(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 589 497 A1

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
08.05.2013 Bulletin 2013/19

(21) Application number: **11800228.6**

(22) Date of filing: **29.06.2011**

(51) Int Cl.:
B42B 5/12 *(2006.01)* ***B42F 3/06*** *(2006.01)*
B42D 1/06 *(2006.01)*

(86) International application number:
PCT/ES2011/070473

(87) International publication number:
WO 2012/001204 (05.01.2012 Gazette 2012/01)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **30.06.2010 ES 201030694 U**

(71) Applicant: **Artes Graficas De Yecla, S.L.**
30510 Yecla (Murcia) (ES)

(72) Inventor: **GARCIA GIL, Miguel**
E-30510 Yecla (Murcia) (ES)

(74) Representative: **Carpintero Lopez, Francisco**
Herrero & Asociados, S.L.
Alcalá, 35
28014 Madrid (ES)

(54) **ASSEMBLY FOR SECURING A COVER TO A DOUBLE SPIRAL NOTEBOOK**

(57) The present invention relates to an assembly for securing a cover (10) to a double spiral notebook (11), comprising:
a long flat base (2) from which a longitudinal row of pairs of inverted L-shaped hooks (3) facing one another extends, where the separation between the pairs of hooks (3) allows a double spiral (11) to rest longitudinally on the surface of the base (2), and the base (2) comprising attachment means (4) for attaching to the spine of the cover (10); and
a securing rod (8) configured to be housed underneath the row of pairs of hooks (3) such that the double spiral (11) is trapped between the rod (8) and the base (2).

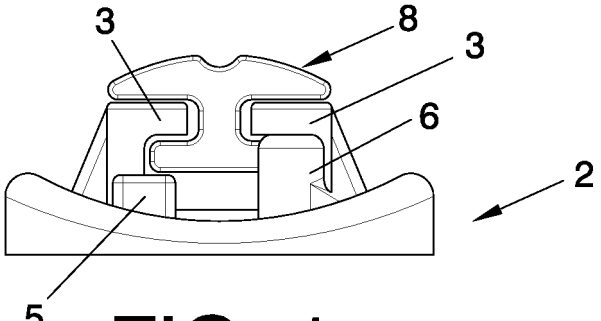

FIG. 1c

EP 2 589 497 A1

Description

Object of the Invention

[0001] The present invention describes an assembly which allows adding a cover to a double spiral notebook in order to improve its visual appearance. The assembly can be easily disassembled which allows separating the notebook from the cover in a very short time and further prevents the double spiral from springing open and the pages of the notebook from coming out.

Background of the Invention

[0002] Various document binding systems are currently known in the art. Ring bound notebooks comprise a long base provided with rings and secured to the inner face of the spine of a cover. On the other hand, a document is formed by pages provided with holes corresponding to the rings of said base. Therefore, by inserting the rings through the holes it is possible to secure the cover to the document in a fast and simple manner. One drawback of this assembly is that, if the document is to be separated from the cover, the pages will come loose, being able to cause the accidental lost of part of the document.

[0003] Another known system consists of spiral and double spiral binding, where the pages making up the document have a row of small holes through which the spiral is inserted. With this assembly the pages are held in a more secured manner and the document can be read conveniently. However, the aesthetic appearance of a spiral notebook is unsuitable for certain uses. For example, since it is not provided with a spine, the users do not usually keep them together with other documents on a bookcase, because not only it is unappealing but it is also impossible to identify the document by means of a title or indication written on the spine. A variant of this assembly is the double spiral assembly, where the spirals are grouped in twos, and having drawbacks similar to the ones of the single spiral.

[0004] As a result, the problem of providing an assembly which allows providing a cover to a double spiral notebook has not been solved until now.

Description of the Invention

[0005] The preceding problem is solved by means of the assembly described in the present document which allows securing a cover to a double spiral notebook in a fast and convenient manner. The double spiral notebook can thus be kept on a bookcase in a manner similar to a book, the notebook being able to be identified through the notes on the spine of the cover. Furthermore, the assembly of the invention allows separating the cover from the double spiral notebook easily if necessary.

