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Remarks:
Amended claims in accordance with Rule 86 (2) EPC.

(54) Tape dispenser with cover

(57) The present invention relates to a hand-held device (1) for transferring a film of adhesive, covering or colored material from a backing tape (13) onto a substrate, comprising a housing (2) having a main body (5) and a neck portion (6), the neck portion (6) being provided with a tip opening (10), through which a tip (11) of an application member (12) protrudes, wherein a cover (3) is provided on the neck portion (6), the cover (3) being moveable on the neck portion (6) from a first position in which the tip (11) of the application member (12) is uncovered to a second position in which the tip (11) of the application member (12) is covered, wherein the cover (3) comprises a first member (16) adapted to spirally move on the outer surface of the neck portion (6) and a second member (17) connected to the fist member

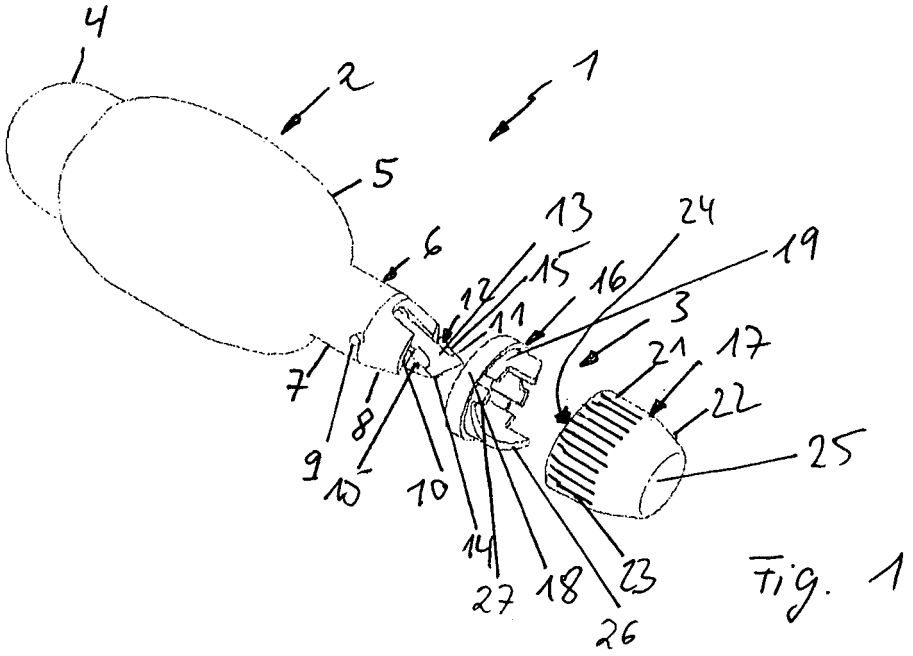

Fig. 1

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Description

[0001] The present invention relates to a hand-held device for transferring a film of adhesive, covering or coloured material from a backing tape onto a substrate according to the preamble of claim 1.

[0002] In prior art, correction tape applicators or applicators for adhesive tape or the like are known. Usually, these applicators comprise a housing and a tip of an application member protruding from the housing, whereby correction tape of the like is guided around this tip. Since correction tape or any other tape used for these type of applicators is very sensitive and the tip is always exposed to the ambience and, thus, to outside influences, it is very likely that the tape is injured or even ruptured, when the applicator is not in use and stored somewhere. Once such a tape ruptures, the entire applicator has to be thrown away. However, there exist some solutions to protect the tape from outside influences, when the applicator is not used. For example, a cap can be provided, which fits on the housing and which is put on the applicator after use. Using such a cap for protection has the disadvantage that it can easily get lost, and then the tip with the tape thereon is unprotected again. Moreover, the applicator is enlarged in size, when a cap is put on the housing, thus, rendering it inconvenient to store.

[0003] Another solution known from prior art is to provide a protection member directly on the housing, so that it cannot get lost. However, applicators equipped with this kind of protection means usually are hard to handle by a user.

[0004] Therefore, the present invention is based on the object to provide a hand-held device for transferring a film of adhesive, covering or coloured material from a backing tape onto a substrate, according to which the application member is reliably protected, when the device is not used, and which is easy to use for a user.

[0005] This object is solved by a hand-held device having the features of claim 1. Preferred embodiments of the invention are defined in the dependent claims.

