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(54) **CONTAINER FOR PACKAGING FOODS**

(57) Container for packaging foods (A) inside it comprising a tray (1) associated with a lid (2), made substantially with the same perimeter shape suitable for closing the tray when the food is positioned inside it, such a lid being fixedly connected to the upper edge of the tray

through a connection portion (3).

Such a food (A) is positioned in the tray, in particular in a base (12) of the tray and is coated by an adherent film (F) so as to place the package under vacuum conditions.

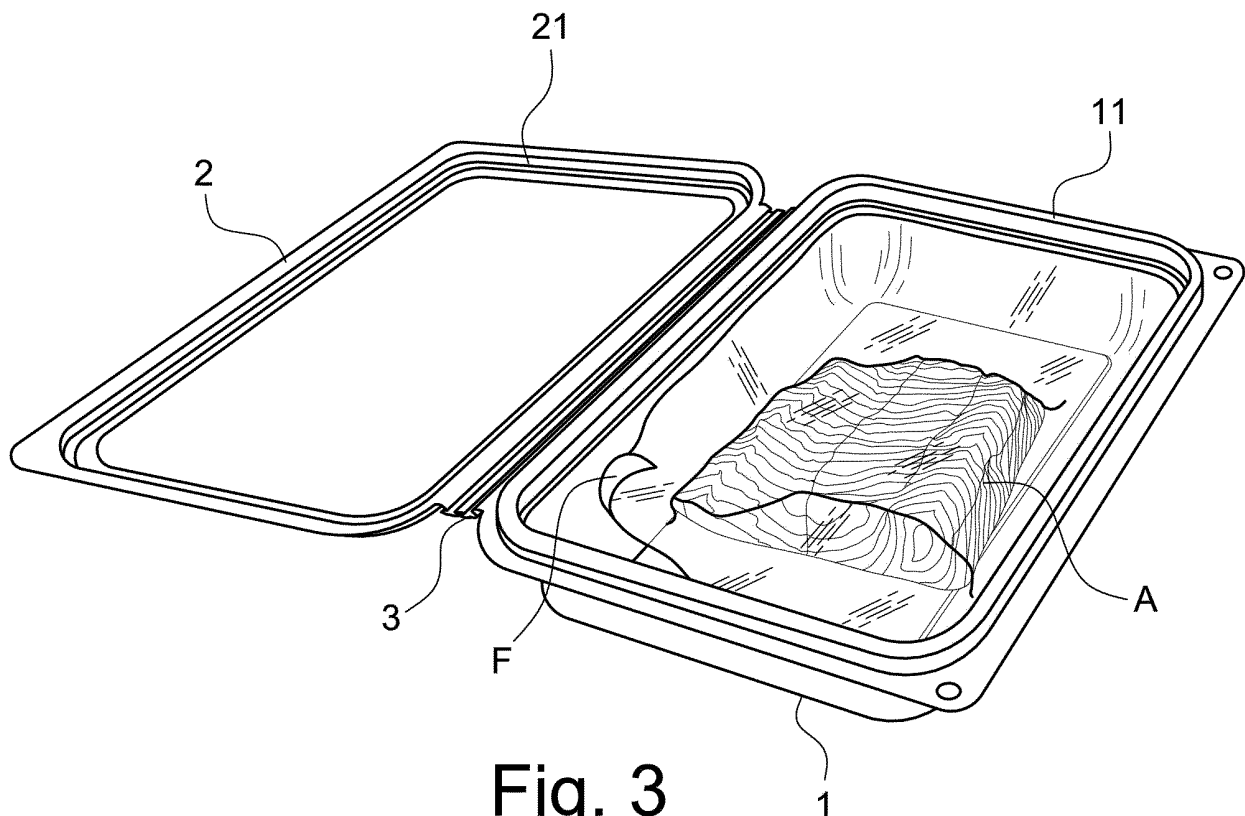


Fig. 3

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Description

[0001] The present invention relates to a container for packaging foods.

[0002] In particular, the present invention refers to a container for packaging foods in the form of a tray open on top made of plastic material preformed in thermoforming or thermoformed, for example in a machine that operates with the "Form Fil Seal" system.

[0003] Such a tray can be made according to various shapes, but in all cases, it is associated with a lid suitable for hermetically closing the tray itself. Such a lid is fixedly connected to a portion of the upper edge of the tray. In this way, the connection portion behaves like a hinge and the lid by rotating about the hinging axis can pass from an open position to a closed position of the tray itself.

