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

(11) **EP 4 361 392 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
01.05.2024 Bulletin 2024/18

(21) Application number: **23203423.1**

(22) Date of filing: **13.10.2023**

(51) International Patent Classification (IPC):
E06B 3/36 *(2006.01)* ***E06B 5/00*** *(2006.01)*
E06B 7/16 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
E06B 5/006; E06B 3/365; A47B 96/201

(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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(30) Priority: **28.10.2022 IT 202200022293**

(71) Applicant: **Tomasella Industria Mobili Di Tomasella Paolo & C. s.a.s.**
33070 Brugnera PN (IT)

(72) Inventor: **Tomasella, Paolo**
33070 Brugnera (PN) (IT)

(74) Representative: **Citron, Massimiliano**
Via Primo Maggio, 6
31020 San Fior (TV) (IT)

(54) **FURNITURE LEAF**

(57) A furniture leaf is described comprising a panel having a side edge, and a strip integral with the edge and adapted to form an abutment. To ease packing of the strip and guaranteeing the integrity of the strip, the strip comprises, or consists of, two parts: a first part, which is fixed at said edge and which extends parallel to the length of said edge, and a second part which is attachable to the first part to compose a strip of bigger size.

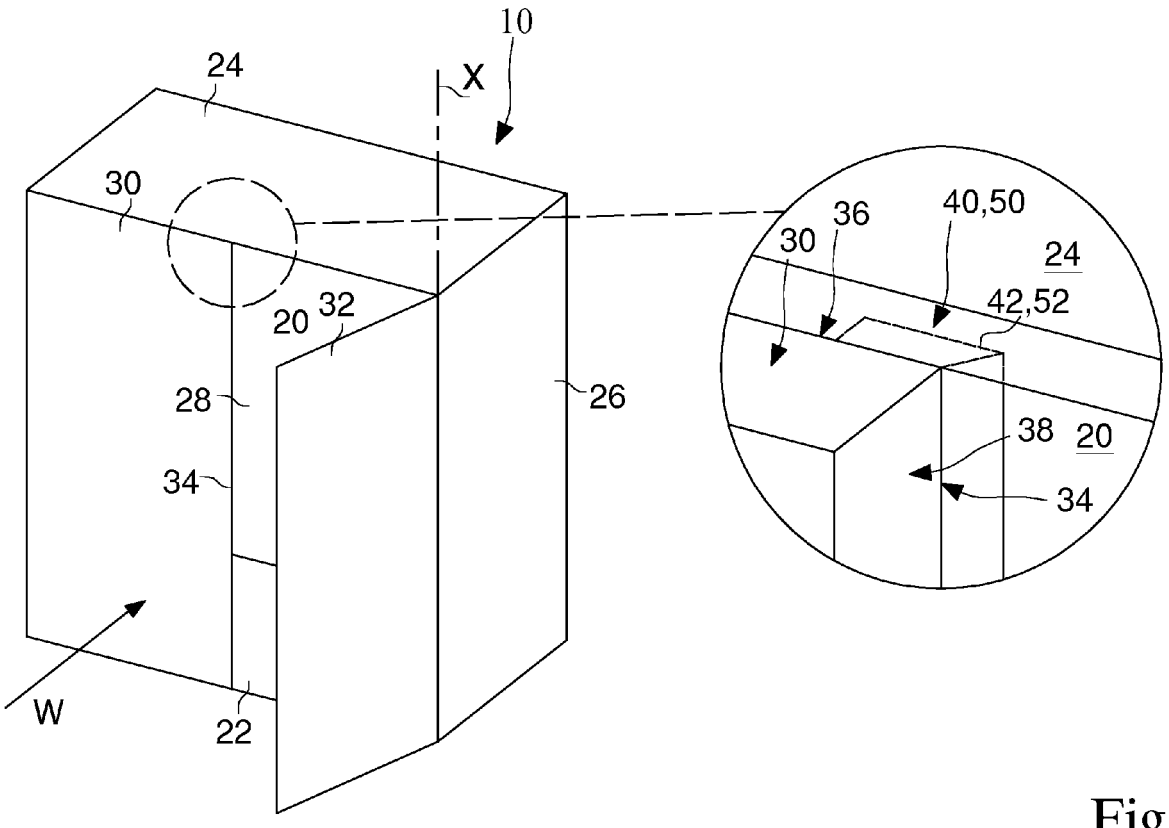

Fig. 1

EP 4 361 392 A1

Description

[0001] The invention generally refers to a furniture leaf and a construction method for obtaining it.

