



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 976 574 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
02.02.2000 Bulletin 2000/05

(51) Int. Cl.⁷: **B42D 5/00**

(21) Application number: **99111121.2**

(22) Date of filing: **08.06.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(71) Applicant: **MAKE S.r.l.**
20095 Cusano Milanino (MI) (IT)

(72) Inventor: **Paciello, Roberto**
39100 Cassano d'Adda (MI) (IT)

(30) Priority: **31.07.1998 IT PC980017 U**
26.02.1999 IT PC990006 U

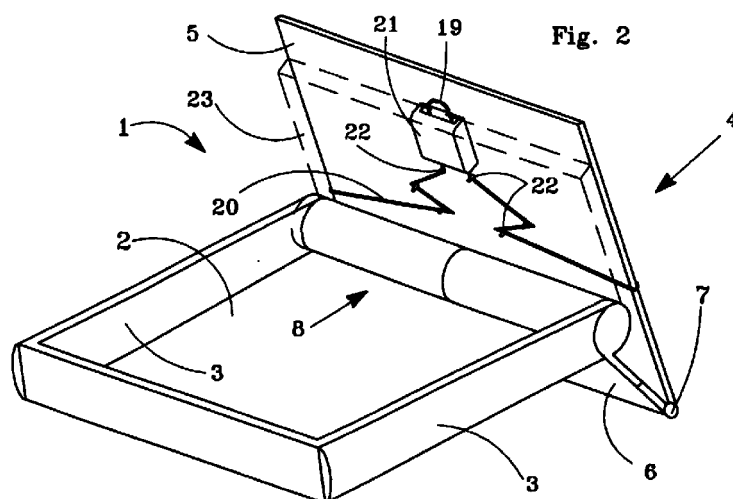
(74) Representative:
La Ciura, Salvatore
Via Francesco Sforza 3
20122 Milano (IT)

(54) **Box-type desk container, in particular for notepads, paper clips, staples and the like**

(57) Desk container, in particular for notepads, paper clips, staples and the like, comprising a roughly box-shaped container (2) and a lid (4).

The said lid is subject to the action of elastic systems (17) which, on opening, cause said lid and said container to rotate the one with respect to the other, so that the lid rests on the desk top and raises the rear part of the container.

The lid is divided into two(5,6) parts hinged to one another, one of which is hinged to the said base in such a way as to counteract elastic systems (17), while the other presents a closing assembly consisting of suitably shaped elastic arms or the like, designed to engage the walls of the container and keep the lid in the closed position, counteracting the said elastic systems.



EP 0 976 574 A1

Description

[0001] This application relates to a desk container designed especially to contain notepads such as the type called "POST-IT"®, paper clips, staples and the like, as well as small instruments like calculating machines, or money-change calculators, said container being provided with a lid which can also be the leaning base and means apt to place the box-type container in a vertical position, so as to be used also as a desk container. In particular said box could constitute a support element for a display, photos, clocks, thermometers, or any other object which must lie and be kept in a vertical position.

[0002] The purpose of this invention is to provide a desk container specifically designed to contain items of stationery, and in particular notepads or paper, paper clips, staples and the like, which comprises a simplified opening and closing system and a special articulated lid which, when opened, places the container in an inclined position, with the rear section raised.

[0003] A further purpose of the invention is to offer a container a container provided with a lid which can also be the bearing support and in which the use in a vertical position of the container is automatically reached, simply by operating on releasing means.

[0004] In particular the invention refers to a box-type container provided with a lid divided in two different halves hinged to one another, one of which is constrained to a wall of the container and comprises a spring rotation device, while the other one comprises closing means constituted by elastic arms designed to elastically engage the walls of the container to keep the lid in a close position.

[0005] The spring rotation device first rotates from the lid engaged to the bottom, then it rotates with respect to the lid, so as to the bottom itself places in a vertical position in order to allow the inner half and the contained item to be shown.

