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(54) FOOD PACKAGE LID FOIL COMPRISING AN ATTACHED ADDITIONAL FOOD CONTAINER AND METHOD FOR FILLING AND SEALING SAID ADDITIONAL FOOD CONTAINER

DECKELFOLIE FÜR LEBENSMITTELVERPACKUNG MIT ANGEHÄNGTER ZUSÄTZLICHER NAHRUNGSVERPACKUNG UND VERFAHREN ZUM FÜLLEN UND VERSCHLIESSEN DIESER NAHRUNGSVERPACKUNG

FEUILLE DE COUVERTURE D'UN RÉCIPIENT DE NOURRITURE COMPRENANT UN RÉCIPIENT ALIMENTAIRE SUPPLÉMENTAIRE CI-JOINT ET PROCÉDÉ DE REMPLISSAGE ET SCELLEMENT DUDIT RECIPIENT SUPPLÉMENTAIRE

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Description

TECHNICAL FIELD

[0001] The present invention relates to a food package adapted for ready meals and the like comprising an additional food package. The present invention further relates to a food package foil comprising an additional food package.

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BACKGROUND ART

[0002] There is an increasingly large demand for meals that are simple to prepare and for which the preparation time is short. Sales of convenience foods or ready meals are increasing. These are sold in disposable packages and are adapted either to be eaten directly without heating, such as sushi, or to be heated before eaten.

[0003] Most ready meals are contained in a disposable package usually consisting of a tray manufactured from cardboard, metal or a plastic material with a lid, which often is a thin, transparent plastic film. A plurality of different heating methods is available, depending on the packaging material. The most common tray material for single portion ready meals is plastic or paper, which allows the meal to be heated in a microwave oven. It is also possible to use a conventional oven or to place the package in hot water. The lid of the package is removed either before or after heating. The meal can be eaten directly from the pack when heated or it is possible to transfer the food from the package to a plate. During a transfer of the food, the presentation of the meal is destroyed and the food content will inevitable mix. If the food is frozen, it may be possible to transfer the food to a plate prior to heating without too much problems, but for a non-frozen meal, the transfer of food is not practical. [0004] One way of solving the problem with the food mixing is to use a tray having different sections divided with dividing walls. Such a tray is manufactured in a single piece using a specific moulding tool or pressing tool. It is difficult to eat directly from such a tray, but the food can be transferred in a more controlled, however time consuming, way. Another disadvantage of such a package is that the different sections are fixed in size. Depending on the prepared meals, different packages may thus be needed for each type of meal.

[0005] One known package is described in WO 2004/045970 A1, in which the package is subdivided into different sections which are adapted to preserve different pressures during heating, and consequently will allow different temperatures in the different sections.

[0006] US 3,708,086 A describes a package which is subdivided into different sections, which is adapted to be inverted after heating and having a specific lid acting as a plate.

[0007] WO 2006/115457 describes a food package in which the food is transferred to a plate by placing the package over a plate and then by removing the bottom

part of the package. The food can in this way be transferred to the serving surface of the plate without any mixing of the food content. The ready meal will thereby retain the same orientation as it had before the transfer of the food. Some foods, such as sauce, may still intermix some with the other foods.

[0008] US 4,656,042 A describes a food package in which a rigid pot adapted to hold an additional food product component is attached to the lid of the food tray transferred to a plate by placing the package over a plate and then by removing the bottom part of the package. In this way, the two different food products can be stored separately. The pot is filled and attached to the lid in the same package machine.

[0009] JP 2000062857 A describes a food package having a lid with an inner compartment adapted to hold a liquid which is formed by an additional foil attached to the lid.

[0010] WO 2009136038 A1, FR 2536251 A1, WO 9008710 A1 and JP 57154684 U all show examples of food packages having an additional food compartment attached to or integrated in the lid.

[0011] In the shown examples, relatively complicated solutions are shown, which require extensive machinery for the production of complete food packages. There is thus still room for an improved food package.