[0006] According to the invention, a hand-held device for transferring a film of adhesive, covering or colored material from a backing tape onto a substrate is provided, comprising a housing. The housing is provided with a tip opening, through which a tip of an application member protrudes. A cover is provided, the cover being moveable on the neck portion from a first position in which the tip of the application member is uncovered to a second position in which the tip of the application member is covered.

[0007] According to the general idea of the present invention the cover is transferred between the first and the second position by rotating it relative to the housing.

[0008] To this regard the cover can e.g. be mounted directly or indirectly on the housing such that it spirals between the first and the second position.

[0009] Preferably the tip itself is not rotated when rotating the cover, but fixed in rotation vis-à-vis the housing.

[0010] E.g., the cover can comprises a first member adapted to spirally move on the outer surface of the neck portion and a second member connected to the fist member adapted to cover the tip of the application member in the second position.

[0011] By the above-mentioned construction of a hand-held device, the cover stays on the housing, even when the hand-held device is used, so that the cover which is intended to protect the tip, when the hand-held device is not in use, cannot get lost. The protection of the tip, moreover, is achieved in a very easy to handle manner in that the cover is moved from a first position in which the tip is uncovered to a second position in which the tip totally disappears inside a cavity formed by the cover, and, thus, is protected against outside influences.

[0012] Thereby the cover moves spirally on the outer surface of the neck portion, facilitating the handling for a user, who without any effort can grip the cover between his thumb and the index finger of one hand and move the cover by twisting it. To carry out the twisting motion in the manner described above is much easier for a user than it would be the case, if, e.g., a linear movement would have to be carried out to move the cover in a position to protect the tip. The cover smoothly slides on the surface of the cylindrical portion of the neck, whereby the spiral movement is guided by the two guiding members provided inside the first member of the cover.

[0013] Preferably, the outer circumference of the cylindrical portion of the first member is corrugated or provided with ribs or grip ribs, respectively. Thus, a user, whose finger tip and thumb tip rests on the outer circumference of the cylindrical portion of the cover to twist it in either direction for covering or for uncovering the tip of the application member, will not slide off the cover surface with his finger tips, when performing the twisting motion.

[0014] Further, the cover itself will not slide off the cylindrical neck portion of the hand-held device, since preferably at least one stop pin is provided on the neck portion, projecting from its circumference and restricting the spiral movement so that the cover cannot slip off the neck portion.

[0015] The present invention and further advantages, which can be achieved by the present invention, will now be explained in detail by means of a preferred embodiment with reference to the drawings in which

Fig. 1 shows an exploded view of the housing and the cover according to the present invention;

Fig. 2 shows a perspective view of the hand-held device according to the present invention, the cover being in the first position; and

Fig. 3 shows a perspective view of the hand-held device according to the present invention, the cover being in the second position.

[0016] Fig. 1 shows the hand-held device 1 according

to the present invention. The housing 2 and the cover 3 are illustrated separately in an exploded view. The housing 2 itself has three differently shaped portions: a rear portion 4 having a hemispherical shape, an intermediate portion or main body 5 having a rounded long-stretched or terete, shape, and a neck portion 6 provided at a front end of the hand-held device 1. The neck portion 6, moreover, is made up of two differently shaped portions: a cylindrical portion 7 adjacent to the main body 5 and a tapering portion 8, forming the outermost part of the front end of the housing 2.

[0017] Projecting from the surface of the cylindrical portion 7 positioned immediately before the transition from the cylindrical portion 7 to the tapering portion 8, there is provided a stop pin 9, against which the cover 3 will abut, when being twisted by a user, and, thus, will not come off the neck portion 6 of the housing 2. The tapering portion 8 only has a very slight taper and at the very front end of the tapering portion 8, there is provided a tip opening 10, through which the tip 11 of an application member 12 protrudes. A correction tape 13 being composed of a backing tape on the surface of which a film of covering material is applied is directed from the cavity formed inside the housing 2 to the application member 12, around an application edge 14 and back into the housing 2 again.

[0018] For safe guidance of the correction tape 13 around the tip 11 of the application member 12, the tip 11 has two opposite guiding wings 15, which extend on both sides therefrom substantially perpendicular to form a wall on both sides of the tip 11 such that the correction tape 13 cannot slip off, when the application edge 14 is moved on the surface of a substrate as, e.g., a sheet of paper. A recess 20 is formed in the tapering portion 8 of the neck portion 6. The recess 20 extends from the very front end of the tapering portion 8, where also the tip opening 10 is provided, towards the cylindrical portion 7. The recess 20 is arranged directly above the correction tape 13.

