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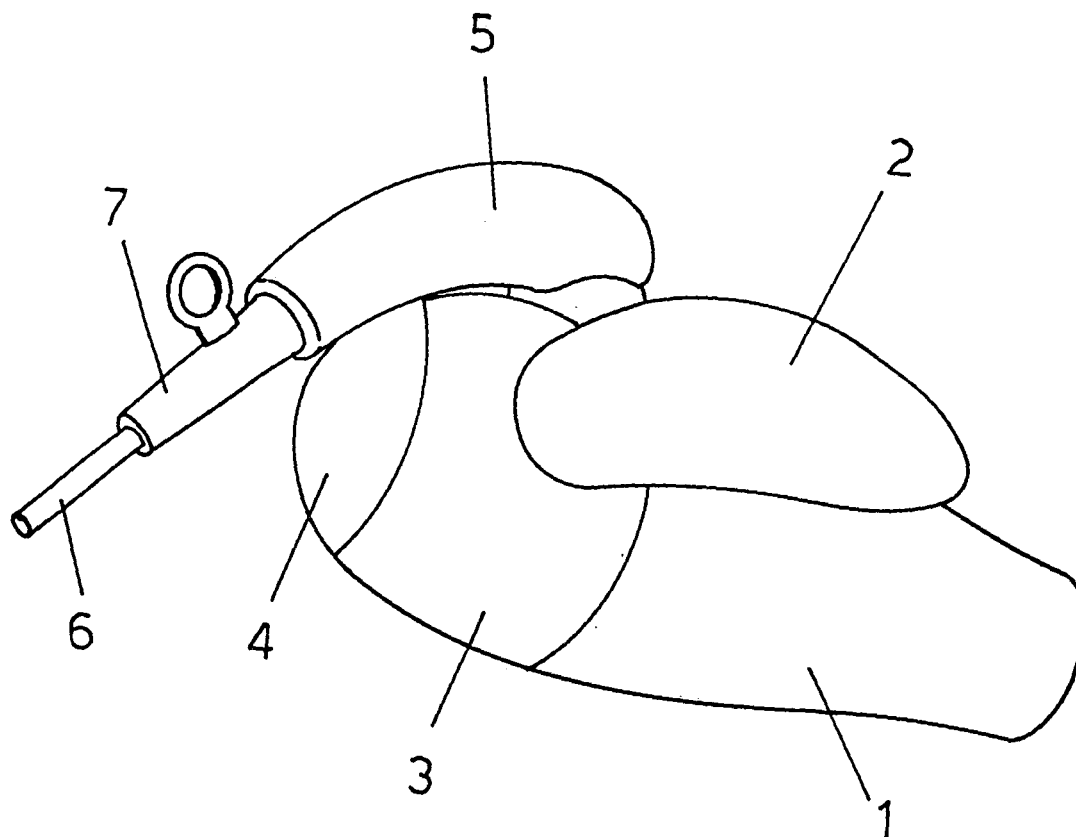
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(54) **Hairdryer**

(57) An ergonomically improved hairdryer construction comprises a blowing front body (1), a rotary middle

body (3), a handle-shape hilt element (2), a sucking rear body (4), and a variable position gripping portion (5).



**FIG 2**

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## Description

### BACKGROUND OF THE INVENTION

[0001] The present invention relates to an ergonomically improved hairdryer construction.

[0002] To provide an ergonomic hairdryer is very important in professional use by hairdressers who, as is known, must use said hairdryers for comparatively long periods of time, with a consequent weariness of their hands, shoulders and arms.

[0003] This problem is further enhanced by the fact that a professional hairdryer has necessarily a comparatively large weight, due to the requirement of providing a set performance and a long duration or life.

[0004] Conventionally, a professional hairdryer comprises a gun type of handle or gripping portion.

[0005] To properly handle or process hair, however, the hairdresser frequently directly grips on the body of the hairdryer.

[0006] To meet the above gripping requirement, hairdryers have been designed including a handle or gripping portion forming a variable angle with respect to the hairdryer body, or free of the conventional gun gripping portion and including a single-volume body also comprising the hairdryer controls therein.

[0007] However, the variable inclination handle of the above mentioned prior hairdryers has not been designed for reduce the hairdryer size, but for improving the ergonomic operation possibilities thereof.

### SUMMARY OF THE INVENTION

[0008] Accordingly, the aim of the present invention is to provide a hairdryer construction having an improved ergonomic configuration with respect to prior hairdryers, either with or without a hairdryer gripping portion or handle.