DISCLOSURE OF INVENTION

[0012] An object of the invention is therefore to provide an improved food package comprising an additional food product which is easy to fill. A further object of the invention is to provide a food package foil comprising an additional food container adapted for the use in a food package.

[0013] The solution to the problem according to the invention is described in the characterizing part of claim 1. The other claims contain advantageous embodiments and further developments of the food package, the food package foil and a method for filling and sealing an additional food container comprised in a lid of a food tray. [0014] In a food package comprising a food tray and a lid having an additional food container comprised in the lid of the food package, the object of the invention is achieved in that the lid of the food tray is made from a foil where the additional food container is folded flat when stored such that the food package foil can be supplied as a roll of foil.

[0015] By this first embodiment of the food package according to the invention, the food package comprises an additional food container comprised in the lid of the package. The lid can be supplied as a roll of foil, which makes it easy and simple to produce the food package. In this way, also small food producers can supply a food package with an additional food product which can be held completely separated from the rest of the food in the tray. The additional food container is formed between the lid and an additional foil that is attached to the lid. By

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making the additional food container from an additional foil allows the additional food container to be folded flat when stored, which in turn allows the package foil to be supplied as a roll of foil. This allows for a compact and cost-effective solution for an additional food container in a food package. With an additional food container that can be folded together attached to the lid, the same sealing machine can be used by the food producer.

[0016] In an advantageous development of the invention, the additional food container is attached to the lid by a temperature sensitive means such that the additional food container will open up when the seal between the additional food container and the lid is above a specific temperature. In this way, the additional food container can open up when the additional food has reached a predefined temperature, which allows the additional food to pour down on the rest of the food in the food tray. In another advantageous development of the invention, the additional food container is attached to the lid by a microwave sensitive means such that the additional food container will open up when the seal between the additional food container and the lid has been exposed to a predefine amount of microwave radiation. The additional food container may also be provided with a perforated weakening which opens up when the pressure rises above a predetermined pressure level.

[0017] In an advantageous development of the invention, the additional food container comprises a material that is at least partly non-permeable to microwaves. In this way, the additional food in the additional food container can be shielded from all or part of the microwave radiation, which allows the additional food to be heated less than the rest of the food in the food tray. By e.g. using a material that is completely non-permeable to microwave radiation, it is possible to prevent the additional food to be heated almost completely.

[0018] In an advantageous development of the invention, the lid is fixedly attached to the food tray and the food tray further comprises a bottom that can be removed from the food tray by the use of a removal means attached to the bottom. Such a food tray is especially advantageous to use, since it is easier to attach the lid to the tray because the lid and the tray can be attached to each other in a more rigid way, e.g. by melting them together. The sealing process is thus less sensitive to variations, which is of advantage when the lid is attached to the tray in a manual way. It is also possible to make the seal between the lid and the tray stronger since other sealing parameters can be used.

[0019] In an advantageous embodiment of an inventive food package foil adapted to be used as a cover for a food package, the food package foil comprises a plurality of lid portions and a plurality of intermediate foil portions interconnecting the lid portions, and further comprises an additional food container comprised in the lid portion of the foil. The additional food container is preferably formed between the lid portion and an additional foil that is attached to the lid portion. This allows for an

additional food container that can be used to separate an additional food product form the rest of the food in a food package, and that can be flat folded before the additional food container is filled. This allows for a cost-effective handling of the package foil, since the foil can be transported on foil rolls and be fed to the package station from the foil rolls.

[0020] In an advantageous development of the invention, the additional food container comprises an opening portion for filling the additional food container. In this way, the additional food container can be filled in an easy and simple way. This allows small food producers to supply a food package with an additional food product, since the filling of the additional food container can be made with simple hand tools.