[0004] The lid is made together with the tray in a moulding step, the upper edge of the tray and the perimeter edge of the lid are configured so as to be fixedly connected to one another, for example by interlocking, to keep the lid itself in closed position.

[0005] Currently, systems for packaging under vacuum conditions and in protective atmosphere are known in the field, which provide for the use of containers in the form of such plastic trays open on top. Such a tray is filled with the product to be packaged and is emptied of air to create the vacuum and possibly filled with gas to create the protective atmosphere.

[0006] Such trays with the lid open pass firstly into a filling station where suitable means are provided for filling the trays with the foods intended to be packaged.

[0007] The full trays continue their path towards a station for generating a vacuum and/or protective atmosphere and welding. During such a path, the lids of the trays are kept in a semi-closed position.

[0008] In such a station, suction means suck the air from inside the tray so as to create the vacuum.

[0009] Then injection means, on the other hand, inject suitable gases in the tray, so as to create a protective atmosphere. Then the lid is completely closed and the edge of the tray is compressed in a sandwich and hermetically closed and sealed through the welding means.

[0010] A packaging of such a type is described in European patent EP 1440887.

[0011] Such a packaging system according to the prior art has various drawbacks. Indeed, once the tray is hermetically closed it can only be positioned on horizontal shelves since if it is positioned differently the food could move and only be positioned in a corner thereof, providing the consumer with an unpleasant effect of a lack of freshness and authenticity of the food itself.

[0012] An aspect of the present invention relates to a tray having the features of the attached claim 1.

[0013] A further aspect of the present invention relates to a process for packaging foods having the features of claim 6.

[0014] The features and advantages of the present invention will become clearer and apparent from the fol-

lowing description, given as an example and not for limiting purposes, of an embodiment with reference to the attached figures, in which:

- 5 • figure 1 is a perspective view of the tray before packaging the food inside it according to the present invention;
- 10 • figure 2 is a perspective view of the tray with the food positioned inside it;
- figure 3 is a perspective view of the tray with the food positioned and fixed inside it;
- 15 • figure 4 is a perspective view of the tray with the food positioned and fixed inside it and with the lid closed.

[0015] With reference to the mentioned figures, the container according to the present invention comprises a tray 1 that can be made according to various shapes, for example square, rectangular, round, oval, etc., but in all cases, it is associated with a lid 2, made substantially with the same perimeter shape suitable for hermetically closing the tray.

20 **[0016]** For example, in one embodiment the tray is deeply concave and the lid is substantially flat, whereas in another one the tray is almost flat and the concavity is present on the lid. In both cases the food is positioned on a base of the tray.

30 **[0017]** The tray and the lid are made of the same material and in particular of APET or polypropylene.

[0018] Such a lid is fixedly connected to the upper edge of the tray through a connection portion 3. In this way, such a connection portion behaves like a hinge and the lid 2, by rotating about the hinging axis, can pass from an open position to a closed position of the tray itself.

35 **[0019]** The lid is made together with the tray and the upper edge of the tray 11 and the perimeter edge of the lid 21 are configured so as to be fixedly connected to one another, for example by interlocking, to keep the lid 2 in closed position.

40 **[0020]** The food A is positioned in the tray, in particular in a base 12 of the tray. Such positioning can be carried out manually, or through a packaging machine equipped with suitable automatic feeding means.

45 **[0021]** Thereafter, the food is covered by a film F according to so-called "skin pack" technology that is a type of vacuum packaging in the tray that makes the upper film adhere to the product as if it was indeed a second skin.

[0022] In the food industry, skin has application in the packaging of fresh, frozen or smoked meats, fish products, cheeses, fresh and frozen pasta, cured meats and gastronomy in general.

