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(54) **REINFORCED PACKAGE FOR FOODSTUFFS**

(57) Reinforced food package, intended for the storage and transport of food, that ensures that food does not come out and that it is ecologically sustainable since all its elements are completely biodegradable. The package comprises a flexible laminar body (1) provided with a front sector (4) and a rear sector (5), which limit a receptacle (7) and comprises an access opening (8) and a flap (9), a first closure element (12), a second closure element (13) configured to join to the first closure element (12) and maintain the flap (9) over the front sector (4) in the closed state, a first reinforcing strip (14) joined to the inner face (3) of the first section (10) and a second reinforcing strip (15) joined to the inner face (3) of the second section (11), which faces the first strip (14) in a closed state.

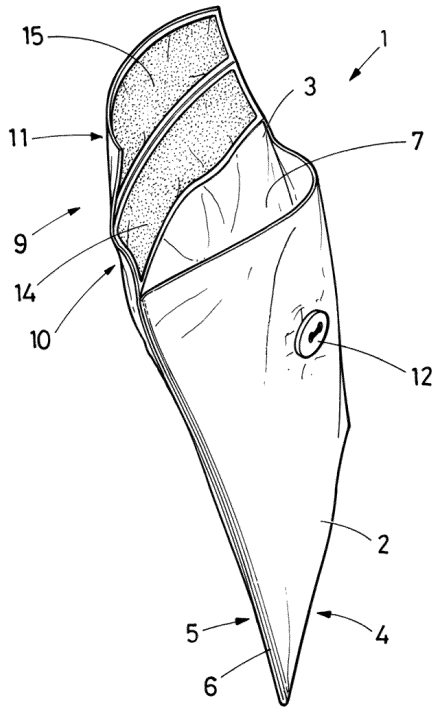

FIG.1

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Description

OBJECT OF THE INVENTION

[0001] The present invention relates to a reinforced food package, intended for the storage and transport of food, where the package comprises a laminar body that defines a receptacle to accommodate the food and a flap with various reinforcements which, in a closed state, prevents access to the receptacle and therefore prevents food from displacing towards the outside of the receptacle.

[0002] More specifically, the present invention relates to a reinforced package that ensures that the food accommodated therein does not come out. In addition, it is an ecologically sustainable product since all its elements are completely biodegradable.

BACKGROUND OF THE INVENTION

[0003] Foldable food packages of an envelope type with flap are known in the state of the art, which have a receptacle intended to accommodate food for convenient storage and transport and also have a closing flap.

[0004] Generally, this type of package is used to accommodate small-sized foods such as sandwiches, pieces of fruit, etc. and they are configured so that the flap closes the receptacle and is maintained in this closed position thanks to closure elements.

[0005] However, in this type of package, the flap does not completely close the receptacle and leaves gaps through which the food can easily come out.

DESCRIPTION OF THE INVENTION

[0006] The present invention relates to a reinforced food package, intended for the storage and transport of food. The package comprises a flexible laminar body limited by an outer face and an inner face, comprising a front sector and a rear sector partially joined by their edge that limit a partially open receptacle that is intended to accommodate the food and comprises an access opening to the receptacle and a flap that extends from the rear sector. The flap in a closed state closes the opening and comprises a first section that extends from the opening and a second section that extends from the first section, where, in a closed state of the package, the second section is folded over the first section and two sections over the outer face of the front sector.

[0007] The package comprises a first closure element attached to the outer face of the front sector, a second closure element partially attached to the outer face of the first section configured to join with the first closure element in a folded state and maintain the closed state of the flap over the front sector, a first reinforcing strip joined to the inner face of the first section and a second reinforcing strip joined to the inner face of the second section, which faces the first strip in a closed state.

[0008] In this way, when the flap is closed over the front sector, the reinforcing strips create a more robust closure and the food is prevented from escaping to the outside.

[0009] Preferably, the first strip is partially accommodated in the receptacle and in a folded state it folds at the height of the opening in such manner that the first strip folds over itself in an overlapping manner and the closure fits better, preventing gaps from forming where food may fall out.

[0010] The second closure element can be a strip provided with a fixed section attached to the first section and a free section attached to the fixed section and which is provided with a buttonhole and the first closure element is a button configured to go through the buttonhole in such manner that the closure is carried out quickly and easily, as well as allowing the use of fully recycled or recyclable materials.