[0002] A known furniture item 10 (fig. 1) comprises a module formed of a compartment 20 which defines a space open towards the outside. Two leaves 30, 32 are hinged at the edges of the compartment 20 so as to rotate in front of the compartment 20 to close it or leave it accessible from the outside.

[0003] On the vertical edge 34 of the leaf 30 facing the leaf 32 there is mounted a known strip 40 adapted to constitute a stop for the closed leaf 32. The strip 40 has a lip 42 or portion protruding (fig. 2) towards the outside of the leaf 30. The lip 42 ends up behind the edge of the leaf 32 when the leaves 30, 32 are coplanar and serves to block the entrance of dust into the compartment 20.

[0004] Unfortunately, when the leaf 30 is packaged and/or during its transport, the lip 42 can receive bumps and become damaged. Furthermore, the bulk of the lip 42 limits or prevents the processing of the leaf 30 in modern automatic machines.

[0005] The main object of the invention is to provide a leaf that solves at least one of the above-mentioned problems.

[0006] A first aspect of the invention concerns a furniture leaf comprising:

- a panel having a side edge,
- a strip integral with the edge and adapted to form an abutment for an adjacent leaf of the furniture,

wherein the strip comprises, or consists of, two parts:

a first part, which is stationary/fixed/fixable at the edge and which extends parallel to the length of the edge, and
a second part which is attachable to the first part to compose a strip of bigger size.

[0007] In this way, during packaging or transport, the strip can be disassembled by moving the two parts apart to arrange them in a less bulky and obstructing configuration. Therefore, the packaging of the strip is facilitated and the integrity of the strip is guaranteed during transport and assembly.

[0008] The first part may be a separate piece from the second part or be connected/constrained to it.

[0009] Preferably, to have a simple and quick connection, the second part may be attachable to the first part by mutual overlapping, or the second part may be superimposable on the first part.

[0010] In a preferred variant, the second part is connected - and movable relatively - to the first part so as to be able to move between two positions:
a first position in which it is superimposed on the first part and a second position in which it is arranged alongside and coplanar with the first part.

[0011] The first part and the second part may be movably coupled to each other in many ways. In a preferred variant the first part and the second part are

connected via a living hinge, or
mutually hinged together by a pin forming a hinge, or relatively translatable, the first part comprising a linear guide for a runner portion comprised in the second part, or vice versa.

[0012] In general, the strip can function as an abutment for the leaf against the edge of the furniture item on which the leaf is mounted. In a preferred variant the first part and/or the second part comprises a lip configured to protrude from the edge towards the outside of the leaf (and from one of said surfaces) when said parts are coupled together, so as to limit the entry of dust into the furniture item. The decomposable structure of the strip is even more advantageous because it allows the lip to be removed from its protruding position and placed in a more sheltered and less bulky position.

[0013] In a preferred variant, the first part and/or the second part are made of plastic or rubber.

[0014] In a preferred variant, the first part is fixed to the panel by means of adhesive and/or nails and/or screws.

[0015] In general, the panel may have a plan of any shape, preferably rectangular in shape.

[0016] In a preferred variant the leaf is a fixed leaf of the furniture item, stationary with respect to a compartment which defines a space open towards the outside and is delimited by: a bottom panel, a ceiling panel, two vertical lateral walls spaced apart by the width of the compartment, and a rear wall. The compartment forms a front opening that can be covered by two leaves closable in front of the compartment.

[0017] In a preferred variant the edge is a line formed by the intersection of two orthogonal surfaces of the panel, and the first part is fixed on one of the two surfaces in proximity of the line and parallel to it.