[0006] The assembly of the invention for securing a cover to a double spiral notebook comprises a base suitable to be secured to a cover and a rod coupled to said base for trapping and immobilizing the double spiral between the base and the rod, the cover thus being secured to the double spiral notebook. Both elements are described in greater detail below.

a) Base

[0007] The base is flat and long and a longitudinal row of pairs of inverted L-shaped hooks facing one another extends from said base. The separation between the pairs of hooks is such that it allows a double spiral to rest longitudinally on the surface of the base. Furthermore, the base comprises attachment means for attaching to the spine of the cover, preferably holes suitable for rivets, screws or the like. Furthermore, the base is preferably made of plastic or the like.

[0008] According to a preferred embodiment, the base also comprises two rows of pins located on both sides of the central axis of the base acting as a clasp or a positioner of the double spiral, since they are arranged for being coupled to the closed end of each pair of spirals, further preventing the double spiral from springing open and the pages from coming loose.

[0009] According to another preferred embodiment of the invention, the base also comprises stop means configured to prevent the securing rod from sliding along the base when it is housed completely underneath the row of pairs of hooks. These stop means are preferably two protrusions located at the ends of the base and giving way laterally towards one side to allow the passage of the securing rod underneath the row of pairs of hooks, recovering its position when the rod has passed to prevent it from sliding longitudinally when it is completely inside the housing thereof. For the protrusions to have the necessary flexibility, each of the protrusions is preferably separated from the base throughout the perimeter thereof except in a narrow strip. Therefore, when the rod starts to be inserted through one of the ends of the base, the force exerted by the rod on the protrusion causes the narrow strip to deform laterally, thus allowing the passage of the rod.

b) Securing rod

[0010] The securing rod is configured to be housed underneath the row of pairs of hooks such that the double spiral is trapped between the rod and the base. According to a preferred embodiment, it has an H-shaped section the shape of which is complementary to the space existing between the pairs of hooks. Furthermore, it is preferably made of plastic or the like.

Description of the Drawings

[0011] To complement the description that is being made and for the purpose of aiding to better understanding the features of the invention according to a preferred

practical embodiment thereof, a set of drawings is attached as an integral part of said description where the following has been depicted with an illustrative and non-limiting character:

Figures 1 a, 1b, 1c and 1d respectively show a perspective view and a cross-section view of a base according to the present invention, as well as two cross-section views of a securing rod inserted in said securing base according to two embodiments, with a rod for double spirals with a smaller opening and a rod for more open or separated double spirals with a larger opening.

Figures 2a and 2b respectively show a perspective view of a securing rod and a sectional view thereof.

Figure 3 shows a perspective view of an end of a base according to the invention.

Figure 4 shows a perspective view of an end of the base coupled to a double spiral.

Figure 5 shows a top view of an end of the base where a protrusion acting as a stop for the rod is seen in detail.

Figure 6 shows a perspective view of an operation of inserting the rod underneath the pairs of hooks of the base.

Figure 7 shows a perspective view of a double spiral notebook coupled to a cover.

Preferred Embodiment of the Invention

[0012] A particular embodiment of the assembly of the invention is described below. Figures 1 a and 2a show respective perspective views of the base (2) and the rod (8). Said figures as well as Figure 1 b show how the upper face of the base (2) has a row of pairs of aligned hooks (3) for housing the rod (8), the section of which is shown in Figure 2b, and attachment means (4) for attaching to the spine of the cover (10). The base (2) also has two rows of separation pins (5) located symmetrically on both sides of the central axis of the base (2) and are used for holding the narrow part of the double spiral (11), preventing the spiral from springing open and the pages from coming out. Furthermore, they are also used for securing the position of the double spiral (11). In this example, the pins (5) are projections having a rectangular section located on the sides of the central line of the base (2).

[0013] Figure 1 c depicts the rod (8) housed in the base (2), according to a cross-section, said rod (8) being used for double spirals with smaller openings. Likewise, Figure 1d depicts a variant of the rod (8) and the base (2) which comprises the same elements, varying only the relative dimensions thereof which are used for more open or separated double spirals with larger openings, having a larger opening size than that of the double spirals depicted in Figure 1 c.