[0011] The package comprises a film that completely covers the inner face of the laminar body and where the first strip is arranged between the inner face and the film and the second strip is joined to the film, thus the strips do not directly contact each other and avoid stains upon coming into contact with food. The film is made of a material which is suitable for being in contact with food and which is easily washable.

[0012] The first strip and the second strip can be made of preferably recycled cotton.

DESCRIPTION OF THE DRAWINGS

[0013] As a complement to the description provided herein, and for the purpose of helping to make the features of the invention more readily understandable, in accordance with a preferred practical exemplary embodiment thereof, said description is accompanied by a set of drawings constituting an integral part of the same, which by way of illustration and not limitation, the following has been represented:

Figure 1.- Shows a perspective view of a foldable package in an unfolded state.

Figure 2.- Shows a profile view of a foldable package in an intermediate folding state.

Figure 3.- Shows an elevation view of a foldable package in an unfolded state.

Figure 4.- Shows an elevation view of a foldable package in a folded state.

PREFERRED EMBODIMENT OF THE INVENTION

[0014] Figure 1 shows a perspective view of the reinforced package, in an open state, according to the present invention, where the package comprises a flexible laminar body (1) limited by an outer face (2) and an inner face (3). The laminar body (1) has a front sector (4) and a rear sector (5) partially joined by their edge (6) which limit a receptacle (7) intended to accommodate the partially open food that comprises an access opening

(8) to the receptacle (7).

[0015] The laminar body (1) comprises a flap (9) that extends from the rear sector (5) and, in a closed state, closes the opening (8). The flap (9) comprises a first section (10) that extends from the opening (8) and a second section (11) that extends from the first section (10), where, in a closed state of the package, the second section (11) is folded over the first section (10) and both sections (10, 11) over the outer face (2) of the front sector (4).

[0016] The package comprises a first reinforcing strip (14) joined to the inner face (3) of the first section (10) and a second reinforcing strip (15) joined to the inner face (3) of the second section (11). The first strip (14) and the second strip (15) are made of cotton.

[0017] The package additionally comprises a first closure element (12) attached to the outer face (2) of the front sector (4) and a second closure element (13) partially attached to the outer face (2) of the first section (10), configured to join to the first closure element (12) in a folded state and maintain the closed state of the flap (9) over the front sector (4).

[0018] Figure 2 shows a profile view of the reinforced package, in an open state, according to the present invention, where the package comprises a film (19) that completely covers the inner face (3) of the laminar body (1) and where the first strip (14) is arranged between the inner face (3) and the film (19) and the second strip (15) is joined to the film (19). Preferably the film (19) is made of translucent thermoplastic polyurethane.

[0019] Figure 3 shows an elevation view of the reinforced package, in an unfolded state, according to the present invention, in which the first strip (14) is partially accommodated in the receptacle (7) and, in a folded state, it folds over itself at the height of the opening (8).

[0020] Thus, the first strip (14) comprises an upper sector (20) attached to the inner face (3) of the first section (10) and a lower sector (21) that extends from the upper sector (20) and is attached to the inner face (3) of the rear sector (5), not visible in the figure, remaining inside the receptacle (7). In this way, when the flap (9) is folded, the second strip (15) faces the upper sector (20) and both face the lower sector (21) on the outside of the receptacle (7) while the lower sector (21) is inside the receptacle (7).

[0021] Figure 4 shows an elevation view of a foldable package in a folded state, according to the present invention, where the second closure element (13) is a strip provided with a fixed section (16) attached to the first section (10) and a free section (17) attached to the fixed section (16) and provided with a buttonhole (18) and the first closure element (12) is a button configured to go through the buttonhole (18).

Claims

1. A reinforced food package, intended for the storage and transport of food where the package comprises:

   - a flexible laminar body (1) limited by an outer face (2) and an inner face (3), comprising

     ◦ a front sector (4) and a rear sector (5) partially joined by their edge (6) that limit a partially open receptacle (7) that is intended to accommodate the food and comprises an access opening (8) to the receptacle (7);
     ◦ a flap (9) that extends from the rear sector (5) and, in a closed state, closes the opening (8) and that comprises a first section (10) that extends from the opening (8) and a second section (11) that extends from the first section (10), where, in a closed state of the package, the second section (11) is folded over the first section (10) and both sections (10, 11) over the outer face (2) of the front sector (4);

   - a first closure element (12) attached to the outer face (2) of the front sector (4);
   - a second closure element (13) partially attached to the outer face (2) of the first section (10) configured to join to the first closure element (12) in a folded state and maintain the closed state of the flap (9) over the front sector (4);

   characterized in that the package comprises

   - a first reinforcing strip (14) joined to the inner face (3) of the first section (10); and
   - a second reinforcing strip (15) joined to the inner face (3) of the second section (11), which faces the first strip in a closed state.