[0009] Within the scope of the above mentioned aim, a main object of the present invention is to provide such a hairdryer construction which can be easily and simply used by a hairdresser.

[0010] Yet another object of the present invention is to provide such an ergonomically improved hairdryer construction which can also be used by left-handed persons.

[0011] The above mentioned aim and objects, as well as yet other objects, which will become more apparent hereinafter, are achieved by an ergonomically improved hairdryer construction, characterized in that said hairdryer construction comprises a blowing front body, a rotary middle body, a handle-shape hilt element, a sucking rear body, and a variable position gripping portion.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0012] Further characteristics and advantages of the present invention will become more apparent hereinafter from the following disclosure of a preferred, though not

exclusive, embodiment of the invention, which is illustrated, by way of an indicative but not limitative example, in the accompanying drawings, where:

Figure 1 is a rear view of the hairdryer construction according to the invention;

Figure 2 is a perspective view of three quarters of the above hairdryer construction;

Figure 3 is a top plan view of that same hairdryer construction;

Figure 4 is a side perspective view of the hairdryer construction according to the invention;

Figures 5 to 7 are rear views of the hairdryer construction, illustrating several positions assumed by the hilt element during a step by step rotary movement of the middle body portion of the hairdryer.

### DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] With reference to the number references of the above mentioned figures, the hairdryer construction according to the invention comprises a blowing or blower front body 1, a rotary middle body 3, a hilt element 2, of handle configuration, a rear sucking body 4, a variable position gripping portion 5, an electric power cable 6 and related cable holder 7.

[0014] Figures 5 to 7 show, by way of an example, several positions assumed by the hilt element during the step by step rotary movement of the middle body portion of the hairdryer.

[0015] These three positions are doubled by providing the use by a left-handed person.

[0016] Figure 3 shows the mechanism for performing the step by step or snap rotary movement.

[0017] The middle section or portion 3, including the above mentioned hilt element 2, comprises a plurality of recesses 11, formed inside it and said portion overlaps an inner flange 9, including a plurality of pawls or pegs 10.

[0018] In this connection it should be pointed out that the elements 3 and 9 are made of a plastics material, the elastic properties of which allow to perform a step by step rotary movement, without a great friction between the parts.

[0019] The rear rotary section or portion, with its hilt wing or gripper portion, provides high ergonomic characteristics to the hairdryer construction according to the present invention.

[0020] More specifically, said rotary portion or section, overlapped by the hilt element, is clamped by screws or engaged by pressure or directly formed in a molding operation, and can be variably step by step turned, depending on an user hand size, and at will.

[0021] The mentioned hilt element has such a size and width adapted to allow an operator hand to be engaged thereinto.

[0022] Thus, the back of the operator hand can bear on the inner portion of the hilt element, whereas the operator hand palm will contact the hairdryer body, thereby

adapting the fingers to the switching pushbuttons or keys of the hairdryer, which control pushbuttons are suitably located.

**[0023]** Moreover, the above mentioned hilt element may also be used, in addition to the above disclosed mode of operation, as a latching means for engaging the hairdryer to a belt of the hairdresser, a carriage or a chair.

**[0024]** In order to stabilize the position of the hilt element and accordingly of the circular conic section where it is housed, a plurality of suitably arranged recesses are formed in the inner part.

**[0025]** Said recesses can be engaged with pawl or peg elements formed on a corresponding conical inner body, thereby allowing step by step movements to the desired positions.

**[0026]** While the hilt element section can be turned about the axis of the hairdryer body, it is longitudinally restrained.

**[0027]** This restraintment can be performed by a cut-out portion formed on the inner part of the hairdryer body.

**[0028]** It has been found that the invention fully achieves the intended aim and objects.

**[0029]** In fact, the invention has provided a hairdryer construction the rear rotary portion of which, provided with a hilt shape wing or handle, provides the hairdryer with very satisfactory ergonomic characteristics.

**[0030]** In practicing the invention, the used materials, as well as the contingent shape and size, can be any, depending on requirements.