[0006] The invention will now be described in details in the following description, given by way of example but not of limitation, and reference is made to the drawings:

- figure 1 schematically shows a lateral view of the container in the open position;
- figure 2 schematically shows a perspective view of the container in the open position;
- figures 3 and 4 schematically illustrate the operation of the lid release mechanisms;
- figure 5 schematically shows a perspective view of the invention in the closed position;
- figure 6 is the schematic and perspective view of the container shown in a first opening movement;

- figure 7 is a view of the container shown in further opening movement;
- figure 8 is the container in accordance with the invention seen in a working use with the lid used as a basis;
- figure 8 is an exploded view of the lid opening and rotating devices.

[0007] By reference to the annexed figures, n. 1 indicates the container in accordance with the invention, comprising a hollow body 2 with a pair of lateral walls 3, and a lid 4 comprising two parts, 5 and 6.

[0008] The two parts of the lid are connected by a hinge 7, and are different sized: preferably the one indicated with number 6 is not so long as the other indicated with number 5.

[0009] The half 6 of the lid is connected to the base by a joint device 8, which, as seen in figure 9, is made of substantially cylindrical elements 9 and 10.

[0010] The first of said cylindrical elements is fastened to one of the lateral walls 3 of the container, by the engagement of a polygonal projection or the like 11, which is inserted in a corresponding hole 12 of the wall 3, while the second one is fitted in a hollow cylindrical cavity 13, in the half 6 of the lid.

[0011] Both the cylindrical elements are hollow and have clips 14 and 15 inside, the ends of said clips being provided with cuttings 16 wherein the bent ends of a spring 17 are inserted.

[0012] The other half of the lid comprises a catch assembly 18 that allows the lid to close on the base.

[0013] This catch assembly consists of a clip 19 integral with a set of elastic operating arms 20 which have a symmetrical angled shape and are joined in the middle to form a U-shaped projection that constitutes the said clip 19.

[0014] The latter is inserted in a hollow casing 21 fitted on the inside of the lid. Clip 19 can be moved backwards and forwards, sliding inside casing 21.

[0015] Arms 20 are made of a number of consecutive sections fitted at an angle to one another; fixed pins 22, which act as positioning and guide elements during the movement of the arms, are fitted at each angle.

[0016] The elastic force of the arms normally causes them to take up a position with the ends projecting from the sides of the lid, so that they are inserted in the corresponding housings in the side walls of the container to keep the lid in the closed position.

[0017] When clip 19 is pushed backwards in the direction indicated by arrow F in figure 4, arms 20 slide round pins 22, taking on the configuration shown in figure 4, and fully retract inside the lid, which is thus released and moves into the open position.

[0018] A panel 23 (fig. 2) fixed to lid 8 prevents the arms from exiting from their seatings.

[0019] As can be seen from the figures, when the con-

tainer is in the closed position it presents a normal, roughly parallelepiped-shaped box configuration, whereas in the open position, which is obtained simply by pressing elastic clip 19 with the finger from the outside, the container clicks backwards as a result of the action of spring 17 and takes up the position shown in figures 1 and 2.

[0020] In the open position, base 2 of the box is inclined, and supported by part 6 of the lid. In practice, the lid holds the rear side of the base in the raised position, resting on the wall of hinge 7.

[0021] The inclined position of the base facilitates use of the container because it faces towards the person sitting at the desk, who will therefore find it easier to take objects from it and to write on sheets of paper or notepads.

[0022] Moreover the particular hinge system of the lid allows to use the container e.g. by lying the lid on a desktop and lifting the containing body 2 so as it can be placed in a vertical position in order to be used as a support for photos, or the like.

[0023] The opening of the container consists of two different stages:

- in the first one, shown in figure 6, after the release of the closing means the part 6 of the lid rotates with respect to the body 2, and the half 5 of the lid slides on the desktop starting to rise a side of the container;
- in the second stage, shown in figures 7 and 8, the spring 17, at the end of the rotation of the halves 5 and 6 of the lid, acts on the container, making it to rotate to its complete rising towards a substantially vertical position.

[0024] The second stage starts when the half of the base 6 reaches, through rotation, its maximum rotation angle with respect to the half 5, so the remaining angular push of the spring is used to make the body of the container rotate.

Claims

1. Desk container, in particular for notepads, paper clips, staples and the like, as well as for small instruments like calculating machines, or money-change calculators, comprising a roughly box-shaped container (2) and a lid (4), the said (4) lid being subject to the act of elastic means (17) which, on opening, cause it to rotate to a position in which it rests on the desk top and raises the rear part of the container.
2. Desk container in accordance with claim 1, wherein the said lid (4) comprises two parts, hinged to one another.

