embodiment of the invention, sleeve 22 of the "fixing block" 2 is connected by welding (or gluing) to cover 4 wherein, as shall be explained in detail, said "warming block" 3 is inserted and positioned, which seats at least the means for the warming and circulation of the air for drying and/or warming garments.

[0022] Said warming block 3 comprises a body 31 on the through cavity 311 whereof there are inserted and fixed one or more electrical resistances 32, an aluminium heat sink 33 and a fan 34. As shown in figure 1, said one or more electrical resistances 32 and said heat sink 33 are in close contact with each other and are substantially seated in the lowermost portion of cavity 311 of body 31, whereas fan 34 is inserted and constrained at the top portion of the same cavity 311.

[0023] Said one or more electrical resistances 32 are of the known type, by way of a non-limiting example, armoured or reinforced, whereas heat sink 33 and fan 34 (but also connector 24 described above and the same resistances 32), also known and with low energy consumption, are of the type already used in several electronic devices and equipment such as personal computers and/or notebooks.

[0024] In fact, it has been found that in order to eliminate the annoying sensation of cold it is sufficient to dispense very low electrical power (in the order of 8 W), a fact that allows using the above components with minimum overall dimensions.

[0025] Body 31 further comprises, on its top face 312, a seat (not shown) for a proximity sensor 5, the purpose whereof shall be explained hereinafter.

[0026] The aesthetical cover 4 wherein said body 31 is capable of being inserted hides the various components contained therein.

[0027] As also shown in figures 2a and 2b, said cover 4, geometrically and dimensionally shaped for seating and connecting to body 31, is provided with a first series 41 of holes obtained on the top face thereof, in the proximity of base 44 and a second series 42 of holes which is instead obtained on the bottom face thereof, in the proximity of the closing cap 43. In this way, with body 31

of the warming block 3 inserted into cover 4, the first series 41 of holes interfaces on the heat sink 33 and on the relative electrical resistances 32, whereas the second series 42 of holes is at fan 34.

[0028] A slot 431 (or any similar opening) is further obtained on the closing cap 43 of cover 4 which leaves the proximity sensor 5 exposed, with body 31 inserted in cover 4.

[0029] Body 31 of the warming block 3 and the corresponding cover 4 whereon it is inserted form the support for the garments to be warmed and/or dried.

[0030] To this end, but also for mainly aesthetical reasons and for reducing the overall dimensions as much as possible, while the fixing block 2 extends from the wall whereon it is fixed according to a direction substantially orthogonal thereto, the warming block 3 (and the relative cover 4), on the other hand, extends upwards with inclination α relative to the same fixing block 2 (to this end, reference shall be made to figure 2a). In any case, nothing prevents said warming block 3 from developing according to a direction substantially orthogonal to the wall the garment hanger 1 is fixed to.

[0031] The tenon and mortise connection between connection 23 and support 21 allows quick assembling/disassembling of the garment hanger 1 from said wall while the fact that body 31 of the "warming block" 3 is simply inserted into cover 4 and accessible, once everything has been assembled, by simply opening cap 43 of the same cover 4, simplifies the operations of maintenance and/or replacement of the various components just described.

[0032] After having described every single main component of the warming garment hanger 1, object of the invention, it is now possible to describe the operation thereof.

[0033] With the garment hanger 1 in operating position (by operating position it is meant that it is installed on the wall and electrically powered), when a wet and/or cold garment is hung, the proximity sensor 5 reads its presence through slot 431 of cap 43 of cover 4, and through known means and procedures, it starts the electrical resistance 32 and fan 34 of the "warming block" 3. The air drawn by fan 34 by means of the first series 41 of holes (and called "inlet") of cover 4 enters into cavity 311 of body 31 of the warming block 3 and crosses the heat sink 33 heated by said one or more electrical resistances 32 it is in contact with.

[0034] Said heat sink 33 therefore has as dual function: that of dissipating the heat generated by said one or more electrical resistances 32 when activated by sensor 5, thus preserving the operation thereof, and at the same time that of yielding it to the air touching it. The air thus heated, through the second series 42 of holes (also called outlet) obtained on the bottom face of cover 4, is pushed by fan 34 towards the inner space defined and circumscribed by the hung garment, allowing the warming and/or the drying thereof.

[0035] It is clear that for the above warming air circu-

lation and therewith the effectiveness of the garment hanger 1 of the invention to be always ensured, it is necessary for the first series 41 of holes of cover 4 not to be obstructed by the hung garment. As already mentioned, this is obtained by obtaining the first series 41 of holes, intended for air inlet, on the top surface of cover 4 and in the proximity of base 44 thereof, and the second series 42 of holes on the bottom surface in the proximity of head 43. This particular arrangement of the two series 41, 42 of holes allows reserving, on the top surface of cover 4, a zone 45 that only serves for resting and supporting the garment to be hung and warmed preventing it from obstructing said first and second series of holes 41 and 42. As is clear, the operation of the garment hanger 1 is in any case also subject to a good use thereof by the user that must actually hang the garments to be warmed properly on said zone 45, preventing them from obstructing said first series 41 of holes for carelessness.