## Claims

1. An ergonomically improved hairdryer construction, **characterized in that** said hairdryer construction comprises a front blowing body, a rotary middle body, a handle-shape hilt element, a rear sucking body and a variable position gripping portion.
2. A hairdryer construction, according to claim 1, **characterized in that** said hairdryer construction comprises an electric power cable and a related cable holder.
3. A hairdryer construction, according to claim 1, **characterized in that** said middle portion, including said hilt element, comprises a plurality of inner recesses, said middle portion overlapping an inner flange including a plurality of peg elements.
4. A hairdryer construction, according to claim 1, **characterized in that** said hairdryer construction is made of a plastics material having such elastic properties as to allow a step by step snap rotary movement without large frictions between the hairdryer construction parts.
5. A hairdryer construction, according to claim 1, **char-**

**acterized in that** said rotary body, including said hilt handle portion, provides said hairdryer construction with high ergonomic characteristics.

6. A hairdryer construction, according to claim 1, **characterized in that** said rotary portion, overlapped by said hilt element, is clamped by clamping screws or pressure engaged or directly molded and can be turned through a plurality of variable step positions, depending on an operator hand size and at will.
7. A hairdryer construction, according to claim 1, **characterized in that** said hilt element has such a width and size as to allow an operator hand to be engaged therein, a back of said operator hand bearing on an inner portion of the hilt element and said operator hand palm contacting the hairdryer body, so as to fit said operator hand finger to a plurality of push-button controls on said hairdryer construction.
8. A hairdryer construction, according to claim 1, **characterized in that** said hilt element is so constructed as to be used as a clamping means for clamping said hairdryer construction to a belt, a carriage or a chair.
9. A hairdryer construction, according to claim 1, **characterized in that**, for stabilizing a position of said hilt element and accordingly of a conic circular section where said hilt element is housed, a plurality of inner recesses cooperating with a plurality of peg elements formed on an inner conic body are provided, to allow a step by step movement to a plurality of desired operating positions.
10. A hairdryer construction, according to claim 1, **characterized in that** said hilt element is adapted to turn about an axis of said hairdryer body while being longitudinally restrained.
11. A hairdryer construction, according to claim 1, **characterized in that** said hairdryer construction comprises a cut-out portion in an inner part of said hairdryer construction body, to provide a restraintment portion.