3. Desk container in accordance with the preceding claim, wherein the said lid (4) is divided into two parts (5, 6) hinged to one another, one of which (6) is hinged to the said container (2) in such a way as to counteract elastic systems (17), while the other one presents a closing assembly (18) consisting of suitably shaped elastic arms (20) or the like, designed to engage the walls of the container and keep the lid in the closed position, counteracting said elastic means.

4. Desk container in accordance with claim 2, comprising base (2) and a lid (4), the said lid hinged fixed to the base by means of a hinge assembly (19) made of roughly cylindrical elements (9 and 10), one of which engages integral the base and the other the lid, and both of which are subject to the action of a coil spring (17).

5. Desk container in accordance with claim 4, wherein one part (5) of the lid comprises a catch assembly (19, 20, 22) which enables the lid to close on the base.

6. Desk container in accordance with claim 5, wherein the said catch assembly is constituted by elastic arms (20), fitted at an angle to one another around pins (22), and having a symmetrical shape which, in the middle part, forms a projection or U-shaped clip (19), inserted in a hollow casing (21) fitted on the inside of the lid.

7. Desk container in accordance with claim 6, wherein the sliding movement of the said clip (19) causes the rotation and movement of arms (20) around pins (22), so as to retract the ends of the arms into the lid and thus release the lid from the body of the container.

8. Desk container comprising a base or lid (4) and a box-shaped container (2), characterised in that said lid (4) constitutes a leaning basis, and elastic means (17) are provided, which bring said container (2) in a substantially vertical position when opening said lid, said lid being made of two halves (6, 5) hinged each other, the first one of which is hinged to a side of the container (2), the other comprises locking means apt to keep the lid in a closed position.

9. Box-type container or container in accordance with the preceding claim, characterise by the fact that said rotating device of the lid is made of cylindrical elements (9, 10) the first of which (9) is fitted to a lateral wall of the container by the engagement of a polygonal jut (11) or the like that is inserted in a corresponding hollow seating (12) of the wall, while the second one (10) is inserted in a hollow cylindrical

cavity provided in the lid, both the said cylindrical elements being hollow and comprising inner clips (16) or the like that engage the bent ends of a spring (17) or the like.