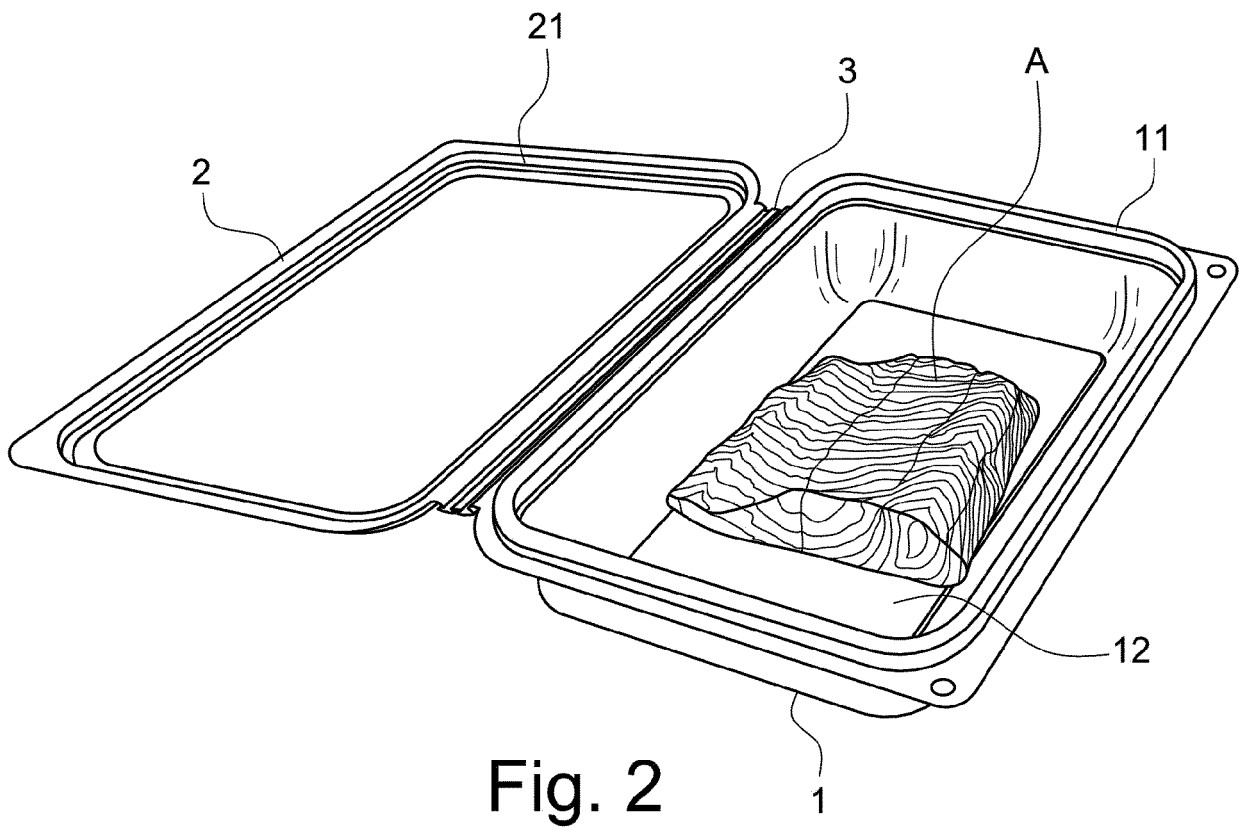
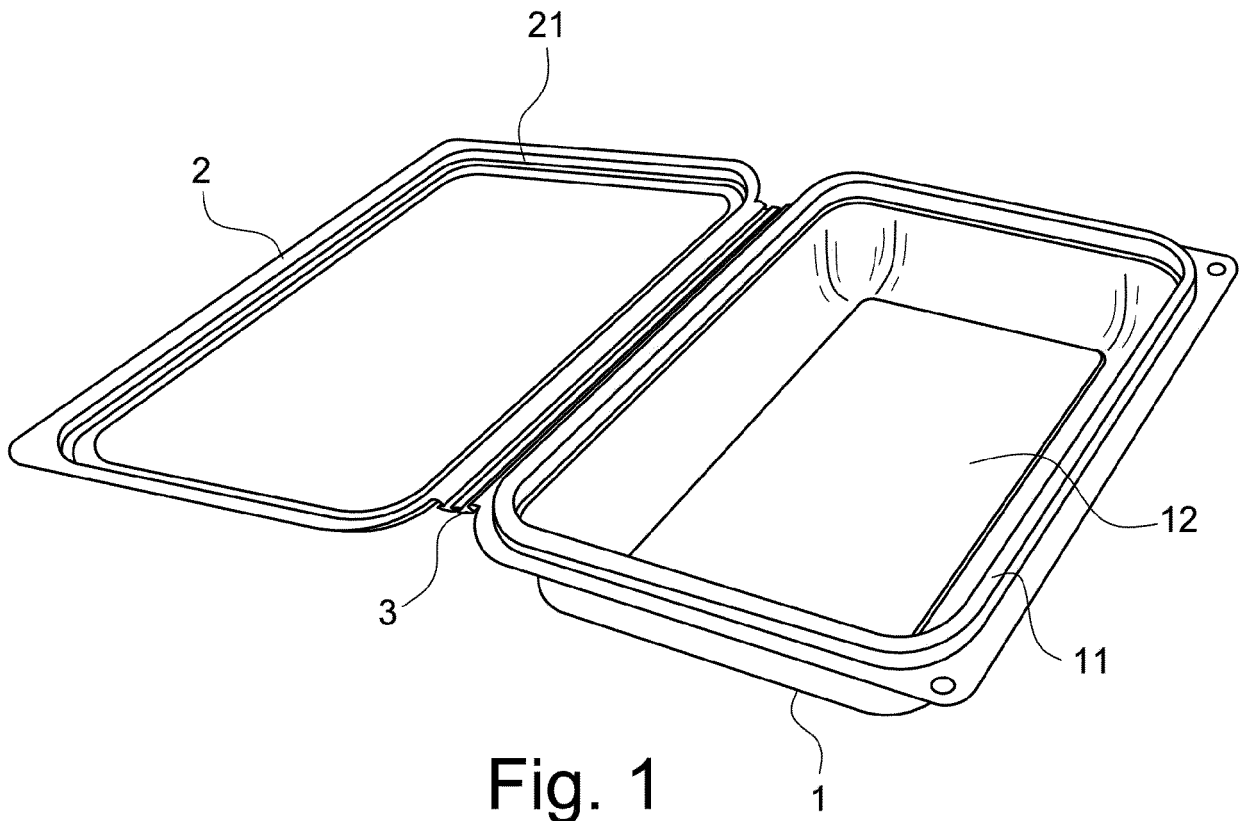
50 **[0023]** This packaging technology offers indisputable advantages in terms of better conservation of the product, safety and integrity of the packages, high flexibility for products of different shapes and sizes, applicability