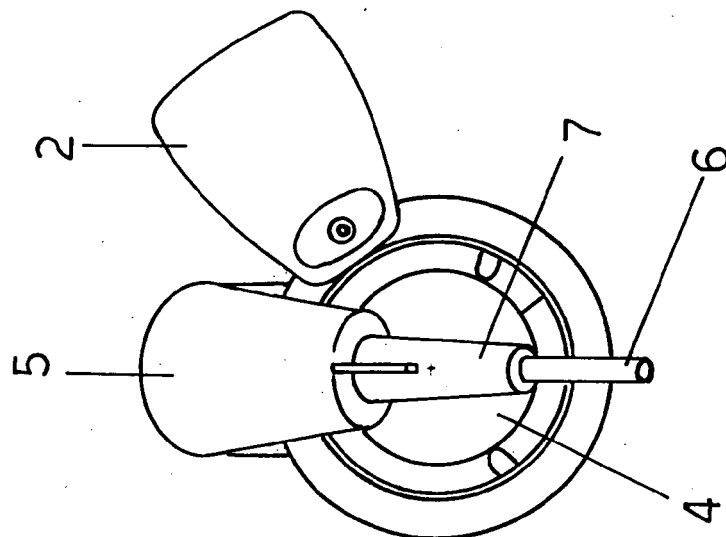


FIG 1

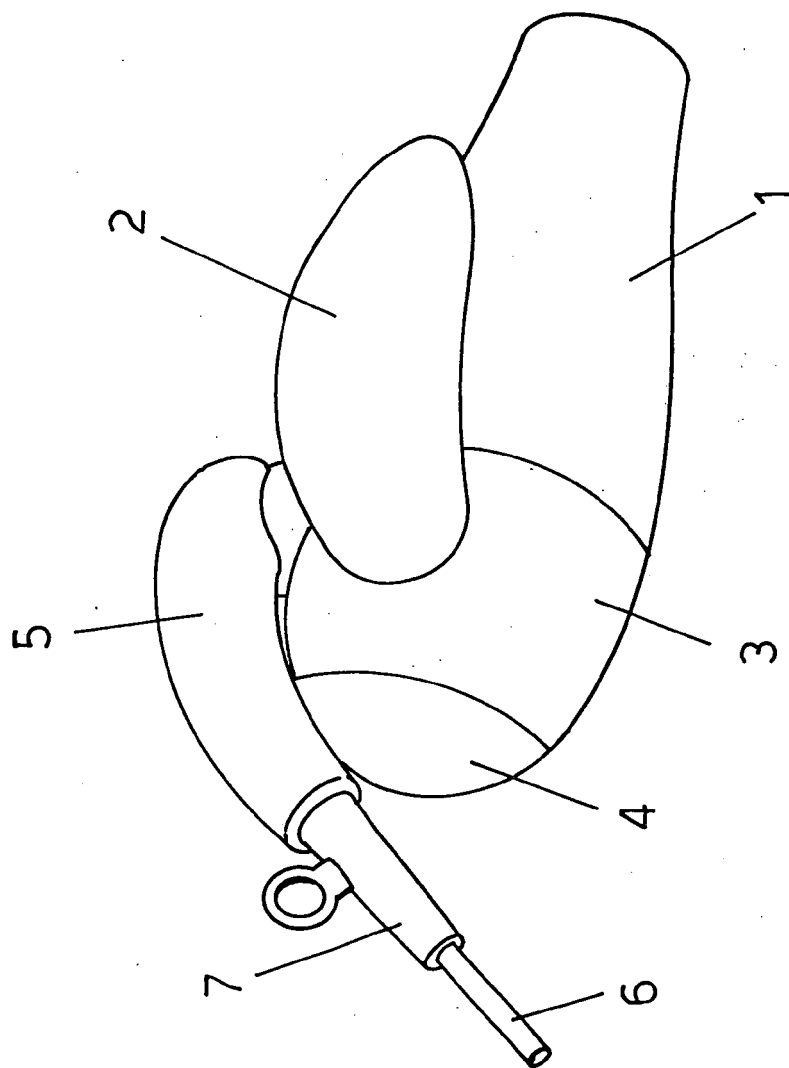


FIG 2