5

10

15

20

25

30

35

40

45

50

55

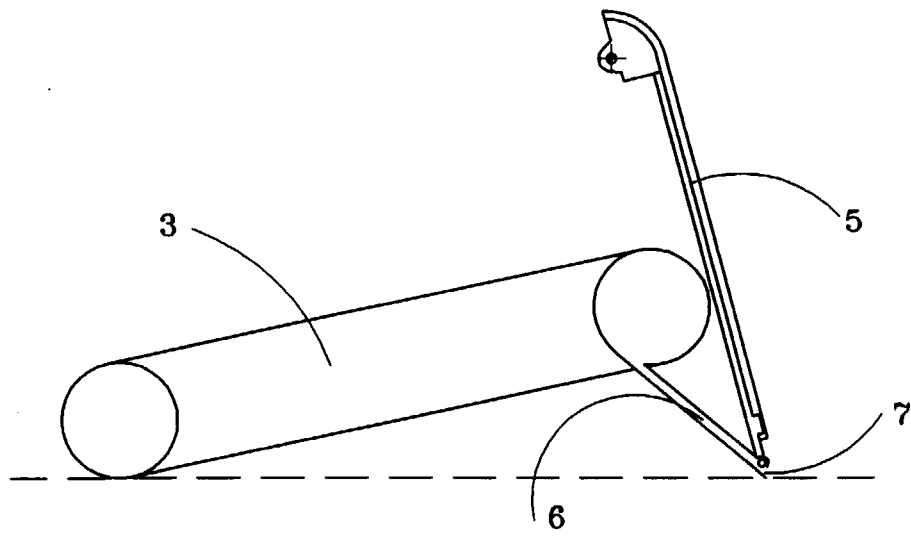


Fig. 1

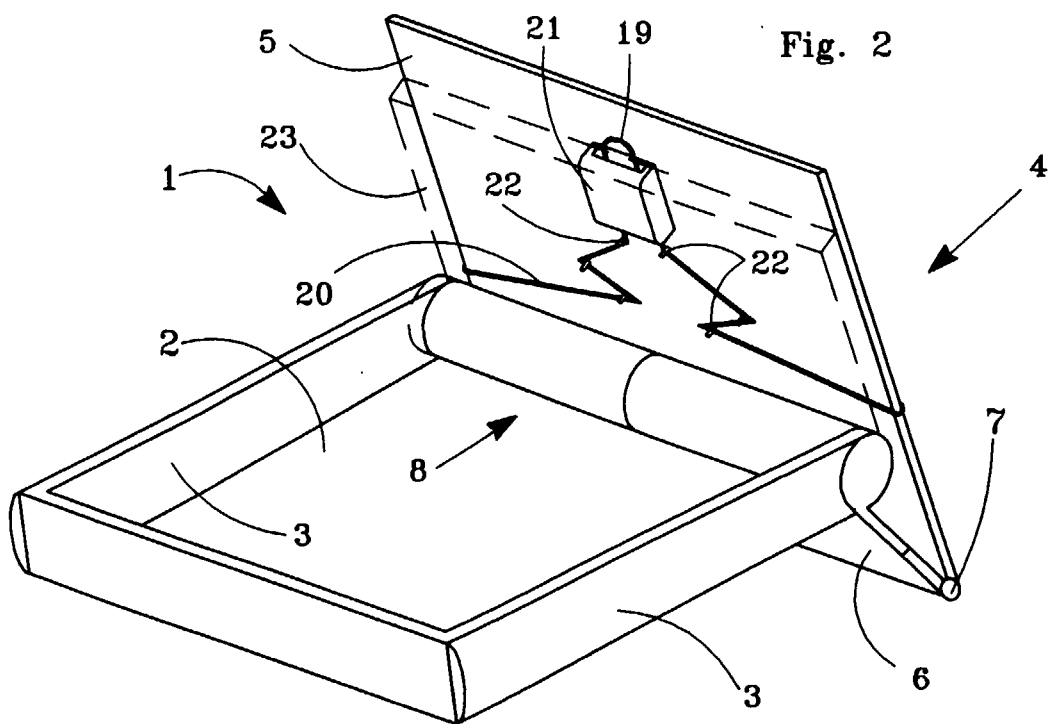


Fig. 2