[0036] As shown in figures 2a and 2b, cover 4 preferably but not necessarily has an elliptical section so as to maximise the air inlet and outlet surfaces defined respectively by the first 41 and second 42 series of holes. Accordingly, also body 31 of the warming block 3 to be inserted in said cover 4 as well as support 21, connection 23 and sleeve 22 of the fixing block 2 likewise have an elliptical section so as to ensure the assembly thereof. However, nothing prevents said components from having any other section suitable for the purpose, such as by way of a non-limiting example, circular, square, rectangular, hexagonal or the like, or also provided with convex zones (for example at the first series 41 of holes on the cover 4).

[0037] It is also useful to specify that the garment hanger 1 may be made of any material suitable for supporting the weight of the hung garments, resistant to humidity (as it is mainly used in/wet rooms and/or garments) and sufficiently precious such as to impart a pleasant, modern and elegant appearance thereto. By way of a non-limiting example, said garment hanger 1 may be made of a metal material (such as aluminium, steel or the like) and/or of a plastic material.

[0038] It is clear that several versions of the garment hanger 1 object of the invention are possible to the man skilled in the art, without departing from the novelty scopes of the inventive idea, as well as it is clear that in the practical embodiment of the invention the various components described above may be replaced with technically equivalent ones.

[0039] For example, nothing prevents the jointing element 23 of the fixing block 2 from being also set up for seating rechargeable batteries to use for powering the one or more electrical resistances. According to this version, the garment hanger 1 may be of the portable type and/or usable in any room, or dismountable for recharging the batteries, if it is not possible to connect it to the mains when applied to the wall. According to this version, moreover, connector 24 placed as seen into said connection 23 may be used, through a known external charg-

er, for recharging said batteries.

[0040] Said charger may be of the known type, already used for example for recharging mobile phones, or it may be integrated into the same connection 23.

[0041] In this second case and according to a possible embodiment (not shown), connection 23 may be provided with two plugs that:

- allow recharging the batteries when the garment hanger 1 is removed from the wall support 21, said plugs being of the type that can be inserted in the traditional electrical outlets
- but they also act as fixing element to support 21 provided with corresponding slots suitably shaped for seating and connecting with said plug, preventing at least the rotation thereof when the garment hanger 1 is in operating position.

[0042] In other words, the electrical plug and corresponding slots pair act as alternative fixing means to said tenon 231 and mortise 212.

[0043] On the other hand, rather than being removably constrained to each other through a tenon and mortise connection, nothing prevents support 21 and the jointing element 23 of the fixing block 2 from being made in a single piece, in this case preferring the lower construction complexity over the greater difficulty of assembly and/or disassembly (for example during the step of installation and/or maintenance and replacement of some internal components).

[0044] As an alternative to welding, sleeve 22 may be connected to cover 4 at base 44 thereof through other known connecting means and systems (not shown) that allow the optional subsequent removal (for example, with no limiting intention, through screws inserted on special eyebolts obtained on base 44 of said cover 4 and capable of tightening on corresponding blocks provided on sleeve 22 or through a flange-counter flange connection). Moreover, nothing prevents sleeve 22 and cover 4 from being made in a single body (especially if the garment hanger is made of a plastic material).

[0045] Moreover, said electrical resistances 32, rather than being of the armoured or reinforced type, may be of any other known type on the market, in particular of the PTC (Positive Temperature Coefficient) type. The advantage of using a PTC resistor, as known, is that it is capable of auto-regulating the temperature at which it emits heat.

[0046] Finally, a modular garment hanger 1 is possible, according to which two or more warming blocks 3 (and relative covers 4) are fixed to the fixing block 2, through suitable connections, so as to warm and/or dry multiple garments hanging on each of them at the same time. A version (also not shown) of such modular garment hanger 1 is also possible, according to which multiple fixing blocks 2, each one constrained, as seen, to the corresponding warming block 3, are mounted on a special base capable of being, in turn, fixed to the wall.

[0047] In conclusion, the garment hanger 1 of the invention is a constructively simple device, with low energy consumption, usable in any period of the year and that can be aesthetically integrated in any household environment and not, which achieves the desired objects and purposes, in particular the possibility of eliminating or at least reducing the annoying sensation of cold caused by the contact of the skin with the cold and/or wet fabric of the garments hung thereon.

Claims

- Garment hanger (1) comprising a warming block (3) internally provided at least with:

- means (32, 33) for heating an air flow for warming and/or drying the garments hung thereon
- means (34) for drawing said air flow to be warmed into said warming block (3),

wherein
it further comprises

- a fixing block (2) for the wall fixing thereof
- first (41) and second (42) passages respectively for the inlet and the outlet of the air flow that touches said heating means (32, 33)
- a zone (45) that acts as rest and support for said hung garments, said properly hung garments leaving said first (41) passages free and defining and circumscribing the collecting space of said warmed air flow, in output from said second (42) passages, for the warming and/or drying thereof **characterised in that** the inlet and outlet of the air flows touches said heating means (32,33).

- Garment hanger (1) according to any previous claim **characterised in that**

it further comprises a cover (4) for covering said fixing block (3), on said cover (4) there being provided said first (41) and second (42) passages, said first (41) passages consisting of a first series (41) of holes on the top surface and in the proximity of the base (44) of said cover (4) and interfacing on said heating means (32, 33), while said second (42) passages consisting of a second series (42) of holes on the bottom surface and in the proximity of the closing cap (43) of said cover (4) and being at said drawing means (34),
the arrangement of said first (41) and second (42) series of holes on said cover (4) defining said zone (45) for resting and supporting said hung garments.