[0018] Preferably the strip comprises means for temporarily blocking the first part and the second part mutually to each other when they are connected or superimposed. In a preferred embodiment of the means, the first part and the second part comprise mutually interlockable portions, preferably snap-fit portions, to stabilize the two parts when they are coupled together. As a particular preferred embodiment for said mutually interlockable portions, the first part comprises a seat, or a linear channel, in which a protruding element, or a linear convexity, of the second part can be snugly fitted, or vice versa. More specifically, the protruding element has a hooked or hook-shaped free end and said seat comprises an undercut with a cross-section complementary to said free end, so that the free end can be inserted by shape fitting into the undercut and is retained by the latter.

[0019] More preferably, the protruding element and/or

said seat are elastically deformable to facilitate their mutual snap-coupling.

[0020] In a preferred variant the first part and/or the second part comprises a portion of Velcro for attaching to the other said part.

[0021] Another aspect of the invention concerns a furniture item comprising the aforementioned leaf.

[0022] Another aspect of the invention concerns an abutment strip for a leaf, the strip sharing the variants defined in this text.

[0023] Another aspect of the invention concerns a method for applying, to a lateral (particularly, in use vertical) edge of a panel of a leaf, a strip adapted to constitute an abutment for said leaf, with the steps of:

- taking a strip comprising a first part and a second part which is movable with respect to the first part,
- fixing the first part at the edge so that it extends parallel to the length of the edge,
- coupling the second part to the first part to attach the two parts to each other.

[0024] In particular, the strip is adapted to also be an abutment for the adjacent leaf of the furniture item.

[0025] In particular, the second part is preferably superimposed on the first part to attach the two parts to each other.

[0026] A preferred step envisages moving the second part from a position in which it is arranged alongside and coplanar with the first part to a position in which it is superimposed and attached to the first part. A more preferred step envisages moving the second part between said two positions by rotating it with respect to the first part.

[0027] A preferred step envisages keeping the second part permanently movably connected to the first part.

[0028] The following description concerns a preferred embodiment of leaf, making reference to the attached drawings in which:

- Fig. 1 shows a three-dimensional view of a furniture item;
- Fig. 2 shows a schematic view of part of the furniture item in fig. 1;
- Fig. 3 shows a schematic view of a leaf according to the invention;
- Fig. 4 shows an enlarged schematic view of fig. 3 for a variant of leaf.

[0029] In the figures equal numbers indicate same or similar parts, and the leaf is described as in use. To avoid crowding the drawings, not all the same elements are numbered.

[0030] A furniture item 10 (fig. 1) comprises a module formed of a compartment 20 which defines a space open towards the outside and is delimited by: a bottom 22, a top 24, two vertical side walls 26 spaced apart by the width of the compartment 20, and a rear wall 28. The compartment 20 forms a front opening that can be covered by two leaves 30, 32 closable in front of the compartment 20. However, a larger furniture item may also be formed by placing various modules or compartments 20 side by side. An arrow W indicates a view direction towards the front of the furniture item 10.

[0031] At least one of the leaves 30, 32 is hinged at the edges of the compartment 20 (e.g. at the edges of the walls 26) about a vertical axis X to rotate in front of the compartment 20 to close it or to leave it accessible from the outside. During their movement the leaves 30, 32 always remain vertical, and vary their relative position and that with respect to the compartment 20. When the leaves 30, 32 are adjacent to each other and coplanar the compartment 20 is closed.

[0032] The leaves 30, 32 have for example rectangular plan, and preferably the leaf 30 is fixed.

[0033] The leaf 30 has a panel of a certain thickness, which defines a vertical edge 34 as a line formed by the intersection of two orthogonal surfaces 36, 38 belonging to the panel.

[0034] On the edge 34 of the leaf 30 facing the leaf 32, preferably on one of the two surfaces 36, 38 in proximity of the line of the edge 34, a strip 50 is mounted. The strip 50 is e.g. adapted to constitute an abutment for the closed leaf 32, and for this purpose the strip 50 has e.g. a lip 52 or portion (fig. 3 and 4) protruding towards the outside of the leaf 30. The lip 52 ends up behind the edge of the leaf 32 when the leaves 30, 32 are coplanar and blocks the entry of dust into the compartment 20, in particular if the leaf abuts against the lip 52.