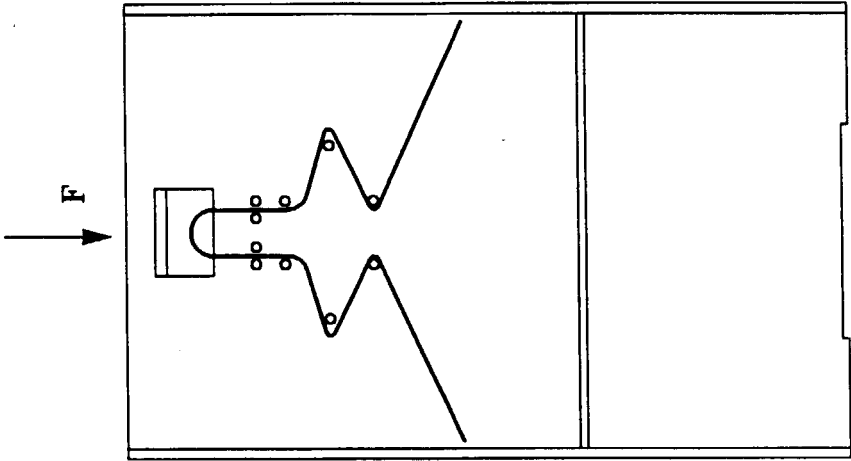


Fig. 4

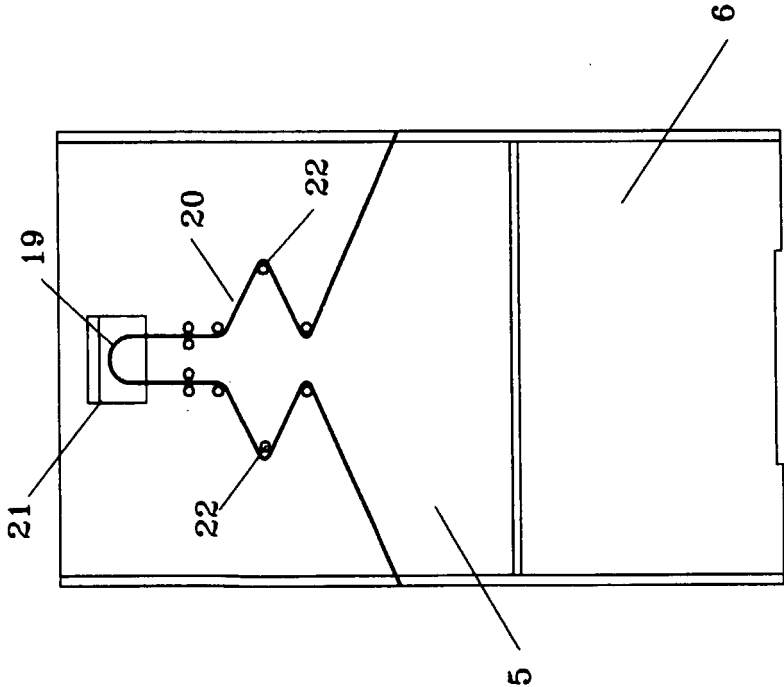
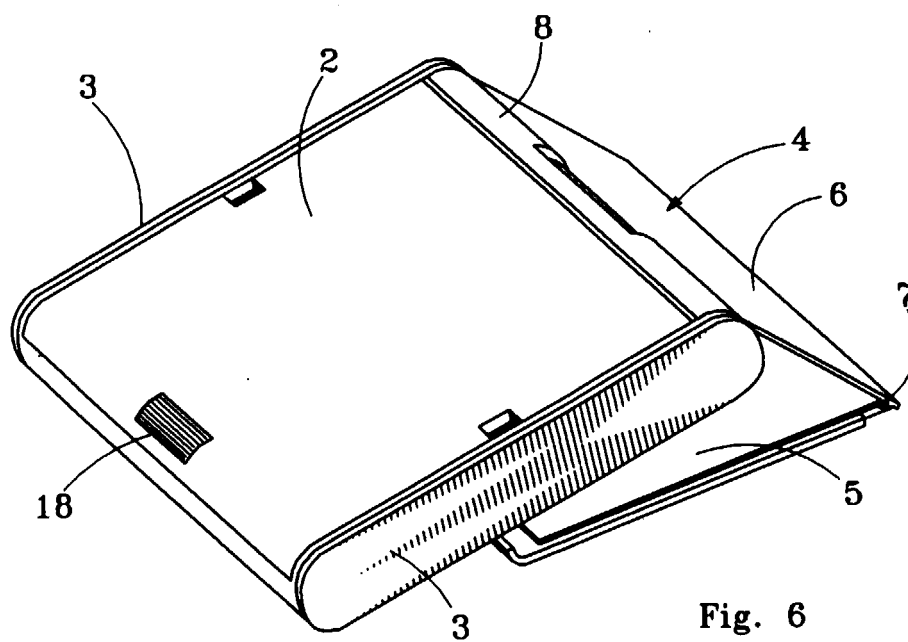
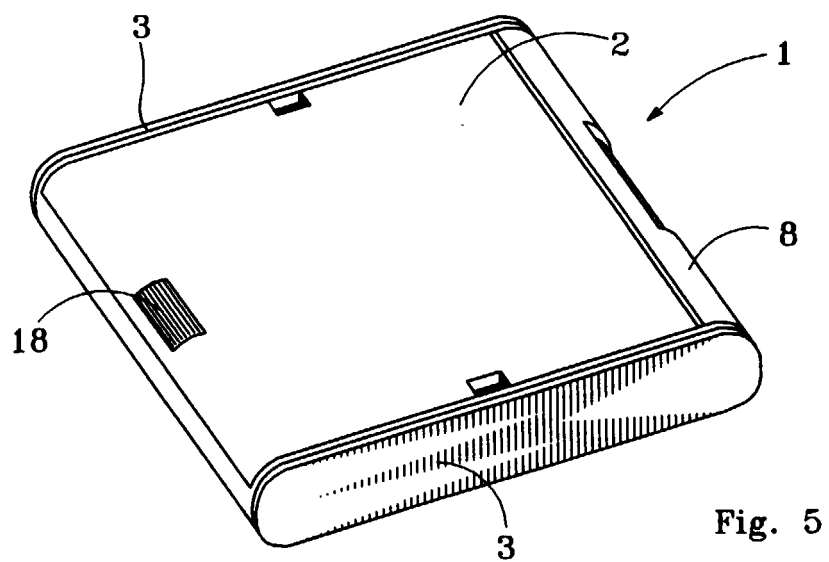