[0019] Inside the housing 2 or, in particular, in the cavity formed by the housing 2, a driving mechanism (not shown) is provided for supplying the correction tape 13 to the application member 12 and for taking up the used tape. The driving mechanism can be of any type, as long as the tape 13 is automatically supplied and taken up, when using the hand-held device 1 in that the application edge 14 is moved on a substrate.

[0020] Further, the cover 3 is illustrated in Fig 1, as already mentioned above. As can be seen from the drawing, the cover 3 comprises two main components: a lower cam or first member 16 and an upper cam or second member 17. The first member 16, in an assembled state of the hand-held device 1, is seated on the neck portion 6 of the housing 2. Moreover, the second member 17 is fixedly connected to the first member 16, when the hand-held device 1 is assembled. The first member 16 has a ring-shaped collar 18, the inner diameter of which is slightly larger than the outer diameter of the neck portion 6, so that it fits thereon relatively tight, but however, still has some positive allowance such that the cover 3 can be moved on the neck portion 6.

[0021] Two guiding member 19 are arranged on the inner circumference of the ring-shaped collar 18, substantially opposite to each other. Each guiding member 19 is formed with a trailing edge 26, which verges into a steep rising edge 27. Due to this configuration which, moreover, in an assembled state of the hand-held device 1, contacts the outer surface of the cylindrical portion 7 of the neck portion 6 and slides thereon, a spiral movement of the cover 3 on the outer surface of the cylindrical portion 7 is enabled and guided or controlled, respectively, when a user twists the cover 3.

[0022] The second member 17 of the cover 3 will now be described. The second member 17 substantially corresponds to the shape of the neck portion 6 of the housing 2, but, however, has slightly larger diameters such that it still fits and also can be moved on the neck portion 6. Thus, the second member 17 also has a cylindrical portion 21, the inner diameter of which is just slightly larger than the outer diameter of the cylindrical portion 7 of the neck portion 6, and a tapering portion 22, the inner diameter of which is just slightly larger than the outer diameter of the tapering portion 8 of the neck portion 6.

[0023] The surface of outer circumference of the cylindrical portion 21 of the second member 17 is corrugated such that grip rips 23 are formed thereon, to prevent the finger tip and/or thumb tip of a user, who holds the hand-held device 1 in his fingers, to slip off the cover 3, when he twists the cover 3 to cover or uncover, respectively, the application member 12. Here, the grip ribs 23 are provided over the entire surface of the cylindrical portion 21. However, it is also conceivable that they are only provided partially, e.g., just at two positions, where the user should place his finger tips or lengthwise, just covering a portion of the cylindrical portion 21, but still being provided around the entire circumference.

[0024] Moreover, the second member 17 has a first opening 22, which is adapted and sized to be slid over the first member 16 and a second opening 25, through which the tip 11 of the application member 12 protrudes, when the hand-held device 1 is being used.

[0025] Fig. 2 shows a perspective view of the hand-held device 1 according to the present invention, the cover being in the first position, and Fig. 3 shows a perspective view of the hand-held device according to the present invention, the cover being in the second position. With respect to Fig. 2 and Fig. 3, the operation of the hand-held device 1 will now be explained.

[0026] In Fig. 2, the cover 3 of the hand-held device 1 is in the first position, in which the tip 11 of the application member 12 is uncovered, so that the hand-held device 1 is ready for use. In this position, i.e., the first position of the cover 3, the tip 11 of the application member 12 protrudes through the second opening 25 of the cover 3. The cover 3 is in a retracted position here, since the collar 18 of the first member 16 abuts against the main body 5

of the housing 2 and the neck portion 6 of the housing 2 is totally overlapped by the cover 3, so that it cannot be seen from the outside.

[0027] After the user terminates using the hand-held device 1, he puts his index finger tip and his thumb tip on the cylindrical portion 21 of the cover 3 and simply twists the cover 3, e.g., 90 degrees (any angle is conceivable depending on the shape of the guiding members), whereby the cover 3 moves along the longitudinal axis L of the hand-held device 1 spirally around the outer circumference of the cylindrical portion 7 of the neck portion 6, on the surface of which the cover 3 slides. When the second position is reached, i.e., when the tip 11 of the application member 12 totally disappears in a cavity formed by the cover 3 and, thus, is completely covered and protected, the stop pin 9 prevents any further movements such that the cover could slip off the neck portion 6 of the housing 2. In this position, which also is an extended position of the cover 3, the hand-held device 1 can be carried along or stored, without any risk that the correction tape 13 gets injured or ruptured. Moreover, in this extended position, a part of the cylindrical portion 7 of the neck portion 6 is uncovered and, thus, visible here. To turn the cover 3 back to the first position, if a user wishes to use the hand-held device 1, it just has to be twisted into the opposite direction (as shown by the respective arrows in Fig. 2 and Fig. 3), whereas this movement is automatically stopped when the collar 18 abuts against the main body 5 of the housing 2. Thus, a reliable protection of the tip 11 carrying the correction tape 13 or the like is achieved by a very simple mechanism, which is very easy to handle for a user.