[0021] The opening portion of the additional food container may comprise a self-closing valve. The self-closing valve will stop the food product from escaping the additional food container. The opening portion may also be sealed at the same time as the lid is attached to the food tray. In this way, the additional food container can be filled outside of the tray, in a separate filling station, and before the lid is positioned over the food tray.

[0022] The opening portion may extend into the intermediate foil portion of the foil. The opening portion can comprise a funnel-shaped entrance opening. The advantage of letting the opening portion extend into the intermediate foil portion is that this portion is cut away during the packaging of the food package. This can simplify the filling of the additional food container and will also prevent spillage of additional food on the food tray, since any spillage will occur at the intermediate portion.

BRIEF DESCRIPTION OF DRAWINGS

[0023] The invention will be described in greater detail in the following, with reference to the embodiments that are shown in the attached drawings, in which

- Fig. 1 shows a side view of a food package comprising an additional food container according to the invention,
- Fig. 2 shows a split view of the food tray according to the invention,
- Fig. 3 shows another split view of the food tray according to the invention,
- Fig. 4 shows part of a roll of foil having lid portions with additional food containers, and
 - Fig. 5 shows another embodiment of a roll of foil having lid portions with additional food containers.

MODES FOR CARRYING OUT THE INVENTION

[0024] The embodiments of the invention with further

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developments described in the following are to be regarded only as examples and are in no way to limit the scope of the protection provided by the patent claims.

[0025] Fig. 1 shows a first embodiment of a food package 1 comprising a food tray 2 and a lid 3, where the lid comprises an additional food container 4. Fig. 2 and 3 shows split views of the food package with the additional food container. Figs. 4 and 5 show part of a roll of foil having lid portions with additional food containers. The food tray may be of different types. The inventive food package may comprise either a regular food tray having a fixed bottom or a food tray comprising a removable bottom. The food tray may also have different shapes, such as a rectangular shape, an oval shape, a circular shape or an asymmetric shape. A rectangular outer shape is however cost-efficient both to handle and to pack in larger quantities. The food tray may be made from different material, such as different plastics, polymers and paper based materials. The food tray 2 shown comprises a concave section at each transverse side wall. Food trays adapted for being sealed with a lid in a heat sealing process are well known and are not described further.

[0026] The upper periphery of the food tray comprise an upper rim 13 that is adapted to receive a lid 3 which is made up of a foil that is heat sealed to the rim of the food tray. The lid may be attached to the food tray in a removable manner, such that the lid may be easily removed from the food tray in order to open the food package. This is advantageous when a conventional food tray having a fixed bottom is used. By attaching the lid in a removable manner, the lid can be removed without having to use a tool to cut the lid away. The lid may also be attached to the food tray in a fixed manner, such that the lid can not be pulled away from the food tray in an easy way in order to open the food package. When the lid is fixedly attached to the food tray, the food package is opened by removing the bottom of the food tray when the food tray bears on a plate or other serving surface. One advantage of using a food tray with a removable bottom is thus that the lid is fixed to the food tray in a more secure way, which is also advantageous such that the opening of the additional food container can be sealed in a more secure way in the sealing process.

[0027] The lid 3 may be made from different materials but is preferably a transparent film or foil that is attached to the upper rim after food has been inserted into the food tray. The lid further comprises an additional food container 4. The additional food container 4 is in the shown example made from a separate foil sheet 5 attached to the foil making up the lid. The foil that makes up the lid for the food package is supplied as a roll of foil that is pulled out over the food tray and subsequently sealed to the food tray when the ready meal contained in the food package is completed. The separate foil sheet 5 is consequently attached to the lid foil in a separate manufacturing step, preferably when the roll of foil is produced.