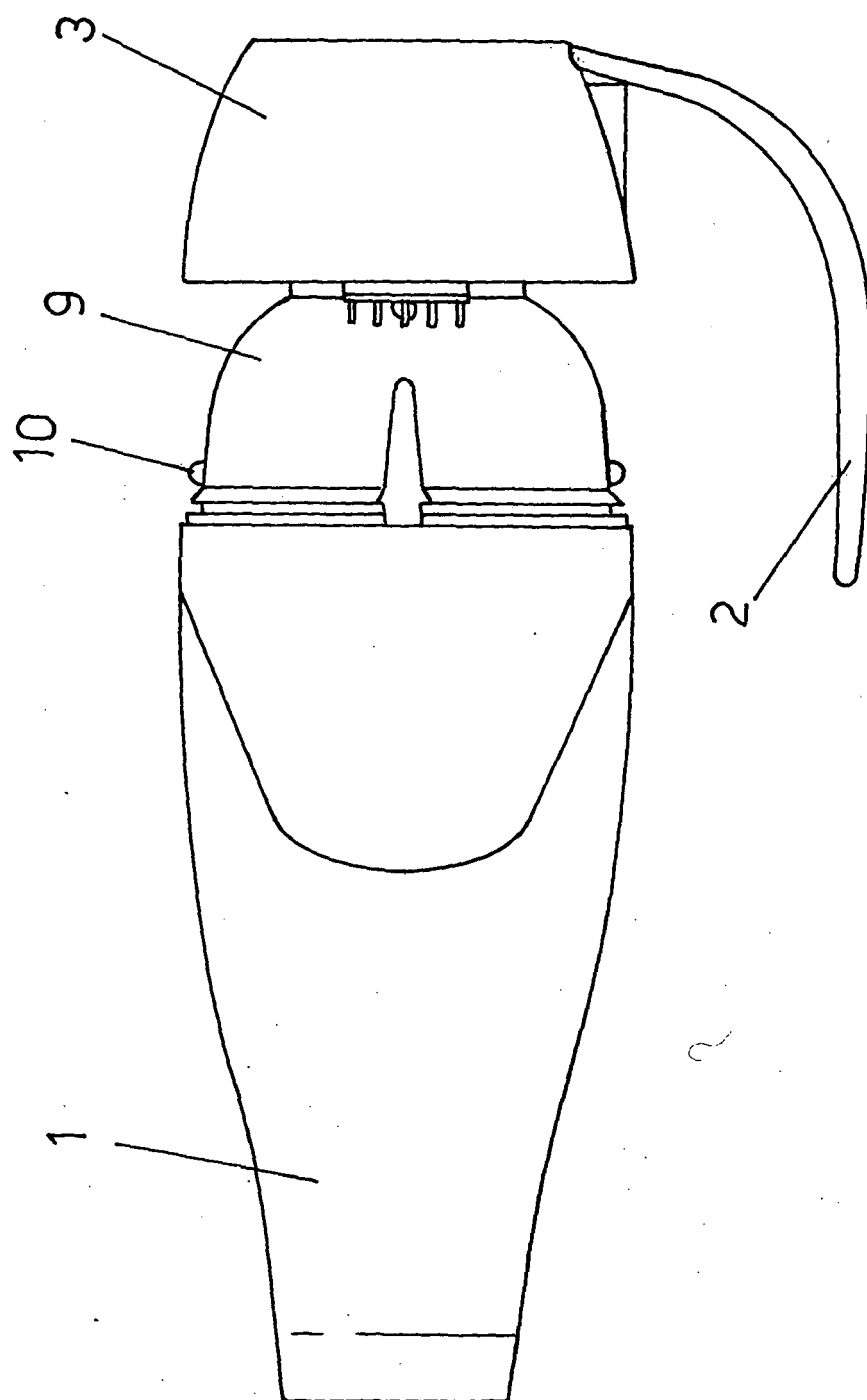


FIG 3

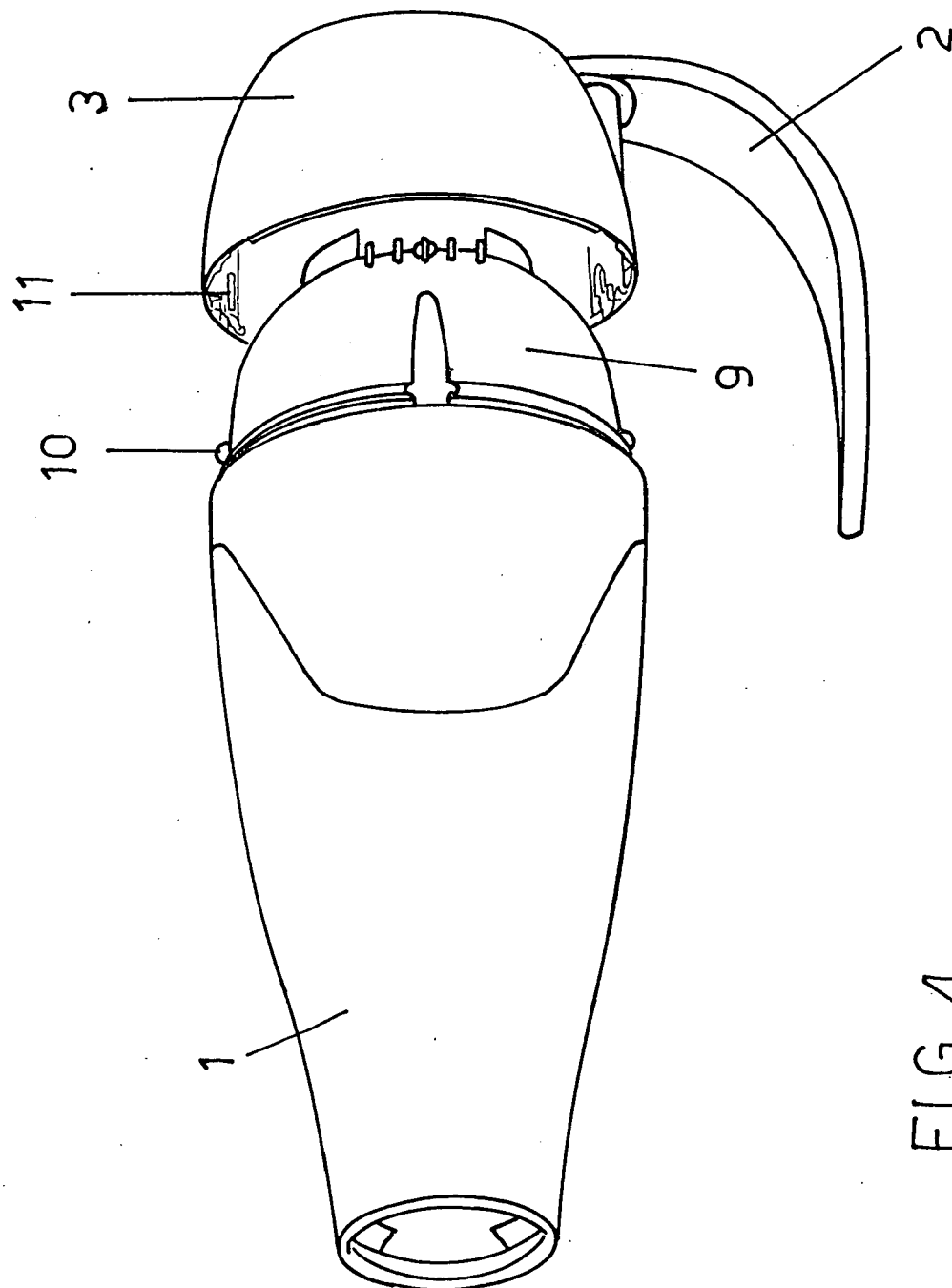


FIG 4

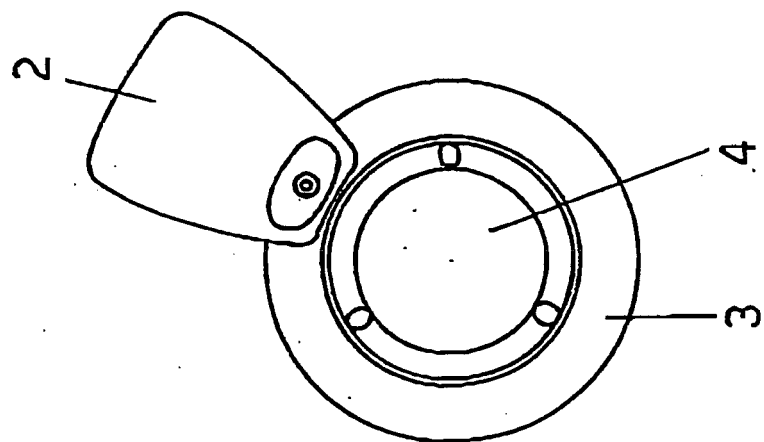