- Garment hanger (1) according to the previous claim **characterised in that**
said warming block (3) further comprises a proximity

sensor (5) suitable for detecting the presence of garments hung thereon, said sensor (5) being left uncovered by a slot (431) obtained on said cover (4).

- Garment hanger (1) according to any previous claim **characterised in that**
said heating means (32, 33), arranged into said warming block (3), consist of one or more electrical resistances (32) and a heat sink (33), said heat sink (33), in close contact with said one or more electrical resistances (32), dissipating the heat generated thereby and yielding it to said air flow for warming and/or drying the garments.
- Garment hanger (1) according to the previous claim **characterised in that**
said one or more electrical resistances (32) are armoured and/or reinforced resistors.
- Garment hanger (1) according to claim 4 **characterised in that**
said one or more electrical resistances (32) are PTC resistors.
- Garment hanger (1) according to any previous claim **characterised in that:**
 - said fixing block (2) comprises
 - a support (21) constrainable to the wall by known fixing means
 - a sleeve (22) for the connection thereof to said cover (4)
 - a jointing element (23) connected to said support (21) and said sleeve (22), said jointing element (23) internally seating means (24, 25) for powering said one or more electrical resistors (32)
 - said warming block (3) comprises a body (31) on the through cavity (311) whereof said one or more electrical resistances (32), said heat sink (33) and said drawing means (34) are seated, said one or more electrical resistances (32) and heat sink (33) being substantially seated in the lowermost portion of said cavity (311) and said drawing means (34) being seated at the top portion of said cavity (311).
- Garment hanger (1) according to the previous claim **characterised in that**
said jointing element (23) is provided on the inside face (233) with connecting means (231) with said support (21) and on the opposite face (234) with a neck (232) capable of connecting by interference with said sleeve (22).
- Garment hanger (1) according to any previous claim

- | | | | |
|----|--|----|--|
| | characterised in that
said sleeve (22) of said fixing block (2) is connected and constrained to the base (44) of said cover (4) by welding and/or gluing and/or by connecting means and systems that allow the optional subsequent removal thereof. | 5 | electrical resistances (32) consist of rechargeable batteries, a connector (24) and an external battery charger, said rechargeable batteries being seated into said jointing element (23) and being chargeable by means of said external battery charger connected to said connector (24). |
| 10 | 10. Garment hanger (1) according to any one of the previous claims except for 9
characterised in that
said sleeve (22) and said cover (4) are in a single body. | 10 | 17. Garment hanger (1) according to any one of the previous claims except for 15 and 16
characterised in that
said means (24, 25) for powering said one or more electrical resistances (32) consist of rechargeable batteries, located into said jointing element (23), and of a battery charger integrated with said jointing element (23), said integrated battery charger being provided with at least two plugs that |
| 15 | 11. Garment hanger (1) according to any previous claim
characterised in that
said fixing block (2) extends from the wall whereon it is fixed according to a direction substantially orthogonal thereto whereas said warming block (3) extends upwards with inclination (α) relative to said fixing block (2). | 15 | - allow recharging said batteries, said plugs being of the type insertable in traditional electrical outlets
- also serve as said connecting means (231) of said jointing element (23) to said support (21), said support (21) being provided with special slots suitably shaped for seating and connecting to said plugs preventing at least the rotation thereof. |
| 20 | 12. Garment hanger (1) according to any one of the previous claims except for 11
characterised in that
said fixing block (2) and said warming block (3) extend from the wall whereon said garment hanger (1) is fixed according to a direction substantially orthogonal thereto. | 25 | 18. Garment hanger (1) according to any one of the previous claims except for 17
characterised in that said connecting means (231) of said jointing element (23) with said support (21) consist of a tenon (231) obtained on the inside face (233) of said union (23), said tenon (231) being capable of connecting to the mortise (212) of said support (21). |
| 30 | 13. Garment hanger (1) according to any previous claim
characterised in that
said cover (4), said body (31) of said warming block (3), said support (21), said jointing element (23) and said sleeve (22) of said fixing block (2) all have equal section, said section being of any shape, preferably elliptical. | 30 | 19. Garment hanger (1) according to any previous claim
characterised in that it is made of any metal and/or plastic material suitable for withstanding the weight of said hung garments and/or resistant to humidity and/or sufficiently precious so as to impart a pleasant, modern and elegant appearance thereto. |
| 35 | | 40 | 20. Garment hanger (1) according to any previous claim
characterised in that it supports bath linen, such as bathrobes and/or towels, underwear and/or any other type of clothing for household purpose and not. |
| 45 | 14. Garment hanger (1) according to any previous claim
characterised in that
said heat sink (33), said drawing means (34), said electrical connector (24) and said one or more electrical resistors (32) have a low energy consumption, minimum overall dimensions and of the type already used in electronic devices and equipment. | 50 | Patentansprüche |
| 50 | 15. Garment hanger (1) according to any previous claim
characterised in that
said means (24, 25) for powering said one or more electrical resistances (32), seated into said jointing element (23), consist of a connector (24) and a condenser (25) for dampening the voltage fluctuations of the electrical system said connector (24) is connected to through a power supply cable. | 55 | 1. Kleiderbügel (1), der einen Erwärmungsblock (3) im Inneren aufweist, der mindestens mit Folgendem ausgestattet ist:
- Mittel (32, 33) zum Erwärmen eines Luftstroms zum Erwärmen und/oder Trocknen der darauf aufgehängten Kleidungsstücke |
| 55 | 16. Garment hanger (1) according to any one of the previous claims except for 15
characterised in that
said means (24, 25) for powering said one or more | | |