[0028] The separate foil sheet 5 of the additional food

container 4 is in the shown example somewhat drop shaped, but may also have other shapes. The separate foil sheet is not attached to the lid foil in a stretched manner, but is instead attached to the lid foil such that a cavity is created between the lid foil and the separate foil sheet. This cavity will hold the additional food. During manufacture of the additional food container, the separate foil sheet is preferably held in a somewhat folded state such that the separate foil sheet is pulled together. The separate foil sheet is then attached to the lid foil, preferably with a heat seal process or by using some kind of adhesive. The shape of the additional food container depends on how the separate foil sheet is held during the attachment. In the shown example, the main portion 6, i.e. the main volume, of the additional food container is concentrated to the middle of the lid. An opening portion 7 is thus created at the rim section of the lid. The separate foil sheet 5 may e.g. be held by a suction cup or a similar tool in order to allow the separate foil sheet to be somewhat folded during the attachment.

[0029] The attachment of the separate foil sheet 5 to the lid foil is preferably made such that bonding between the separate foil sheet and the lid foil is relatively weak. This will allow the seal to open when the pressure in the additional food container rises during heating of the additional food. When the additional food container opens up, the additional food product can pour down on the rest of the food in the food tray just before the serving of the ready meal. In this way, there is no mixing of the additional food and the rest of the food during storage and transportation of the ready meal. The food in the food tray may e.g. be meat and fried potatoes and the additional food product may be sauce.

[0030] The advantage of placing the sauce in a supplementary food container is that the sauce will not mix with the food in the tray before the food is ready to serve. This will prevent the food to be contaminated by the additional food product during storage and transportation of the food package. In this way, it is possible to prevent e.g. fried potatoes to be soaked with sauce which would inevitably destroy the crispness of the potatoes. Certain chemical reactions, which will start when some food products are mixed, can also be prevented by separating one of the food products. One such situation is discolouring of food by the additional food product, such as fish by a sauce, which is prevented by the separation of the food products.

[0031] It is also possible to attach the separate foil sheet to the lid foil with an adhesive that is relatively weak, such that the bonding between the separate foil sheet and the lid foil is relatively weak. This will also allow the seal to open when the pressure in the additional food container rises during heating of the additional food. The adhesive may also be temperature sensitive, such that the additional food container opens up when the temperature of the seal reaches a predetermined temperature. It is also possible to use an adhesive that is sensitive to microwave radiation, such that the seal opens up when

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the seal has been exposed to a predefined amount of microwave radiation. It is e.g. possible to provide a material that is designed to absorb microwaves in the seal. Such a material will absorb the microwaves and will heat up, which in turn will cause a heat-sensitive adhesive to detach. Such a material is referred to as a susceptor. The complete seal may open up, or just part of the seal. This can be controlled by the attachment of the separate foil sheet to the lid foil.

[0032] To facilitate that the additional food container opens up or to control where the additional food container opens up, it is possible to provide weaker parts of the seal between the separate foil sheet and the lid foil. Such a predefined weakening may e.g. be created by double folding the separate foil sheet at some positions, which will create a weaker seal. It is also possible to provide one or more weakening regions or perforations in the surface of the separate foil sheet. The separate foil sheet is preferably thinner and/or weaker than the lid foil. This will guarantee that the additional food container will open up instead of the lid. Since the additional food container is provided inside the food package and is protected by the lid, the strength of the separate foil must not be very high.

[0033] In some cases, it may be of advantage to spread the additional food in the additional food container evenly over the complete ready meal. In such a case, the additional food container may be adapted to explode in a controlled way when the pressure in the additional food container reaches a predefined value due to the heating of the additional food. In this way, the additional food is spread over the entire area of the food in the food tray. [0034] When the separate foil sheet 5 is attached to the lid foil, an opening portion 7 is created. The opening portion is used to fill the additional food container 4 with an additional food product. It is thus of advantage that the opening portion is rather well defined and that it resembles a short tube having a cross section that is smaller than the main portion 6 of the additional food container 4. By letting the opening section be positioned above a maximum filling height 8 when the lid with the additional food container is held in a horizontal position, the additional food product will stay in the additional food container during the handling and the sealing of the lid. In this way, there is no need for a non return valve in the opening portion. It is of course also possible to provide the opening portion with a non return valve.