List of reference numerals

[0028]

1	hand-held device
2	housing
3	cover
4	rear portion
5	main body
6	neck portion
7	cylindrical portion
8	tapering portion
9	stop pin
10	tip opening
11	tip
12	application member
13	correction tape
14	application edge
15	guiding wing
16	first member
17	second member
18	collar
19	guiding member
20	recess
21	cylindrical portion
22	tapering portion
23	grip ribs
24	first opening
25	second opening
L	longitudinal axis

Claims

1. A hand-held device (1) for transferring a film of adhesive, covering or coloured material from a backing tape (13) onto a substrate,
comprising a housing (2) being provided with a tip opening (10), through which a tip (11) of an application member (12) protrudes,
wherein a cover (3) is provided,
the cover (3) being moveable relative to the neck portion (6) from a first position in which the tip (11) of the application member (12) is uncovered to a second position in which the tip (11) of the application member (12) is covered,
characterized in that
the cover (3) is transferable between the first and second position by rotating it relative to the housing.

2. A device according to claim 1,
wherein the cover comprises a first member (16) adapted to spirally move on the outer surface of a neck portion (6) of the housing and a second member (17) connected to the fist member (16) and adapted to cover the tip (11) of the application member (12) in the second position.

3. The hand-held device (1) according to claim 2,
characterized in that
the neck portion (6) has a cylindrical portion (7) and a tapering portion (8).

4. The hand-held device (1) according to claim 2 or 3,
characterized in that
at least one stop pin (9) is provided on the cylindrical portion (7).

5. The hand-held device (1) according to any of claims 1 to 4,
characterized in that
the first member (16) has a ring-shaped collar (18) and two guiding members (19) which are adapted to direct the spiral movement of the cover (3) on the surface of the neck portion (6).

6. The hand-held device (1) according to any of claims 1 to 5,
characterized in that
the cover (3) can be moved from the first position to the second position by twisting the cover (3).

7. The hand-held device (1) according to claim 6,

characterized in that
the cover (3) can be moved from the second position to the first position by twisting it in a direction opposite to the direction of moving it from the first position to the second position.

8. The hand-held device (1) according to any of claims 1 to 7,
characterized in that
the spiral movement is performed on the cylindrical portion (7) of the neck portion (6).

9. The hand-held device (1) according to any of claims 1 to 7,
characterized in that the second member (17) has a cylindrical portion (21) and a tapering portion (22).

10. The hand-held device (1) according to any of claims 1 to 8,
characterized in that
the second member (17) has a first opening (24) and a second opening (15), whereby with the first opening (24) it is slid on the first member (16) and the second opening (25) serves as a tip opening for the tip (11) of the application member (12).

11. The hand-held device (1) according to any of claims 1 to 9,
characterized in that
the first member (16) and second member (17) are fixedly connected to each other.

12. The hand-held device (1) according to any of claims 2 to 10,
characterized in that
a recess (20) is formed in the tapering portion (8) of the neck portion (6).

13. The hand-held device (1) according to any of claims 1 to 12,
characterized in that
the first position is an extended position.

14. The hand-held device (1) according to any of claims 1 to 13,
characterized in that
the second position is a retracted position.

15. The hand-held device (1) according to any of claims 1 to 14,
characterized in that
the tip (11) comprises an application edge (14) and two opposite guiding wings (15).

16. The hand-held device (1) according to any of claims 5 to 14,
characterized in that
the guiding members (19) each have a trailing edge (26).

17. The hand-held device (1) according to claim 15,
characterized in that
the trailing edge (26) verges into a steep rising edge (27) .

18. The hand-held device (1) according to any of claims 1 to 16,
characterized in that
at least a portion of the cylindrical portion (21) of the second member (17) is corrugated around the outer circumference.

Amended claims in accordance with Rule 86(2) EPC.