- Mittel (34) zum Ziehen des zu erwärmenden Luftstroms in den Erwärmungsblock (3),
- wobei
er außerdem Folgendes aufweist: 5
- einen Befestigungsblock (2) für die Wandbefestigung davon
 - erste (41) und zweite (42) Durchgänge jeweils für den Einlass und den Auslass des Luftstroms, der die Heizmittel (32, 33) berührt 10
 - einen Bereich (45), der als Auflage und Träger für die aufgehängten Kleidungsstücke fungiert, wobei die ordnungsgemäß aufgehängten Kleidungsstücke die ersten (41) Durchgänge freilassen und den Sammelraum des erwärmten Luftstroms bei dem Ausgang aus den zweiten (42) Durchgängen für das Erwärmen und/oder Trocknen davon definieren und abgrenzen, **dadurch gekennzeichnet, dass** der Einlass und Auslass der Luftströme die Heizmittel (32, 33) berühren. 15
2. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** 20
- er ferner eine Abdeckung (4) zum Abdecken des Befestigungsblocks (3) aufweist, wobei auf der Abdeckung (4) die ersten (41) und zweiten (42) Durchgänge vorgesehen sind, wobei die ersten (41) Durchgänge aus einer ersten Reihe (41) von Löchern auf der Oberseite und in der Nähe der Basis (44) der Abdeckung (4) bestehen und mit den Heizmitteln (32, 33) verbunden sind, während die zweiten (42) Durchgänge aus einer zweiten Reihe (42) von Löchern an der Unterseite und in der Nähe der Verschlusskappe (43) der Abdeckung (4) bestehen und bei den Mitteln zum Ziehen (34) angeordnet sind, wobei die Anordnung der ersten (41) und zweiten (42) Reihe von Löchern auf der Abdeckung (4) den Bereich (45) zum Aufliegen und Tragen der aufgehängten Kleidungsstücke definiert. 25
3. Kleiderbügel (1) nach dem vorhergehenden Anspruch, **dadurch gekennzeichnet, dass** 40
- der Erwärmungsblock (3) ferner einen Näherungssensor (5) zum Erkennen der Anwesenheit von darauf aufgehängten Kleidungsstücken aufweist, wobei der Sensor (5) durch einen Schlitz (431), der auf der Abdeckung (4) erhalten ist, unbedeckt bleibt. 45
4. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** 50
- die Heizmittel (32, 33), die in dem Erwärmungsblock (3) angeordnet sind, einen oder mehrere elektrische Widerstände (32) und eine Wärmesenke (33) auf- weisen, wobei die Wärmesenke (33) in engem Kontakt mit einem oder mehreren elektrischen Widerständen (32) die Wärme, die dadurch erzeugt wird, ableitet und an den Luftstrom zum Erwärmen und/oder Trocknen der Kleidungsstücke abgibt. 55
5. Kleiderbügel (1) nach dem vorhergehenden Anspruch, **dadurch gekennzeichnet, dass** ein oder mehrere elektrische Widerstände (32) ge-panzerte und/oder verstärkte Widerstände sind.
6. Kleiderbügel (1) nach dem Anspruch 4, **dadurch gekennzeichnet, dass** ein oder mehrere elektrische Widerstände (32) PTC-Widerstände sind.
7. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass**
- der Befestigungsblock (2) Folgendes aufweist
 - einen Halter (21), der durch die bekannten Befestigungsmittel an der Wand gehalten werden kann,
 - eine Hülse (22) für die Verbindung davon mit der Abdeckung (4)
 - ein Verbindungselement (23), das mit dem Halter (21) und der Hülse (22) verbunden ist, wobei in dem Verbindungselement (23) intern Mittel (24, 25) eingesetzt sind, um einen oder mehrere elektrische Widerstände (32) mit Strom zu versorgen
 - wobei der Erwärmungsblock (3) ein Gehäuse (31) auf dem Durchgangshohlraum (311) aufweist, worauf ein oder mehrere elektrische Widerstände (32), die Wärmesenke (33) und die Mittel zum Ziehen (34) eingesetzt sind, wobei ein oder mehrere elektrische Widerstände (32) und die Wärmesenke (33) im Wesentlichen in dem untersten Abschnitt des Hohlraums (311) und die Mittel zum Ziehen (34) am oberen Teil des Hohlraums (311) eingesetzt sind.
8. Kleiderbügel (1) nach dem vorhergehenden Anspruch, **dadurch gekennzeichnet, dass** das Verbindungselement (23) an der Innenseite (233) mit Verbindungsmitteln (231) mit dem Halter (21) und auf der gegenüberliegenden Seite (234) mit einem Hals (232) versehen ist, der durch Überlagerung mit der Hülse (22) verbunden werden kann.
9. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass**