[0035] In one embodiment, the opening portion 7 is advantageously positioned on the lid foil at a position of the foil 10 that will be cut off when the lid is attached to the food tray. Normally, the lid foil is provided with the same width as the food tray and the foil is cut transverse the longitudinal direction of the foil. In this way, the food package is released from the foil and the intermediate foil portions 11 between the lid portions 12 of the foil are discarded. Preferably, the opening portion 7 extends into the intermediate foil portion. The outer end of the opening portion 7 may also be formed in a funnel-shaped entrance

opening 9 such that the filling tool may be more easily inserted, especially when the additional food container is filled manually. It is also of advantage to let the opening portion end in the intermediate portion of the foil since spillage that may occur during the insertion and removal of the filling tool can be caught by the funnel-shaped portion and discarded together with the intermediate portion. [0036] In another embodiment, the opening portion 7 is positioned inside of the rim section of the lid foil, at a position of the foil 10 that will not bear on the rim of the food tray when the lid is heat sealed to the tray. The rim section of the lid is the part of the lid that will bear on the rim and that will be heat sealed to the rim of the tray. The opening portion may in this example be provided with a non return valve that will stop the food product from escaping the additional food container. It is also possible to use an opening portion without a non return valve. In this case, the opening portion may be closed by e.g. an ultrasonic weld when the additional food container has been filled, before the lid is attached to the tray. Depending on the food product and the shape of the opening portion, it may also be possible to leave the opening portion open. The outer end of the opening portion 7 may also be formed in a funnel-shaped entrance opening 9 such that the filling tool may be more easily inserted, especially when the additional food container is filled manually.

[0037] In this way, the additional food container can be filled with an additional food product before the lid with the additional food container is positioned over the food tray and the lid can be handled without the additional food product spilling out. The filling of the additional food container is made by inserting a tube or pipe into the opening portion. The filling may be performed by a manually operated filling station or an automated filling station. After the additional food product has been inserted into the additional food container, the filler tool is withdrawn. The lid is then positioned above the food tray and the lid, either with or without the opening of the additional food container, is sealed to the food tray. The lid is preferably mounted to the tray in a heat sealing operation. Commonly known heat sealing apparatuses or machines comprising a heated plate may be used. It is also possible to use other types of sealing apparatuses, such as an apparatus using laser or ultrasonic to heat the seal. It would also be possible to treat the contacting surfaces of the lid and the tray with substances of a two component adhesive, such that a bond is created when they come into contact with each other. The same applies when the additional food container is filled when the lid is positioned over the food tray prior to the filling.

[0038] It is also possible to provide the separate foil sheet 5 and/or the section of the lid adjacent to the separate foil sheet 5 with a material that is at least partly non-permeable to microwave radiation. By microwaves are meant electromagnetic waves adapted to heat food in a microwave oven. Such microwaves normally have a frequency of 2.45 GHz, but other frequencies in the lower

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GHz-range may also be used. In this way, a food product such as a sauce can be heated less than the rest of the food, or may even be more or less unheated. This is of advantage for some food products that degrade at to high temperatures. When the food product is not heated or only heated to some extent, the seal is preferably opened by using a microwave sensitive adhesive.

[0039] The invention is not to be regarded as being limited to the embodiments described above, a number of additional variants and modifications being possible within the scope of the subsequent patent claims. The additional food container may have different sizes and shapes and may be made from any suitable material.