[0014] Figures 3 and 4 show in greater detail the pins (5) and the hooks (3).

[0015] The base (2) further comprises stop means (6) preventing the rod (8) from being able to slide longitudinally coming out of its housing once inserted completely underneath the row of pairs of hooks (3). In this example, the stop means (6) comprise respective protrusions (6) located at the ends of the base (2) and configured such that they have certain lateral flexibility. Figure 5 shows the position of a protrusion (6) and how it is connected to the base (2) only by a narrow strip (7). With the protrusion (6) in this position, when the securing rod (8) is to be inserted in its housing, it is necessary to move the protrusion (6) laterally. This is achieved by applying a slight pressure with the rod (8) itself at the start of its insertion causing the deformation of the strip (7), and subsequently the lateral movement of the protrusion (6). The rod (8) can then be inserted in its housing, the protrusion (6) returning to its original position when the rear end of the rod (8) has been completely inserted.

[0016] Figure 6 shows the process of inserting a rod (8) underneath the row of pairs of hooks (3). First, the double spiral (11) has been arranged on the surface of the base (2), being located in its position as a result of the pairs of hooks (3) and of the pins (5). The lower bar of the H-shaped section making up the rod is then inserted in a manner similar to a dovetail type connection underneath the hooks. Once more, as a result of the pins (5), the front end of the rod (8) can slide longitudinally without being clasped in the double spiral (11). The result of this process is shown in Figure 7, where the rod (8) is already completely arranged in its housing, the protrusions (6) preventing the rod from getting out accidentally. To separate the double spiral notebook (11) from the cover (10), it will be necessary to move one of the protrusions (6) laterally either by moving it slightly with a finger or by pushing with the rod (8) itself, and then removing said rod (8).

Claims

1. Assembly for securing a cover (10) to a double spiral notebook (11), **characterized in that** it comprises:

   a long flat base (2) from which a longitudinal row of pairs of inverted L-shaped hooks (3) facing one another extends, where the separation between the pairs of hooks (3) allows a double spiral (11) to rest longitudinally on the surface of the base (2), and the base (2) comprising attachment means (4) for attaching to the spine of the cover (10); and

   a securing rod (8) configured to be housed underneath the row of pairs of hooks (3) such that the double spiral (11) is trapped between the rod (8) and the base (2).

2. Assembly according to claim 1, where the securing rod (8) has an H-shaped section the shape of which is complementary to the space existing between the

pairs of hooks (3).

3. Assembly according to any of the preceding claims, where the attachment means (4) comprise holes made on the base (2).

4. Assembly according to any of the preceding claims, further comprising two rows of separation pins (5) separating the securing rod (8) in relation to the surface of the base (2) located on both sides of the central axis of the base (2).

5. Assembly according to claim 4, where the separation pins (5) comprise projections extending from the surface of the base (2) configured for acting as a clasp of the double spiral (11) preventing it from being able to spring open and preventing the pages from coming out.

6. Assembly according to claim 5, where the projections have a rectangular shape.

7. Assembly according to any of the preceding claims, further comprising stop means (6) configured to prevent the securing rod (8) from sliding along the base (2) when it is housed completely underneath the row of pairs of hooks (3).

8. Assembly according to claim 7, where the stop means (6) comprise two protrusions located at the ends of the base (2) giving way laterally towards one side to allow the passage of the securing rod (8) underneath the row of pairs of hooks (3), recovering its position when the rod (8) has passed to prevent it from sliding longitudinally.

9. Assembly according to claim 8, where the protrusions are separated from the base (2) throughout the perimeter thereof except in a narrow strip (7), such that they are provided with lateral flexibility.