- die Hülse (22) des Befestigungsblocks (2) mit der Basis (44) der Abdeckung (4) durch Schweißen und/oder Kleben und/oder durch Verbindungsmitte und -systeme festhaltend verbunden ist, die das optionale anschließende Entfernen davon ermöglichen.
- 10. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche mit Ausnahme des Anspruchs 9, **dadurch gekennzeichnet, dass****
- die Hülse (22) und die Abdeckung (4) in einem einzigen Teil sind. 10
- 11. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass****
- sich der Befestigungsblock (2) von der Wand erstreckt, worauf er nach einer im Wesentlichen dazu orthogonalen Richtung befestigt ist, wohingegen sich der Erwärmungsblock (3) mit einer Neigung (α) in Bezug auf den Befestigungsblock (2) nach oben erstreckt. 15
- 12. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche mit Ausnahme des Anspruchs 11, **dadurch gekennzeichnet, dass****
- sich der Befestigungsblock (2) und der Erwärmungsblock (3) von der Wand erstrecken, worauf der Kleiderbügel (1) nach einer im Wesentlichen orthogonalen Richtung dazu befestigt ist. 20
- 13. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass****
- die Abdeckung (4), das Gehäuse (31) des Erwärmungsblocks (3), der Halter (21), das Verbindungs-element (23) und die Hülse (22) des Befestigungs-blocks (2) alle das gleiche Profil haben, wobei das Profil von jeder beliebigen Form, vorzugsweise elliptisch sein kann. 25
- 14. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass****
- die Wärmesenke (33), die Mittel zum Ziehen (34), der elektrische Steckverbinder (24) und der oder die elektrischen Widerstände (32) einen niedrigen Energieverbrauch, geringe Abmessungen haben und von der Art sind, die bereits in elektronischen Geräten und Einrichtungen verwendet werden. 30
- 15. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass****
- die Mittel (24, 25) zur Stromversorgung des oder der elektrischen Widerstände (32), die in dem Verbindungs-elemente (23) angeordnet sind, aus einem Steckverbinder (24) und einem Kondensator (25) zur Dämpfung der Spannungsschwankungen des elek- 35
- trischen Systems bestehen, wobei der Steckverbinder (24) an ein Stromversorgungskabel angeschlossen ist.
- 5 16. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche mit Ausnahme des Anspruchs 15, **dadurch gekennzeichnet, dass****
- die Mittel (24, 25) zur Stromversorgung des oder der elektrischen Widerstände (32) aus wiederaufladba-ren Batterien, einem Steckverbinder (24) und einem externen Batterieladegerät bestehen, wobei die wie-deraufladbaren Batterien in dem Verbindungs-element (23) eingesetzt sind und durch das externe Batterieladegerät, das an dem Steckverbinder (24) an-geschlossen ist, geladen werden können. 40
- 17. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche mit Ausnahme des Anspruchs 15 und 16, **dadurch gekennzeichnet, dass****
- die Mittel (24, 25) zur Stromversorgung des oder der elektrischen Widerstände (32) aus wiederaufladba-ren Batterien, die in dem Verbindungs-element (23) eingesetzt sind, und aus einem Batterieladegerät bestehen, das mit dem Verbindungs-element (23) integriert ist, wobei das integrierte Ladegerät mit we-nigstens zwei Steckern versehen ist, die
- das Aufladen der Batterien erlauben, wobei diese Stecker von dem Typ sind, der in traditio-nelle Steckdosen gesteckt werden kann,
 - auch als die Verbindungsmitte (231) des Ver-bindungslementes (23) an den Halter (21) dienen, wobei der Halter (21) mit speziellen ent-sprechend geformten Schlitten zum Einsetzen und Verbinden der Stecker versehen ist, um mindestens die Drehung davon zu verhindern.
- 18. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche mit Ausnahme des Anspruchs 17, **dadurch gekennzeichnet, dass** die Verbindungs-mittel (231) des Verbindungslementes (23) mit dem Halter (21) aus einem Zapfen (231) bestehen, der auf der Innenseite (233) der Verbindung (23) erhalten ist, wobei der Zapfen (231) an die Nut (212) des Halters (21) verbunden werden kann. 45**
- 19. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** er aus irgendeinem Metall und/oder Kunststoff hergestellt ist, das geeignet ist, um dem Gewicht der aufgehängten Kleidungsstücke standzuhalten und/oder feuchtigkeitsbeständig ist und/oder ausreichend edel ist, um ihm ein angenehmes, modernes und elegantes Aus-sehen zu verleihen. 50**
- 20. Kleiderbügel (1) nach einem der vorhergehenden Ansprüche,** 55

dadurch gekennzeichnet, dass er Badwäsche wie Bademäntel und/oder Handtücher, Unterwäsche und/oder jede andere Art von Kleidung für Haushaltszwecke und nicht hält.

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Revendications

1. Cintre pour vêtements (1) comprenant un bloc de chauffage (3) prévu à l'intérieur, avec au moins :

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- des moyens (32, 33) pour chauffer un flux d'air pour chauffer et / ou sécher les vêtements accrochés sur celui-ci
- un moyen (34) pour aspirer ledit flux d'air pour être réchauffé dans ledit bloc de chauffage (3),

dans lequel
il comprend en outre

- un bloc de fixation (2) pour la paroi de fixation de celui-ci
- un premier (41) et un second (42) passage respectivement pour l'entrée et la sortie du flux d'air qui intéresse lesdits moyens de chauffage (32, 33)
- une zone (45) qui agit en tant qu'appui et support pour lesdits vêtements suspendus, lesdits vêtements correctement accrochés laissant le premier (41) desdits passages libre et définissant et délimitant l'espace de collecte dudit flux d'air réchauffé, en sortie dudit second (42) passage, pour le chauffage et / ou le séchage de celui-ci, **caractérisé en ce que** l'entrée et la sortie des flux d'air vient en contact avec lesdits moyens de chauffage (32, 33).

2. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes

caractérisé par le fait que

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il comprend en outre un couvercle (4) pour recouvrir ledit bloc de fixation (3), sur ledit couvercle (4) étant prévu lesdits premier (41) et second (42) passage, ledit premier (41) des passages constitué d'une première série (41) de trous sur la surface supérieure et à proximité de la base (44) dudit couvercle (4) et s'interfaisant sur lesdits moyens de chauffage (32, 33), tandis que ledit second (42) passage constitué d'une seconde série (42) de trous sur la surface de fond et à proximité de le bouchon de fermeture (43) dudit couvercle (4) et étant au niveau desdits moyens d'aspiration (34), la disposition desdites première (41) et seconde série (42) de trous sur ledit couvercle (4) définissant ladite zone (45) pour supporter et soutenir lesdits vêtements accrochés.

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3. Cintre pour vêtements (1) selon la revendication pré-

cédente

caractérisé par le fait que

ledit bloc de chauffage (3) comprend en outre un capteur de proximité (5) approprié pour détecter la présence de vêtements accrochés sur celui-ci, ledit capteur (5) étant laissé découvert par une fente (431) obtenue sur le dit couvercle (4).

4. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes

caractérisé par le fait que

lesdits moyens de chauffage (32, 33), disposés dans ledit bloc de chauffage (3), se composent d'une ou plusieurs résistances électriques (32) et d'un dissipateur de chaleur (33), ledit dissipateur de chaleur (33), en contact étroit avec ladite une ou plusieurs résistances électriques (32), dissipant la chaleur y produite et la transférant audit flux d'air pour réchauffer et / ou sécher les vêtements.

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5. Cintre pour vêtements (1) selon la revendication précédente

caractérisé par le fait que

lesdites une ou plusieurs résistances électriques (32) sont des résistances blindées et / ou renforcées.

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6. Cintre pour vêtements (1) selon la revendication 4,

caractérisé par le fait que

lesdites une ou plusieurs résistances électriques (32) sont des résistances PTC.

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7. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes

caractérisé par le fait que :

- ledit bloc de fixation (2) comprend

- un support (21) fixable à la paroi par des moyens de fixation ordinaires
- un manchon (22) pour la connexion de celui-ci audit couvercle (4)
- un élément de jonction (23) relié audit support (21) et au dit manchon (22), ledit élément de jonction (23) ayant des moyens d'appui interne (24, 25) pour alimenter lesdites une ou plusieurs résistances électriques (32)

- ledit bloc de chauffage (3) comprend un corps (31) sur la cavité de passage (311) où lesdites une ou plusieurs résistances électriques (32), ledit dissipateur de chaleur (33) et lesdits moyens d'aspiration (34) viennent s'appuyer, lesdites une plusieurs résistances électriques (32) et le dissipateur thermique (33) étant sensiblement enfoncés dans la partie la plus basse de ladite cavité (311) et lesdits moyens d'aspiration (34) étant logés dans la partie supérieure

- de ladite cavité (311).
8. Cintre pour vêtements (1) selon la revendication précédente
caractérisé par le fait que
 ledit élément de jonction (23) est équipé sur la face interne (233) avec des moyens de liaison (231) avec ledit support (21) et sur la face opposée (234) avec un col (232) capable de se connecter par emboîtement avec ledit manchon (22). 10
9. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes
caractérisé par le fait que
 ledit manchon (22) dudit bloc de fixation (2) est connecté et fixé à la base (44) dudit couvercle (4) par soudage et / ou collage et / ou par des moyens et systèmes qui permettent l'option de retrait ultérieur de celui-ci. 15
10. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes à l'exception de 9
caractérisé par le fait que
 ledit manchon (22) et ledit couvercle (4) sont en un seul corps. 20
11. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes
caractérisé par le fait que
 ledit bloc de fixation (2) s'étend à partir de la paroi sur laquelle il est fixé suivant une direction substantiellement orthogonale à celle-ci alors que ledit bloc de chauffage (3) s'étend vers le haut avec une inclinaison (α) par rapport audit bloc de fixation (2). 25
12. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes à l'exception de 11
caractérisé par le fait que
 ledit bloc de fixation (2) et ledit bloc de chauffage (3) s'étendent à partir de la paroi sur laquelle ledit cintre pour vêtements (1) est fixé selon une direction substantiellement orthogonale à celle-ci. 30
13. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes
caractérisé par le fait que
 ledit couvercle (4), ledit corps (31) dudit bloc de chauffage (3), ledit support (21), ledit élément de jonction (23) et ledit manchon (22) dudit bloc de fixation (2) ont tous la même section, ladite section étant de forme quelconque, de préférence elliptique. 35
14. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes
caractérisé par le fait que
 ledit dissipateur de chaleur (33), ledit moyen d'aspiration (34), ledit connecteur électrique (24) et lesdites une ou plusieurs résistances électriques (32) ont une faible consommation d'énergie, l'encombrement réduit et du type déjà utilisé dans les appareils et équipements électroniques. 40
- 5 15. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes
caractérisé par le fait que
 lesdits moyens (24, 25) pour alimenter lesdites une ou plusieurs résistances électriques (32), insérées dans ledit élément de jonction (23), se composent d'un connecteur (24) et un condenseur (25) pour réduire les fluctuations de tension du système électrique ledit connecteur (24) est relié au moyen d'un câble d'alimentation électrique. 45
16. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes à l'exception de 15
caractérisé par le fait que
 lesdits moyens (24, 25) pour alimenter lesdites une ou plusieurs résistances électriques (32) sont constitués par des batteries rechargeables, un connecteur (24) et un chargeur de batterie externe, lesdites batteries rechargeables étant insérées dans ledit élément de jonction (23) et pouvant être chargées par moyen dudit chargeur de batterie externe relié audit connecteur (24). 50
17. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes à l'exception de 15 et 16
caractérisé par le fait que
 lesdits moyens (24, 25) pour alimenter lesdites une ou plusieurs résistances électriques (32) sont constitués par des batteries rechargeables, situées dans ledit élément de jonction (23), et d'un chargeur de batterie intégré avec ledit élément de jonction (23), ledit chargeur de batterie intégré étant muni d'au moins deux fiches qui
- permettent la recharge desdites batteries, lesdites fiches pouvant être insérées dans une prise électrique traditionnelle
 - servant également comme lesdits moyens de liaison (231) dudit élément de jonction (23) audit support (21), ledit support (21) étant muni de fentes spéciales de forme appropriée pour s'appuyer et se connecter auxdites fiches qui empêchent au moins la rotation de celui-ci.
- 55 18. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes à l'exception de 17
caractérisé par le fait que lesdits moyens de liaison (231) dudit élément de jonction (23) avec ledit support (21) se composent d'un tenon (231) obtenu sur la face interne (233) dudit raccord (23), ledit tenon (231) étant capable de se connecter à la mortaise (212) dudit support (21).

19. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes
caractérisé par le fait qu'il est réalisé avec quelconque métal et / ou matière plastique aptes à supporter le poids desdits vêtements suspendus et / ou résistant à l'humidité et / ou suffisamment noble de façon à conférer un aspect agréable, moderne et élégant à celui-ci.

20. Cintre pour vêtements (1) selon l'une quelconque des revendications précédentes
caractérisé par le fait qu'il supporte le linge de toilette, tels que peignoirs et / ou serviettes de bain, sous-vêtements et / ou tout autre type de vêtements à usage privé et non.

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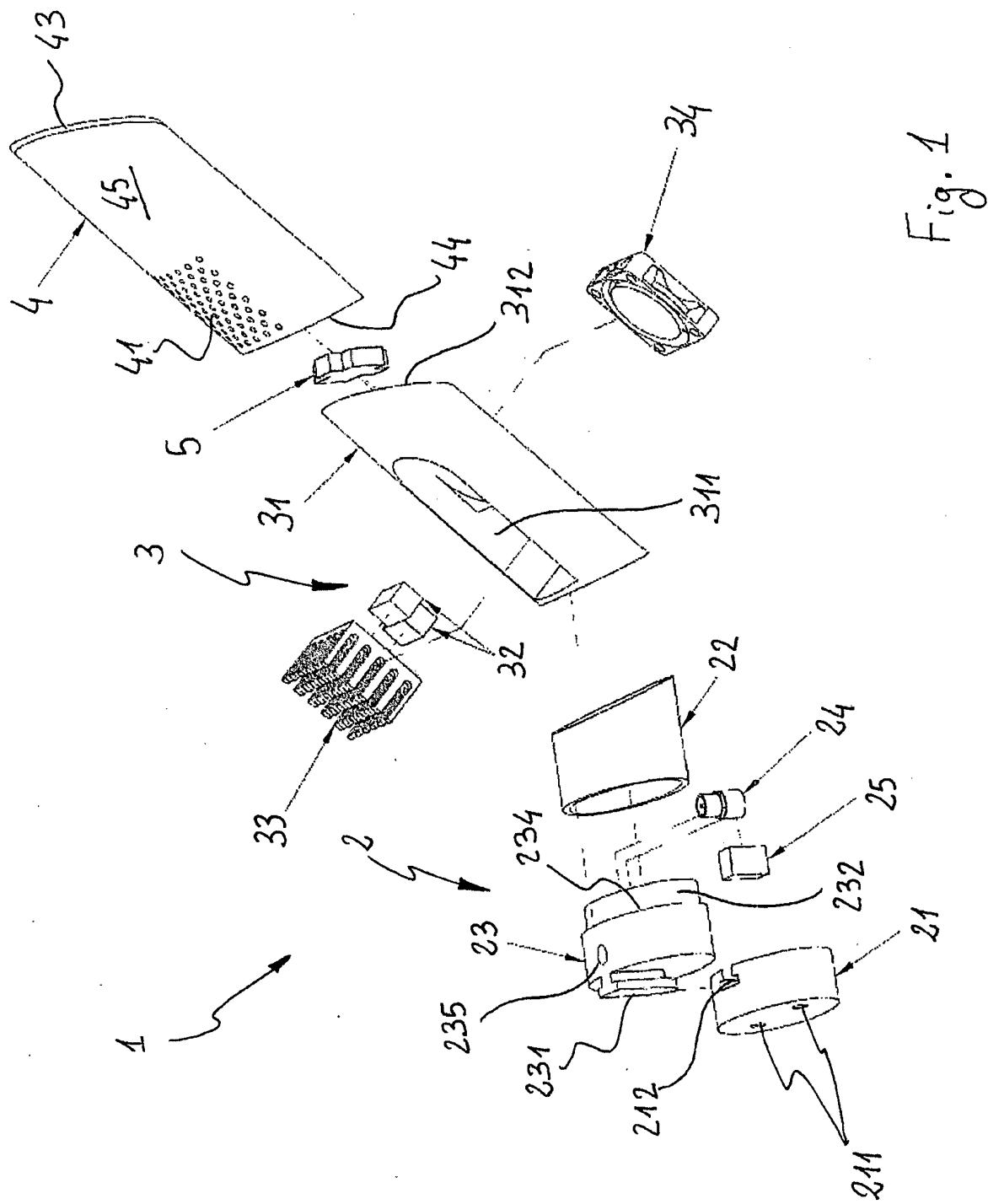