2. The reinforced food package of claim 1, in which the first strip (14) is partially accommodated in the receptacle (7) and, in a folded state, it folds over itself at the height of the opening (8).

3. The reinforced food package of claim 1, in which the second closure element (13) is a strip provided with a fixed section (16) attached to the first section (10) and a free section (17) attached to the fixed section (16) and which is provided with a buttonhole (18) and the first closure element (12) is a button configured to go through the buttonhole (18).

4. The reinforced food package of claim 1, comprising a film (19) that completely covers the inner face (3) of the laminar body (1) and where the first strip (14) is arranged between the inner face (3) and the film (19) and the second strip (15) is joined to the film (19).

5. The reinforced food package of claim 1, in which the first strip (14) and the second strip (15) are made of cotton.

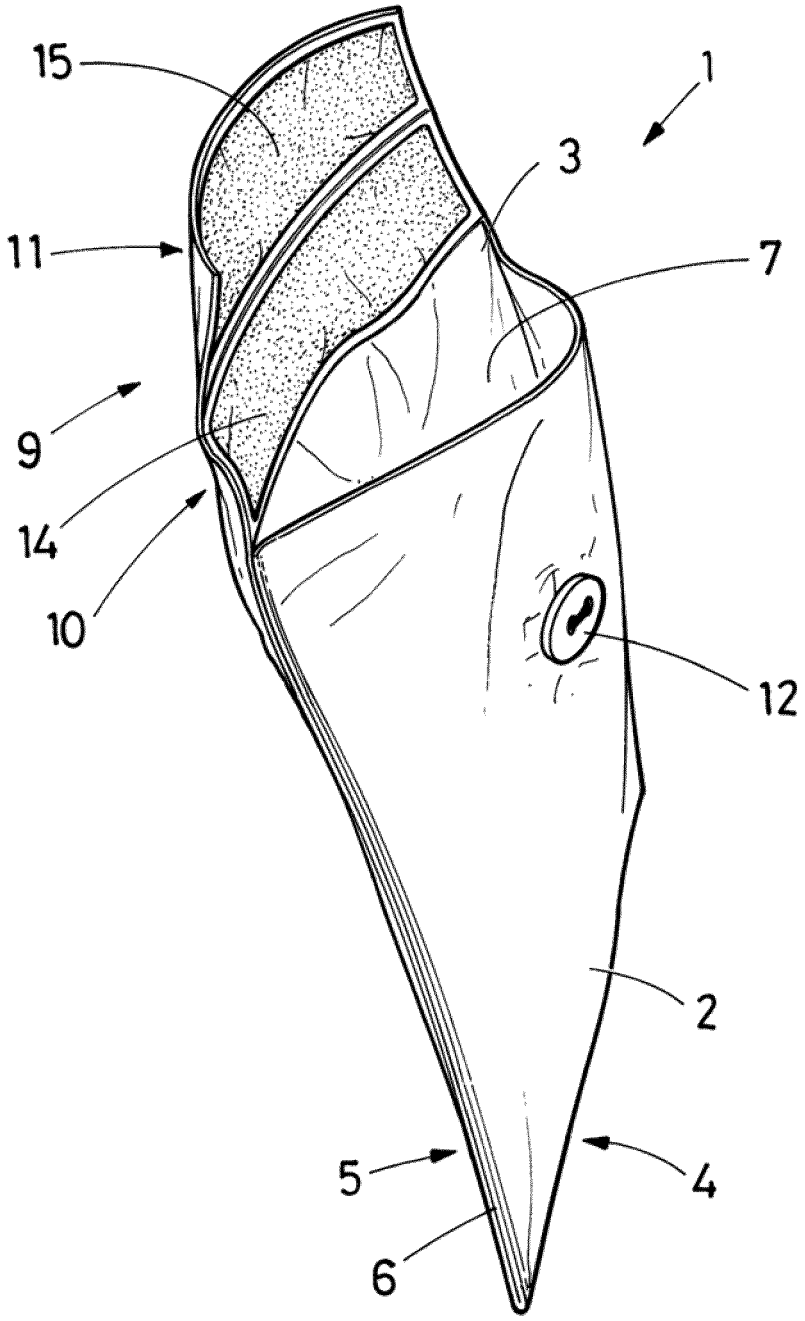

FIG.1

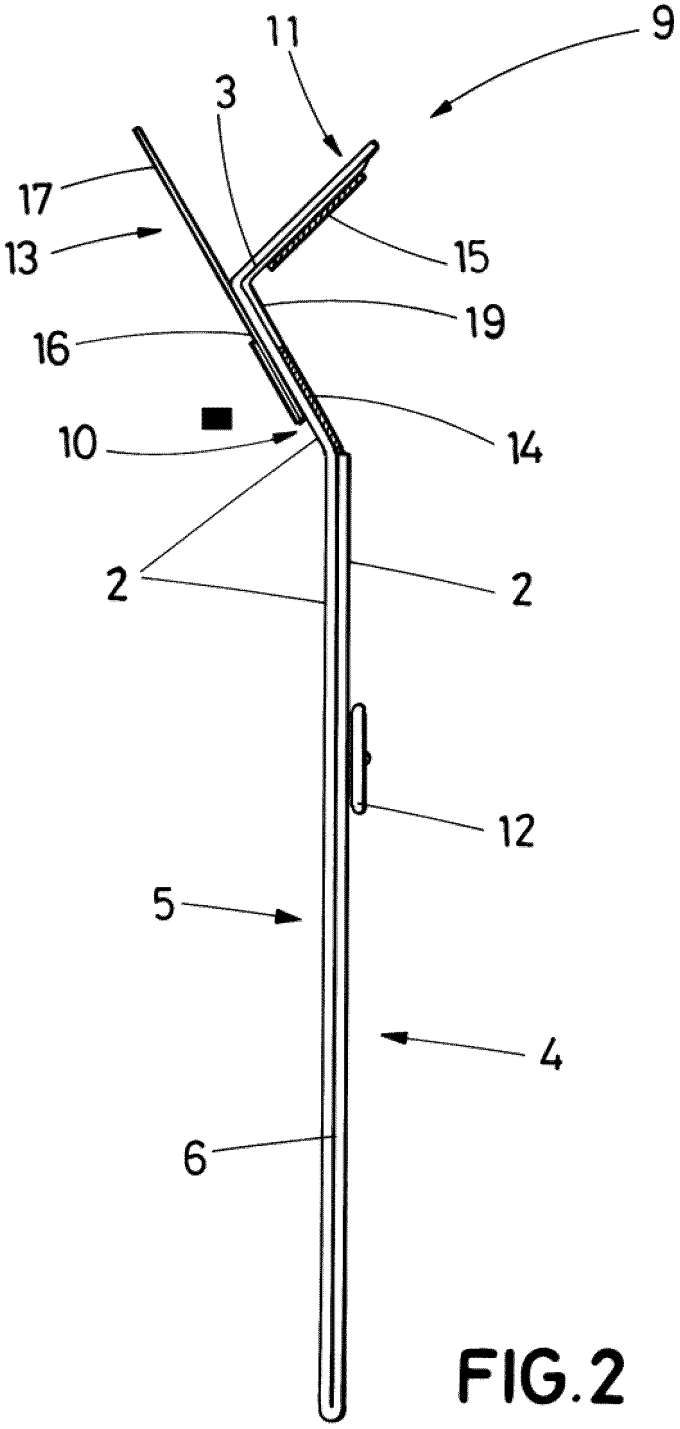

FIG.2

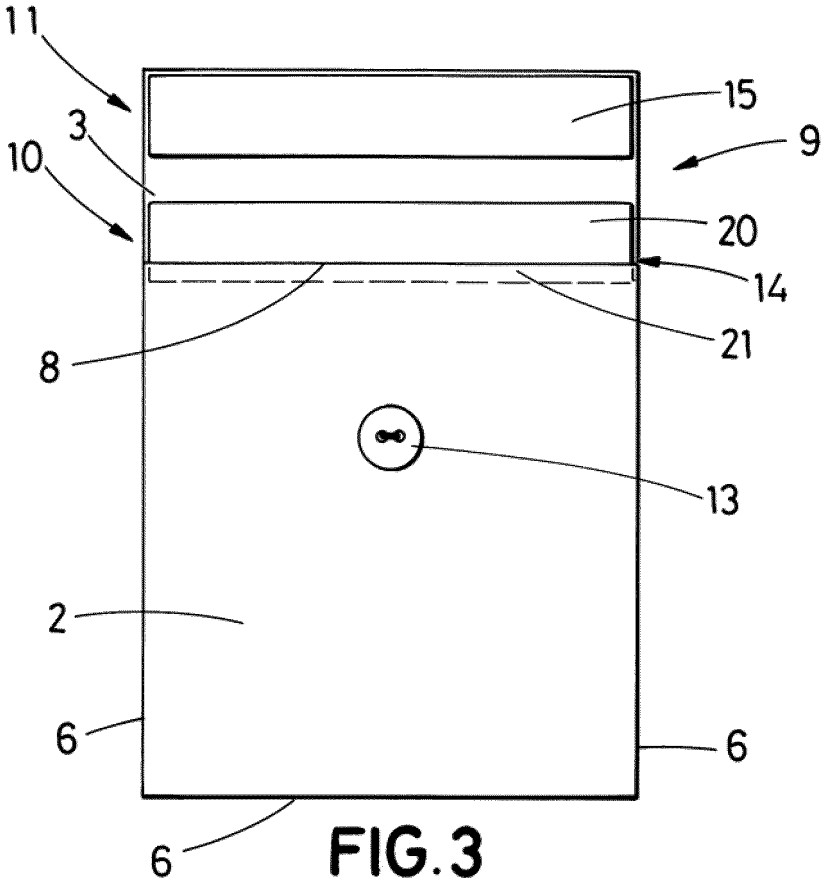

FIG.3

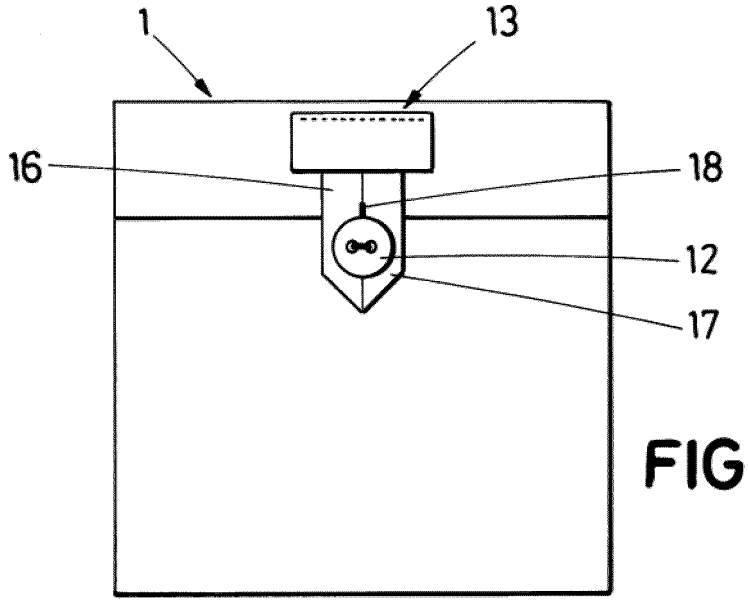

FIG.4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/ES2021/070938

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)
B65D

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.
A	ES 4356 U (PAPELERAS REUNIDAS) 16/01/1936, Page 2, paragraph 2; figures A, B and C	1 - 5
A	GB 1396290 A (BRITISH VISQUEEN) 04/06/1975, Abstract; figures	1 - 5
A	ES 1256285 U (MARCADIFERENCIA) 18/11/2020, Page 5, lines 19 - 25; figure 3	3
A	US 2018057214 A1 (CHEN) 01/03/2018, Abstract; figures	1 - 5
A	US 2015131926 A1 (LUX ET AL.) 14/05/2015, Abstract; figures	1 - 5
A	ES 1076610 U (VALGRAF) 28/03/2012, Claims; figures	1 - 5

☐ 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
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"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
09/03/2022	**(11/03/2022)**
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 F. Monge Zamorano Telephone No. 91 3495541

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/ES2021/070938

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
ES4356U U	16.01.1936	NONE	
GB1396290 A	04.06.1975	NONE	
ES1256285U U	18.11.2020	ES1256285Y Y	08.02.2021
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ES1076610U U	28.03.2012	FR2987351 A1 ES1076610Y Y	30.08.2013 27.06.2012

Form PCT/ISA/210 (patent family annex) (January 2015)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2021/070938

CLASSIFICATION OF SUBJECT MATTER

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B65D27/22 (2006.01)
B65D33/16 (2006.01)

Form PCT/ISA/210 (extra sheet) (January 2015)