[0035] The strip 50 extends parallel to the line of the edge 34, and preferably for the entire extension of the edge 34.

[0036] The strip 50, unlike the known strip 40, comprises, or consists of, two parts that are coupled together or are couplable together: a first part 60 and a second part 80 which comprises the lip 52.

[0037] The first part 60 is fixedly applied at the edge 34 and extends parallel to the length of the edge 34. Preferably, the first part 60 is fixed to the panel using adhesive and/or nails and/or screws.

[0038] The second part 80 is movable relative to the first part 60 so as to be able to move between two positions: a first position (see fig. 4) in which it is superimposed on the first part 60 and a second position (see fig. 3) in which is placed side by side and coplanar with the first part 60.

[0039] The first part 60 and the second part 80 nay be movably couplable in many ways. In the illustrated example the first part 60 and the second part 80 are connected via a living hinge 90, i.e. at their edges they are connected by a thin and deformable portion 92. The hinge allows the first part 60 to rotate about an axis parallel to the edge 34 (see arrow F). Other solutions are also possible such as a pin hinge, and/or a guided relative translation between the first part 60 and the second part 80; or the first part 60 and the second part 80 are separate

pieces but couplable to each other.

[0040] During packaging and/or transportation, the second part 80 is e.g. arranged alongside the first part 60, to remain protected from impacts and simplify packaging. Then, before assembling the leaf 30 on the furniture item 10, the second part 80 is placed on the first part 60, recomposing the strip 50 which will have the same performances as the strip 40.

[0041] Preferably the strip 50 comprises means for temporarily blocking the first part 60 and the second part 80, e.g. when they are superimposed, with the advantage of stabilizing the operation of the strip 50 and avoiding other manual interventions.

[0042] A preferred variant of the means envisages that the first part 60 and the second part 80 comprise mutually snap-interlockable portions, to temporarily block the first part 60 and the second part 80 when they are coupled or superimposed.

[0043] More specifically, to make such portions, the first part 60 comprises a linear channel 92 into which a linear convexity 94 of the second part 80 can be fitted snugly.

[0044] The linear channel 92 is replaceable e.g. with a notch or a seat or a hole, and the linear convexity 94 is replaceable e.g. with a pin or a tooth. The positions of the interlockable portions can be exchanged.

[0045] The blocking means may also be e.g. a strip of Velcro.

[0046] Note that the lip 52 is not essential. The structure of the strip 50 retains advantages even when it, without the lip 52, e.g. rests on an edge of the compartment 20 or on an upright in the center of the compartment 20. The possibility of reducing the thickness of the strip 50 by relatively moving the parts 60, 80 facilitates the assembly and transport of the strip 50, because it makes the surface of the leaf 30 flatter and less irregular.

[0047] The strip 50 can also be applied to different edges of the leaf.

[0048] E.g. the first part 60 and/or the second part 80 are made of plastic or rubber.

Claims

1. Furniture leaf comprising:

- a panel having a side edge,
- a strip integral with the edge and adapted to form an abutment,

wherein the strip comprises, or consists of, two parts:

- a first part, which is fixed at said edge and which extends parallel to the length of said edge, and
- a second part which is attachable to the first part to compose a strip of bigger size.

2. Leaf according to claim 1, wherein the first part is a piece connected to the second part.

3. Leaf according to any one of the preceding claims, wherein the second part is connected - and movable relatively - to the first part so as to be able to move between two positions:

a first position in which it is superimposed on the first part and
a second position in which it is arranged alongside and coplanar to the first part.

4. Leaf according to any one of the preceding claims, wherein the first part and the second part are connected via a living hinge.

5. Leaf according to any one of the preceding claims, wherein the second part comprises a lip configured to protrude from said edge towards the outside of the leaf when said parts are coupled.

6. Leaf according to any one of the preceding claims, wherein the first part is fixed to the panel by means of adhesive and/or nails and/or screws.

7. Leaf according to any one of the preceding claims, wherein the strip comprises means for temporarily locking the mutual attachment condition between the first part and the second part.