Fig. 1

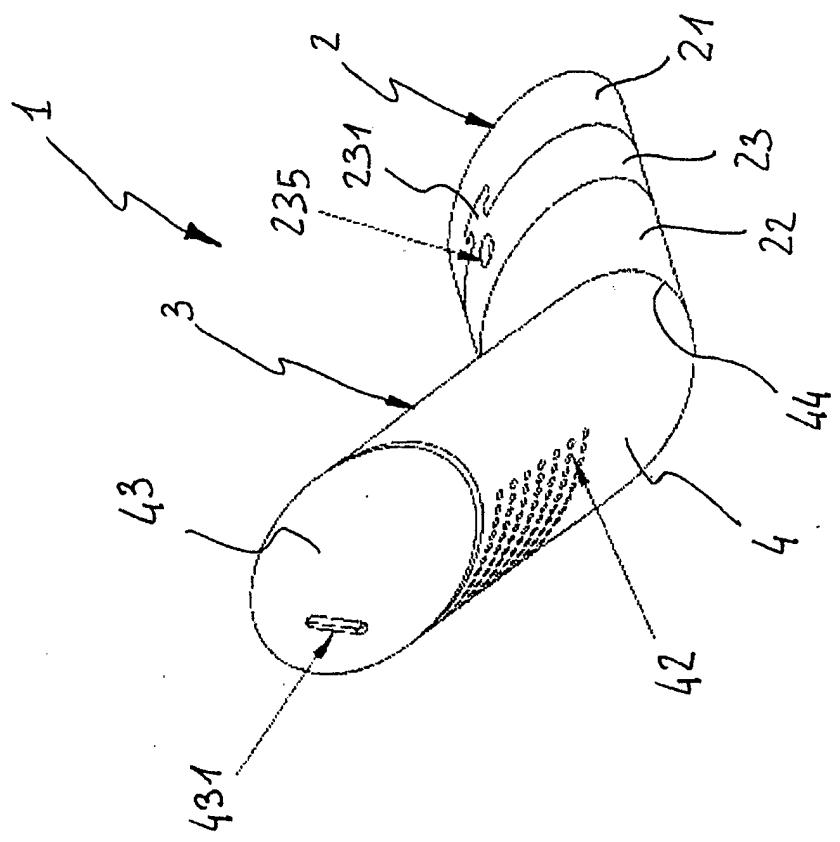


Fig. 2b

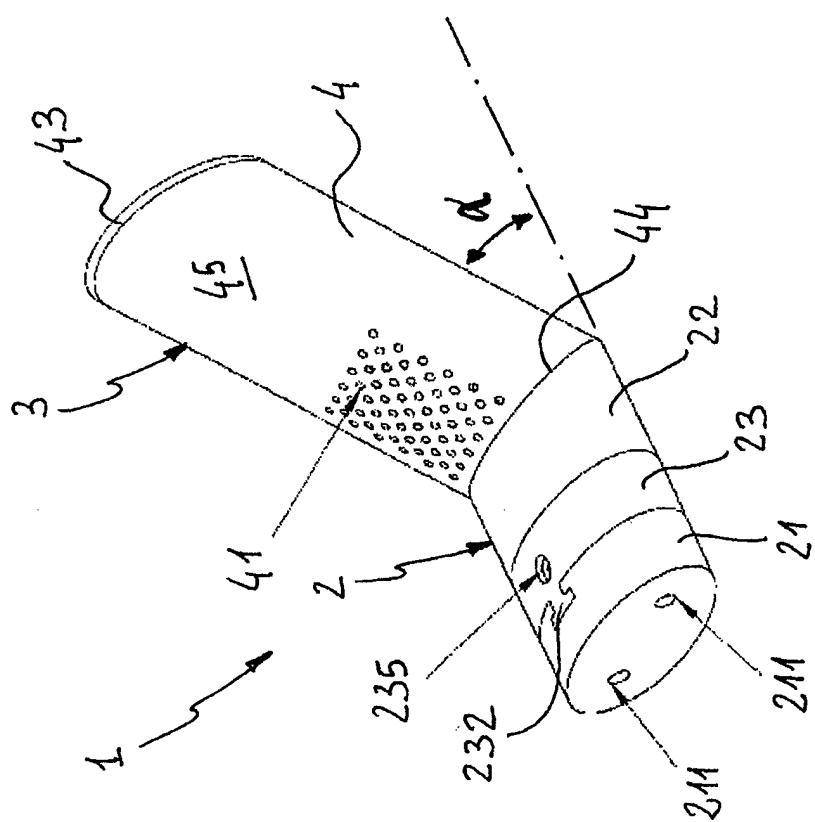


Fig. 2a

REFERENCES CITED IN THE DESCRIPTION

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