to small pieces, single or double-portion, practicality and ease of movement and reduction of transportation space.
[0024] Finally, in a closing station, the lid is made to adhere to the base of the tray simply by interlocking or similar means, without the need to weld the two parts together.

8. Process according to claim 6, wherein in such a closing step the lid and the tray are fixedly connected to one another by interlocking.

Claims

1. Container for packaging foods (A) inside it comprising a tray (1) associated with a lid (2), made substantially with the same perimeter shape suitable for closing the tray when the food is positioned inside it, such a lid being fixedly connected to the upper edge of the tray through a connection portion (3), **characterised in that** such a food (A) is positioned in the tray, in particular in a base (12) of the tray and is coated by an adherent film (F) so as to place the package under vacuum conditions.
2. Container according to claim 1, wherein such a film is positioned on the food according to "skin pack" technology.
3. Container according to claim 1, wherein the tray can be made according to various shapes, for example square, rectangular, round, oval, etc.
4. Container according to claim 1, wherein the edge of the tray (11) and the perimeter edge of the lid (21) are shaped so as to fixedly connected to one another, for example by interlocking, to keep the lid itself in closed position.
5. Container according to claim 1, **characterised in that** it is made of APET or polypropylene.
6. Process for packaging foods (A) in a container, such a container comprising a tray (1) associated with a lid (2), made substantially with the same perimeter shape, suitable for closing the tray when the food is positioned inside it, such a lid being fixedly connected to the upper edge of the tray through a connection portion (3), **characterised in that** it comprises the following steps:
 - positioning the food (A) in a base (12) of the tray,
 - coating such food with a film (F),
 - making such a film stick to the food making a vacuum pack for the food itself,
 - closing the lid of the tray.
7. Process according to claim 1, wherein such a step of making the film stick is carried out according to "skin pack" technology.