1. A hand-held device (1) for transferring a film of adhesive, covering or coloured material from a backing tape (13) onto a substrate,
comprising a housing (2) being provided with a tip opening (10), through which a tip (11) of an application member (12) protrudes,
wherein a cover (3) is provided,
the cover (3) being moveable relative to the neck portion (6) from a first position in which the tip (11) of the application member (12) is uncovered to a second position in which the tip (11) of the application member (12) is covered,
wherein

- the cover (3) is transferable between the first and second position by rotating it relative to the housing (2),
- the cover (3) is arranged at the outer surface of a neck portion (6) of the housing (2).

2. A device according to claim 1,
wherein the cover comprises a first member (16) on the outer surface of a neck portion (6) of the housing and a second member (17) connected to the first member (16) and adapted to cover the tip (11) of the application member (12) in the second position.

3. The hand-held device (1) according to claim 2,
characterized in that
the neck portion (6) has a cylindrical portion (7) and a tapering portion (8).

4. The hand-held device (1) according to claim 2 or 3,
characterized in that
at least one stop pin (9) is provided on the outer surface of the cylindrical portion (7), the stop pin (9) cooperating with the first member (16) of the cover (3).

5. The hand-held device (1) according to any of claims 1 to 4,

characterized in that
the first member (16) has a ring-shaped collar (18) and two guiding members (19) which are adapted to direct the spiral movement of the cover (3) on the surface of the neck portion (6) .

6. The hand-held device (1) according to any of claims 1 to 5,
characterized in that
the cover (3) can be moved from the first position to the second position by twisting the cover (3).

7. The hand-held device (1) according to claim 6,
characterized in that
the cover (3) can be moved from the second position to the first position by twisting it in a direction opposite to the direction of moving it from the first position to the second position.

8. The hand-held device (1) according to any of claims 1 to 7,
characterized in that
the spiral movement is performed on the cylindrical portion (7) of the neck portion (6).

9. The hand-held device (1) according to any of claims 1 to 7,
characterized in that the second member (17) has a cylindrical portion (21) and a tapering portion (22).

10. The hand-held device (1) according to any of claims 1 to 8,
characterized in that
the second member (17) has a first opening (24) and a second opening (15), whereby with the first opening (24) it is slid on the first member (16) and the second opening (25) serves as a tip opening for the tip (11) of the application member (12).

11. The hand-held device (1) according to any of claims 1 to 9,
characterized in that
the first member (16) and second member (17) are fixedly connected to each other.

12. The hand-held device (1) according to any of claims 2 to 10,
characterized in that
a recess (20) is formed in the tapering portion (8) of the neck portion (6).

13. The hand-held device (1) according to any of claims 1 to 12,
characterized in that
the first position is an extended position.

14. The hand-held device (1) according to any of claims 1 to 13,
characterized in that
the second position is a retracted position.

15. The hand-held device (1) according to any of claims 1 to 14,
characterized in that
the tip (11) comprises an application edge (14) and two opposite guiding wings (15).

16. The hand-held device (1) according to any of claims 5 to 14,
characterized in that
the guiding members (19) each have a trailing edge (26).

17. The hand-held device (1) according to claim 15,
characterized in that
the trailing edge (26) verges into a steep rising edge (27).

18. The hand-held device (1) according to any of claims 1 to 16,
characterized in that
at least a portion of the cylindrical portion (21) of the second member (17) is corrugated around the outer circumference.