10. Assembly according to any of the preceding claims, where the base (2) is made of plastic or the like.

11. Assembly according to any of the preceding claims, where the securing rod (8) is made of plastic or the like.

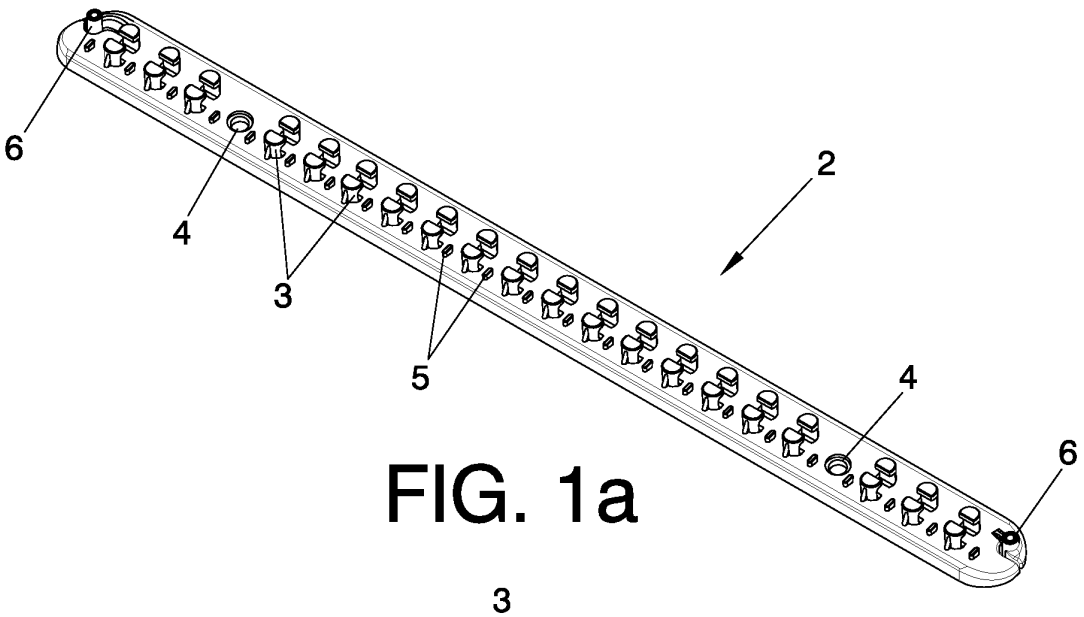

FIG. 1a

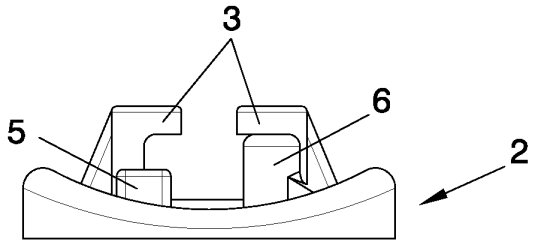

FIG. 1b

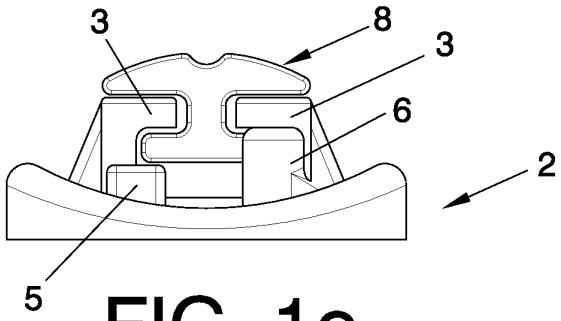

FIG. 1c

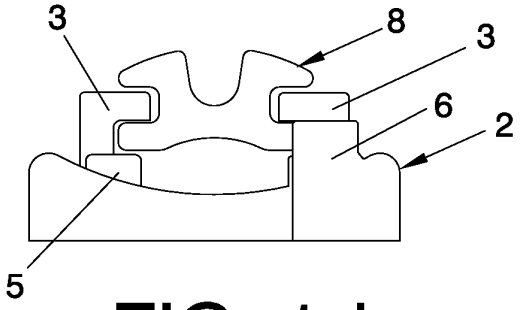

FIG. 1d

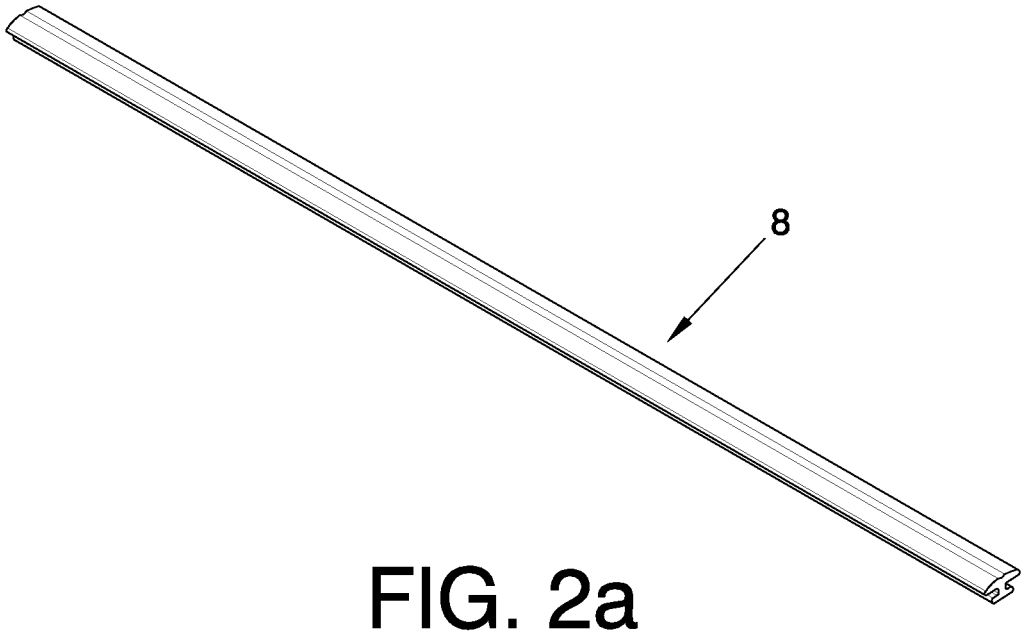

FIG. 2a

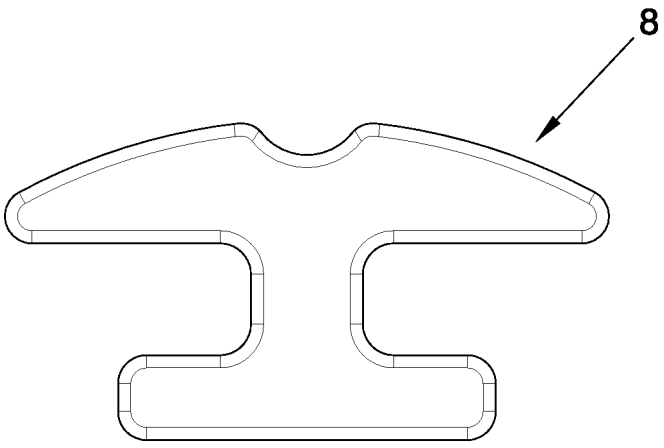

FIG. 2b