8. Leaf according to claim 7, wherein said means comprise mutually interlockable portions provided in the first part and in the second part.

9. Leaf according to claim 8, wherein the mutually interlocking portions are elastically deformable to obtain a mutual snap-coupling.

10. Method for applying, to a lateral edge of a panel of a leaf, a strip adapted to form an abutment for said door, with the steps of

- providing a strip comprising a first part and a second part movable with respect to the first part,
- fixing the first part at said edge so that it extends parallel to the length of said edge, and
- coupling the second part to the first part to attach such two parts to each other.

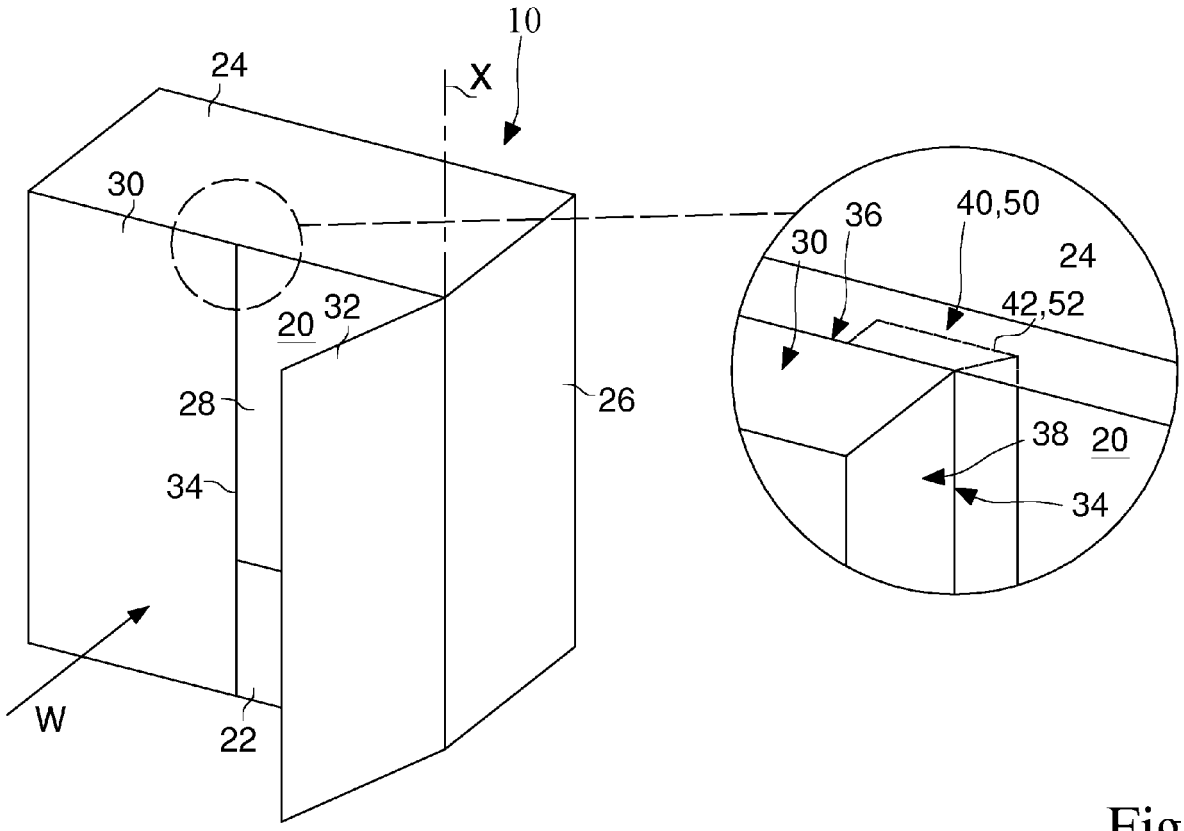

Fig. 1

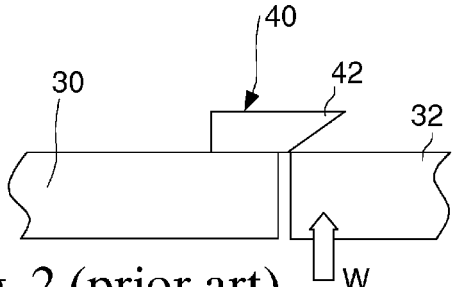

Fig. 2 (prior art)