FIG 5

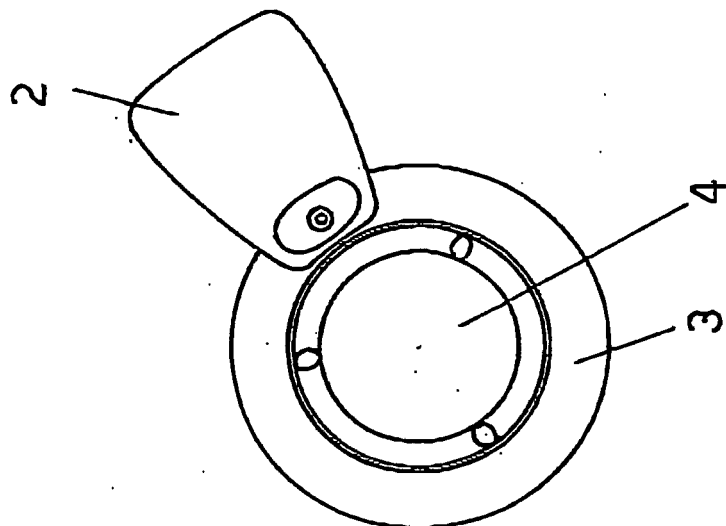


FIG 6

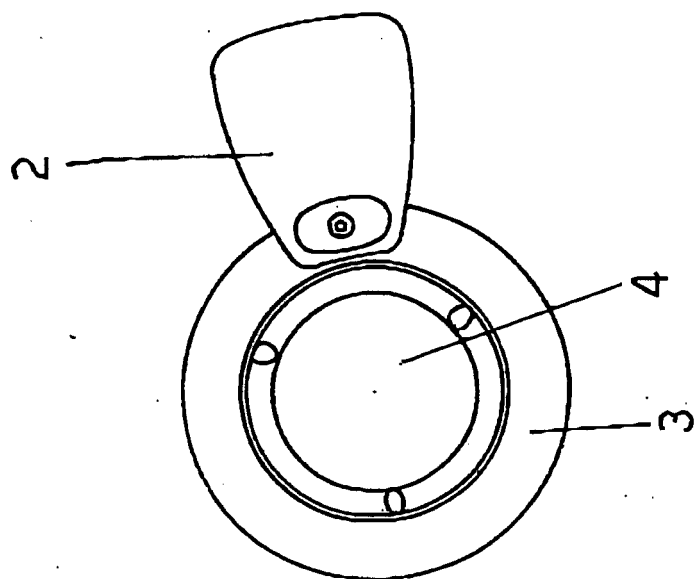


FIG 7