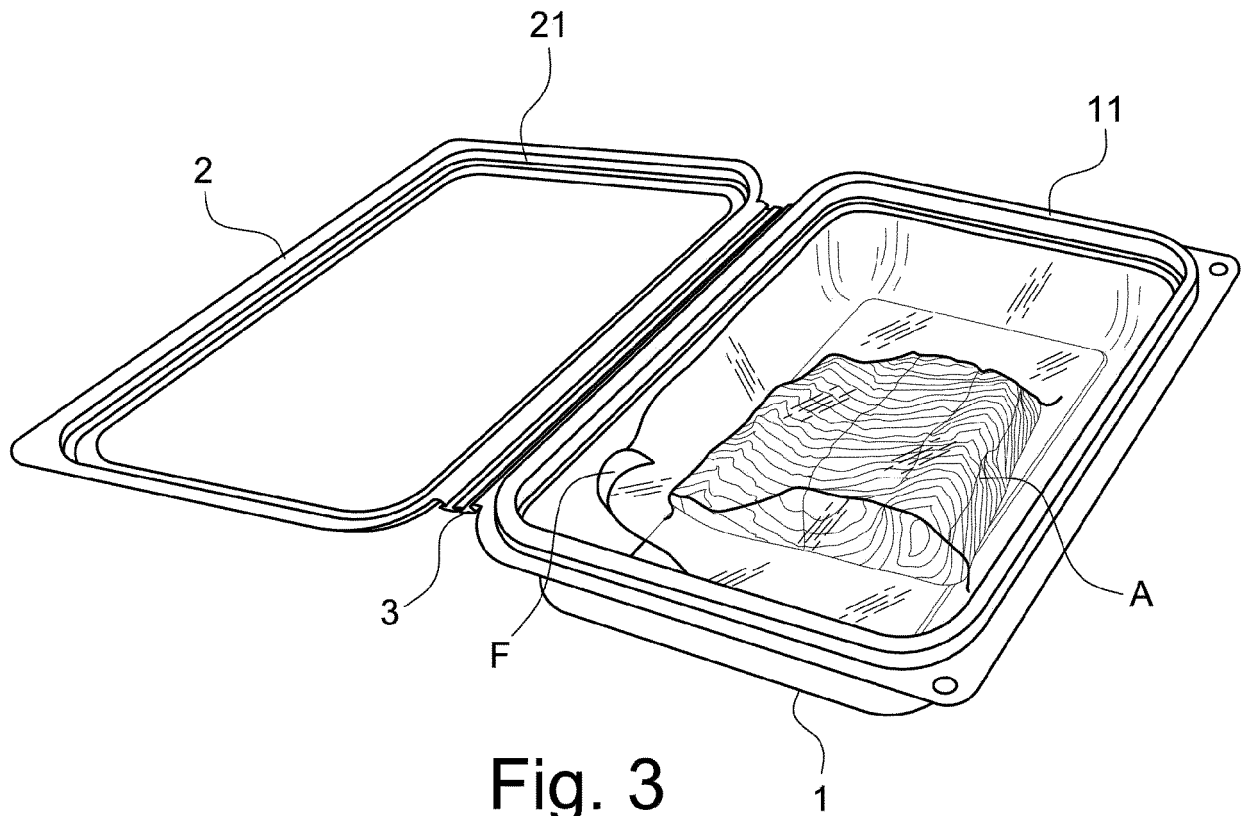


Fig. 3

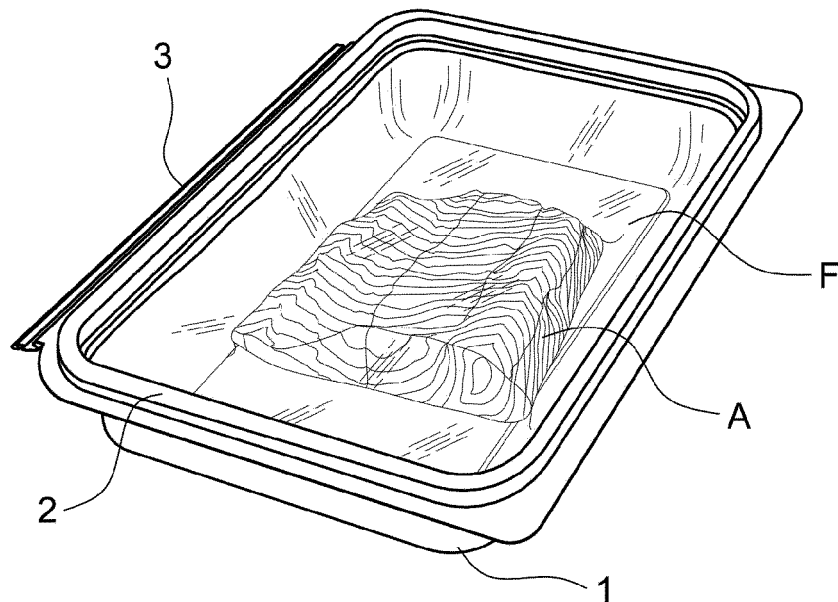


Fig. 4



EUROPEAN SEARCH REPORT

Application Number
EP 16 15 7207

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	US 4 840 271 A (GARWOOD ANTHONY J M [AU]) 20 June 1989 (1989-06-20) * abstract; figures * * column 1, lines 6-10 * * column 3, lines 12-43 *	1-8	INV. B65D75/22 B65D75/30
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			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 11 May 2016	Examiner Serrano Galarraga, J
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 03/02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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