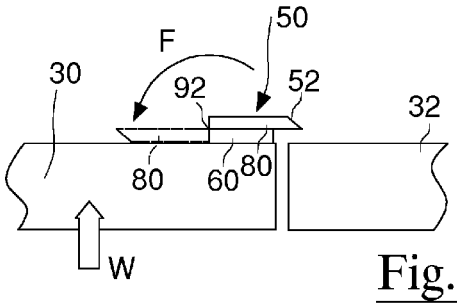

Fig. 3

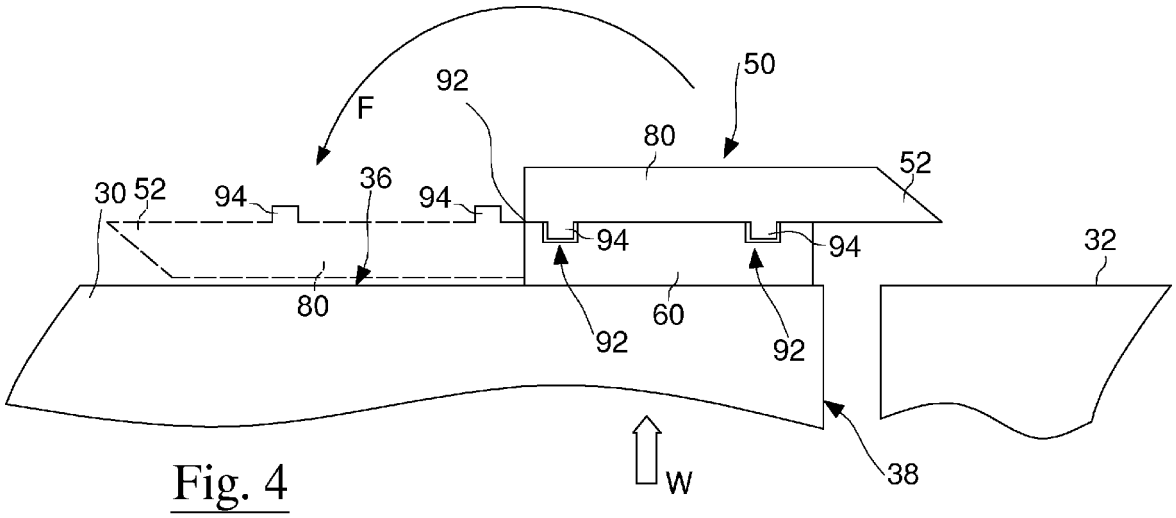

Fig. 4

Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 23 20 3423

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	DE 30 12 798 A1 (GESIKA BUEROMOEBELWERK GMBH [DE]) 24 December 1981 (1981-12-24) * the whole document *	1-10	INV. E06B3/36 E06B5/00 E06B7/16
X	DE 75 33 005 U (WILHELM HAUENSCHILD MÖBELFABRIK KG) 12 February 1976 (1976-02-12) * figure 3 *	1-3,5-10	
X	WO 93/20321 A1 (GARRIGUES JEAN ANDRE [FR]) 14 October 1993 (1993-10-14) * figures 1-3 *	1-3,5-10	
X	FR 2 780 437 A1 (MALERBA DUGELET [FR]) 31 December 1999 (1999-12-31) * figures 3-4 *	1-3,5-10	
			TECHNICAL FIELDS SEARCHED (IPC)
			E06B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	15 February 2024	Demeester, Jan

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 23 20 3423

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.

15-02-2024

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 3012798 A1	24-12-1981	NONE	
DE 7533005 U	12-02-1976	NONE	
WO 9320321 A1	14-10-1993	FR 2667340 A1 WO 9320321 A1	03-04-1992 14-10-1993
FR 2780437 A1	31-12-1999	NONE	

EPO FORM P0459

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