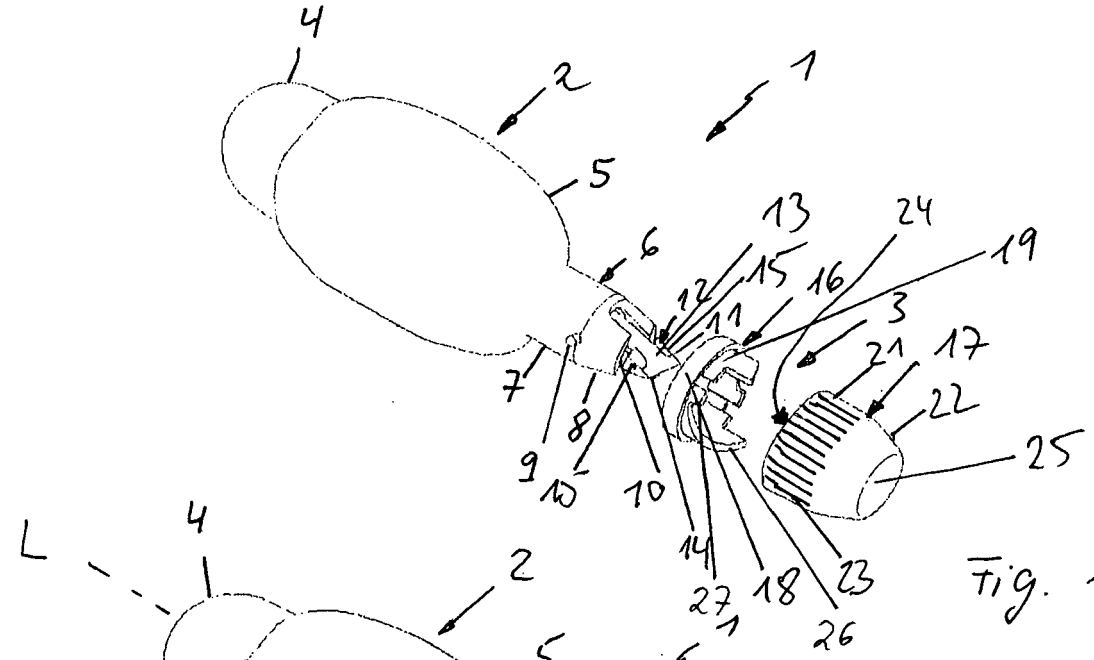

Fig. 1

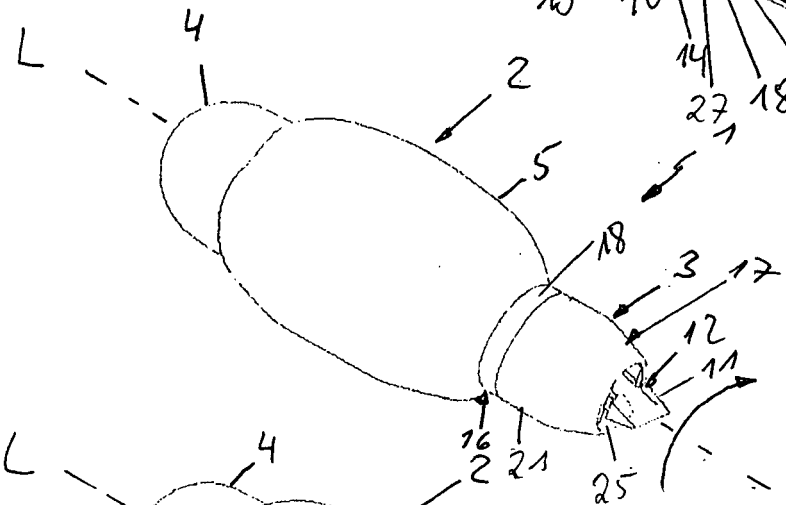

Fig. 2

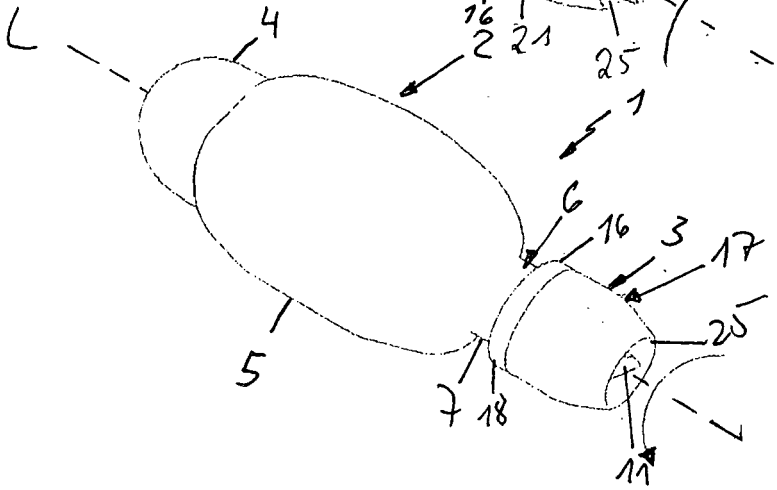

Fig. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 06 00 0113

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12, 5 December 2003 (2003-12-05) & JP 2005 001850 A (TOMBOW PENCIL CO LTD), 6 January 2005 (2005-01-06) * abstract * -----	1-11, 13-15,18	INV. B65H37/00
			TECHNICAL FIELDS SEARCHED (IPC) B65H

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	31 May 2006	Raven, P

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 06 00 0113

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2005001850 A	06-01-2005	NONE	

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