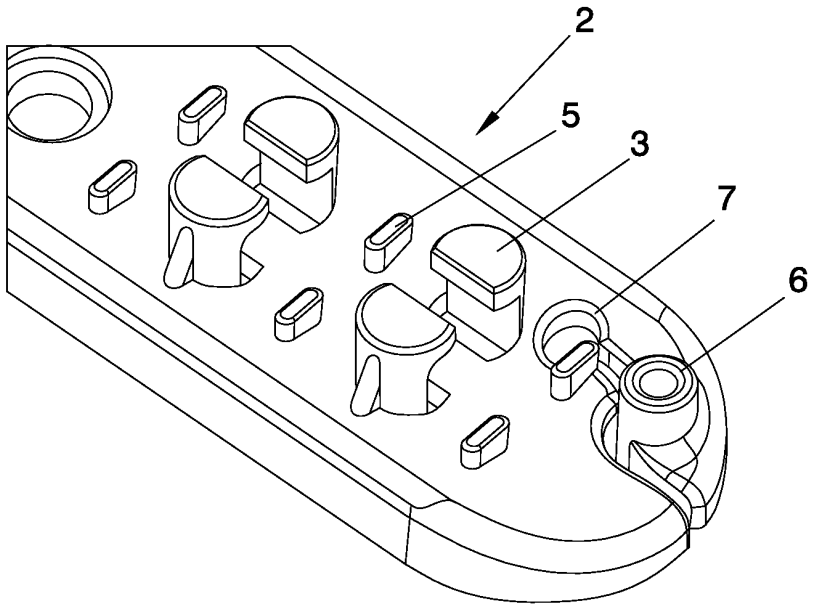

FIG. 3

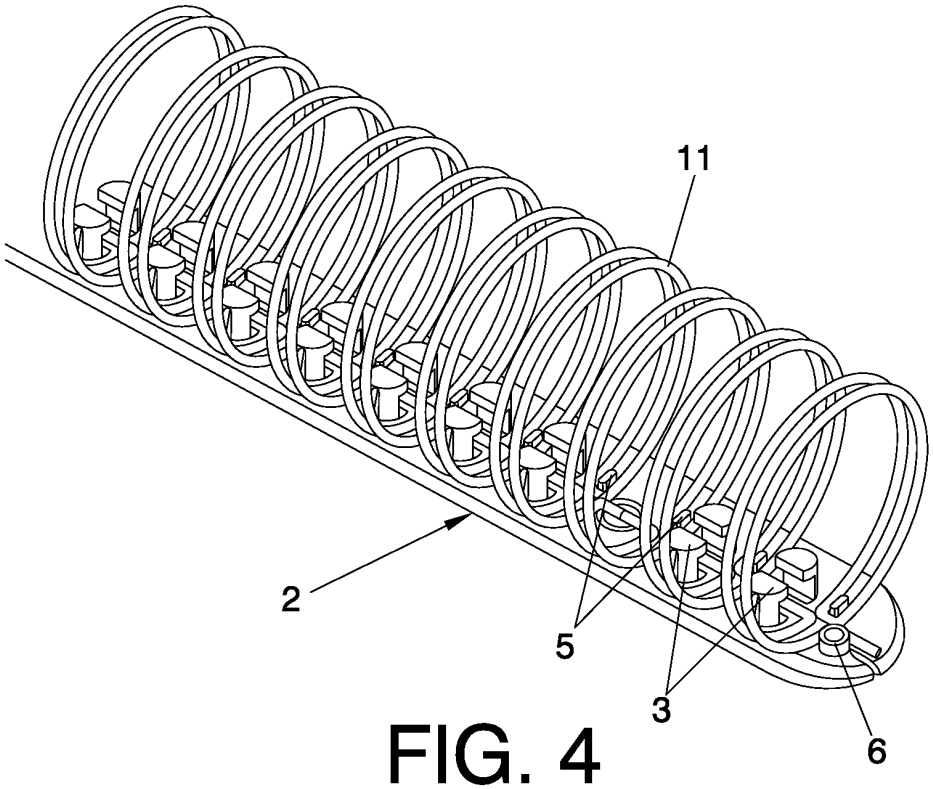

FIG. 4

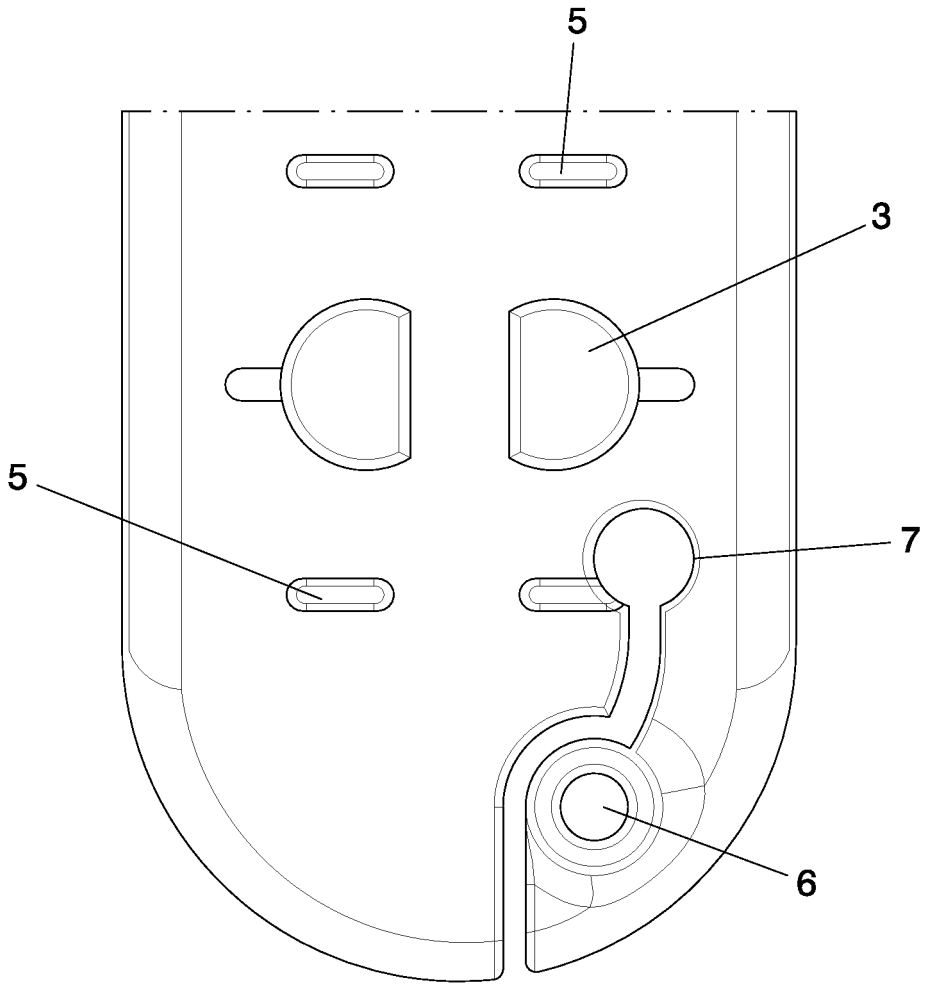

FIG. 5

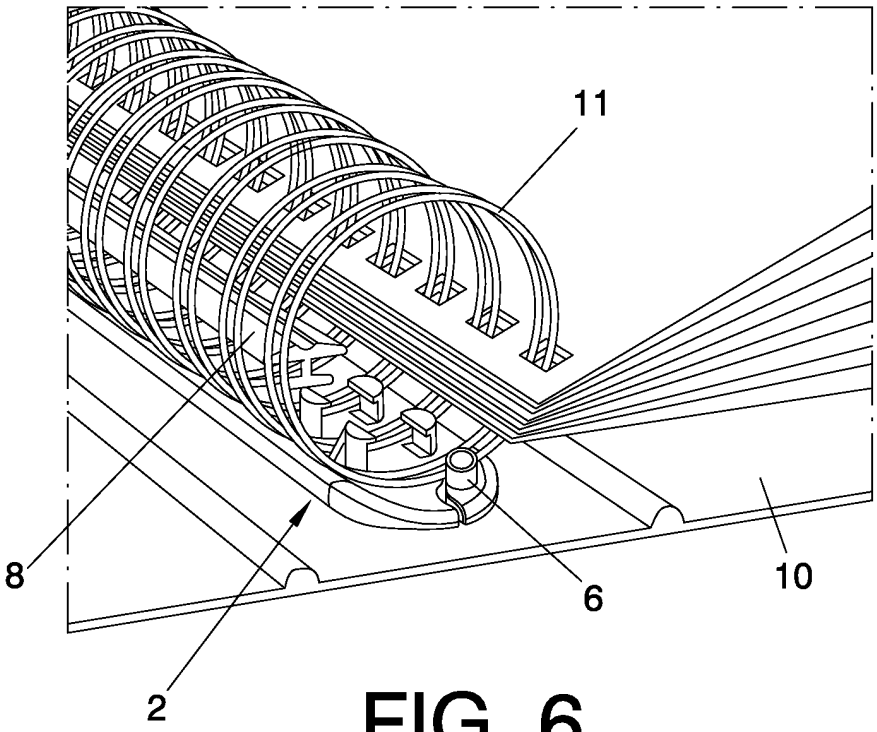

FIG. 6

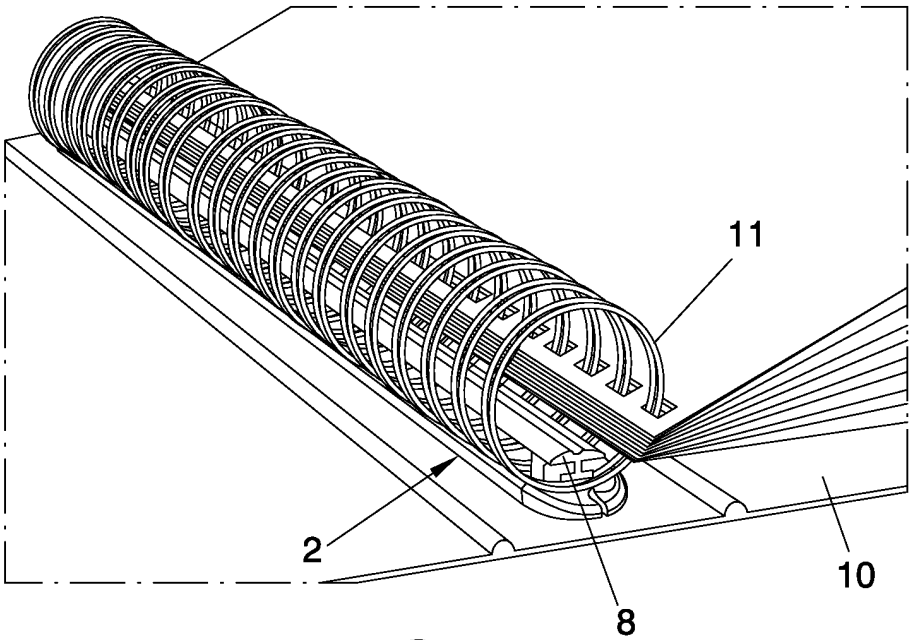

FIG. 7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/ES2011/070473

A. CLASSIFICATION OF SUBJECT MATTER

See extra sheet

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B42B, B42F, B42D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, INVENES