Fig. 3



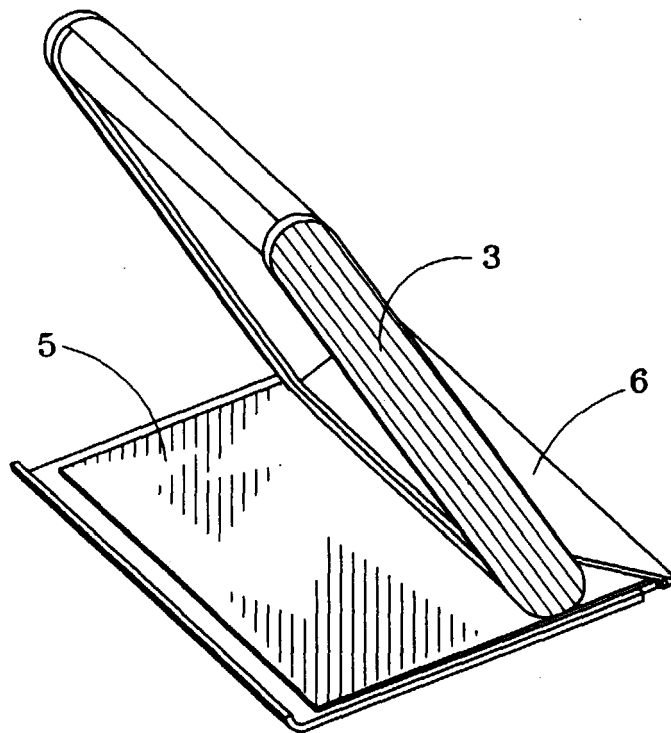


Fig. 7

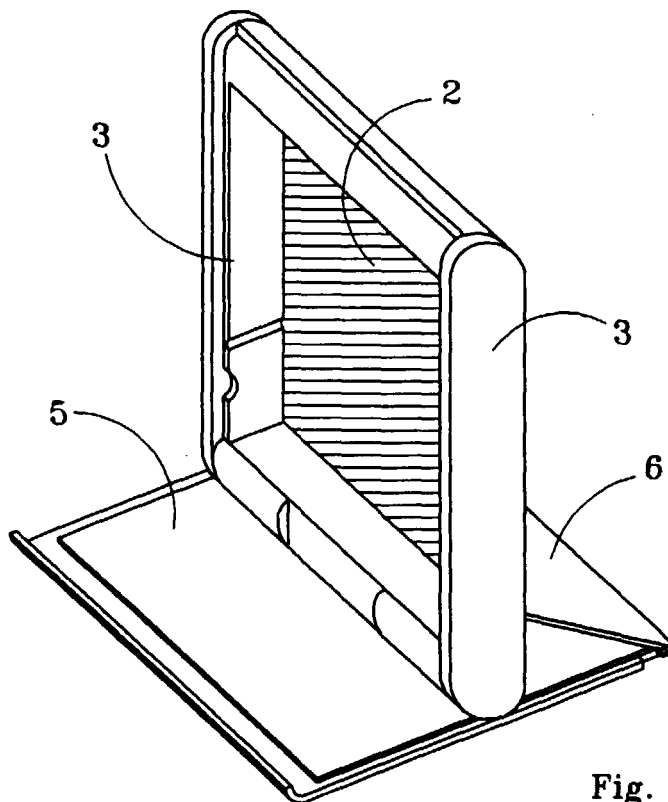


Fig. 8

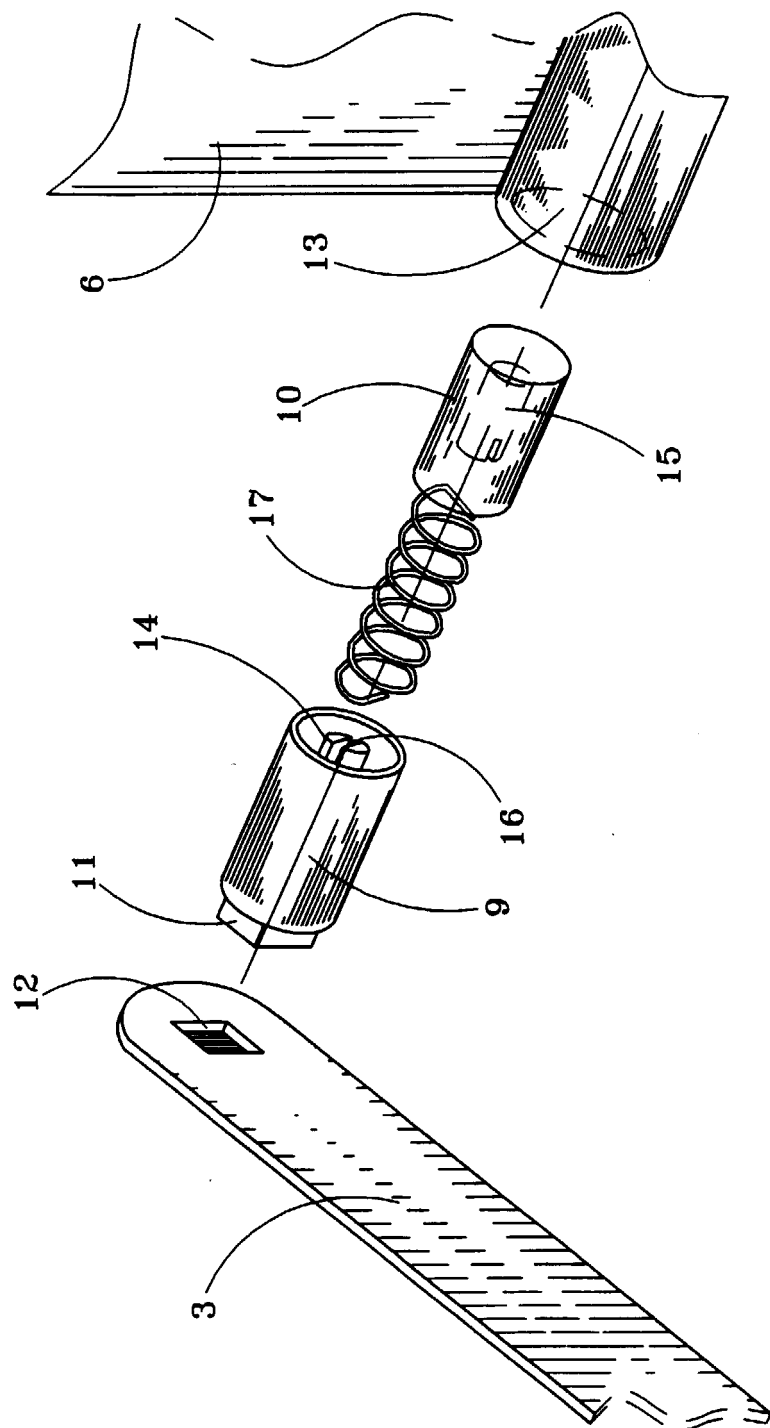


Fig. 9



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 11 1121

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	GB 843 969 A (PEARCE) * page 2, line 15 - page 3, line 15; figures 1-8 *	1,8	B42D5/00
A	US 4 981 386 A (BELECKIS) 1 January 1991 (1991-01-01) * column 2, line 57 - column 5, line 25; figures 1-3 *	1,8	
A	PATENT ABSTRACTS OF JAPAN vol. 4, no. 138 (P-029), 27 September 1980 (1980-09-27) & JP 55 089777 A (RHYTHM WATCH), 7 July 1980 (1980-07-07) * abstract *	1,8	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B42D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 November 1999	Examiner Evans, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 11 1121

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-11-1999

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 843969	A		NONE	
US 4981386	A	01-01-1991	NONE	
JP 55089777	A	07-07-1980	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82