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 687016 A (JAMES BURN AND COMPANY LTD) 04/02/1953, the whole document.	1,3,7,10,11
A	EP 1726453 A1 (MAX CO LTD) 29/11/2006, paragraphs [0014 - 0023]; figures 1 - 15.	1,3,10
A	US 2006008319 A1 (LEE SIN-YOUNG) 12/01/2006, paragraphs [0020 - 0025]; figures 3 - 6.	1,10

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance.
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure use, exhibition, or other means.
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other documents , such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
05/12/2011	**(13/12/2011)**
Name and mailing address of the ISA/ OFICINA ESPAÑOLA DE PATENTES Y MARCAS Paseo de la Castellana, 75 - 28071 Madrid (España) Facsimile No.: 91 349 53 04	Authorized officer A. Hoces Diez Telephone No. 91 3495371

Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/ES2011/070473

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
GB687016 A	04.02.1953	BE498413 A	
		CH288445 A	31.01.1953
		FR1024691 A	03.04.1953
EP1726453 A	29.11.2006	WO2005087508 A	22.09.2005
		JP2005262495 A	29.09.2005
		JP4442266B2 B	31.03.2010
		EP20050721196	15.03.2005
		KR20060132721 A	21.12.2006
		CN1933982 A	21.03.2007
		CN100439121 C	03.12.2008
		TWI277541 B	01.04.2007
		US2007196162 A	23.08.2007
		US7665924 B	23.02.2010
US2006008319 A	12.01.2006	NONE	

Form PCT/ISA/210 (patent family annex) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2011/070473

CLASSIFICATION OF SUBJECT MATTER

B42B5/12 (2006.01)
B42F3/06 (2006.01)
B42D1/06 (2006.01)

Form PCT/ISA/210 (extra sheet) (July 2009)