REFERENCE SIGNS

[0040]

- 1: Food package
- 2: Food tray
- 3: Lid
- 4: Additional food container
- 5: Separate foil sheet
- 6: Main portion
- 7: Opening portion
- 8: Filling height
- 9: Funnel-shaped entrance opening
- 10: Foil
- 11: Intermediate foil portion
- 12: Lid portion
- 13: Rim
- 14: Rim section
- 15: Non return valve

Claims

- 1. A food package foil (10) adapted to be used as a cover for a food package (2), comprising a plurality of lid portions (12), where each lid portion is adapted to be sealed to a food tray (2) at a rim section (14) of the lid portion, and a plurality of intermediate foil portions (11) interconnecting the lid portions (12), where the food package foil (10) further comprises an additional food container (4) comprised in the lid portion (12) of the foil (10), **characterized in that** the additional food container (4) is formed between the lid portion (12) and an additional foil (5) that is attached to the lid portion (12), where the additional foil (5) is folded flat when stored such that the food package foil (10) can be supplied as a roll of foil.
- 2. Food package foil according to claim 1, characterized in that the each lid portion (12) is adapted to be heat sealed to a food tray (2).
- 3. Food package foil according to claim 2, characterized in that the additional food container (4) com-

- prises an opening portion (7) for filling the additional food container (4).
- **4.** Food package foil according to claim 3, **characterized in that** the opening portion (7) comprises a funnel-shaped entrance opening (9).
- 5. Food package foil according to claim 3, **characterized in that** the opening portion (7) is positioned inside of the rim section (14) of the lid portion, such that the opening portion does not interfere with the heat sealing of the lid to the food tray.
- **6.** Food package foil according to claim 3, **characterized in that** the opening portion (7) extends into the intermediate foil portion (11) of the foil (10).
- 7. Food package foil according to any of claims 3 to 6, characterized in that the opening portion (7) comprises a non return valve (15).
- **8.** A food package (1) comprising a food tray (2) and a lid (3) made from a lid portion (12) of a food package foil (10) according to any of claims 1 to 7.
- 9. Food package according to claim 8, **characterized** in that the opening portion (7) for filling the additional food container (4) is sealed when the lid (3) is attached to the food tray (2) by heat sealing.
- 10. Food package according to any of claims 8 or 9, characterized in that the additional food container (4) is attached to the lid (3) by a temperature sensitive means such that the additional food container (4) will open up when the seal between the additional food container (4) and the lid (3) is above a specific temperature.
- 11. Food package according to any of claims 8 or 9, characterized in that the additional food container (4) is attached to the lid (3) by a microwave sensitive means such that the additional food container (4) will open up when the seal between the additional food container (4) and the lid (3) is exposed to a predefined amount of microwave radiation.
- 12. Food package according to any of claims 8 to 11, characterized in that the additional food container (4) comprises a material that is at least partly non-permeable to microwaves.
- 13. Food package according to any of claims 8 to 12, characterized in that the lid (3) is fixedly attached to the food tray (2) and that the food tray further comprises a bottom (14) that can be removed from the food tray by the use of a removal means attached to the bottom (14) when the food tray bears on a serving surface.

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- **14.** Method for filling and sealing an additional food container comprised in a lid of a food tray, **characterized in** the following steps:
 - inserting a filling tool into an opening at a rim section of the lid of the additional food container,
 - filling the additional food container with an additional food product,
 - removing the filling tool,
 - attaching the lid at the rim section to the food tray by means of a heat sealing operation and,
 - at the same time, sealing the opening at the rim section of the additional food container.

Patentansprüche

- 1. Lebensmittelverpackungsfolie (10), die dazu konzipiert ist, als Abdeckung für eine Lebensmittelverpackung (2) verwendet zu werden, umfassend mehrere Deckelabschnitte (12), wobei jeder Deckelabschnitt dazu konzipiert ist, an einem Randabschnitt (14) des Deckelabschnitts an eine Lebensmittelschale (2) angesiegelt zu werden, und mehrere Zwischenfolienabschnitte (11), welche die Deckelabschnitte (12) miteinander verbinden, wobei die Lebensmittelverpackungsfolie (10) ferner eine zusätzliche Nahrungsverpackung (4) umfasst, die in dem Deckelabschnitt (12) der Folie (10) enthalten ist, dadurch gekennzeichnet, dass die zusätzliche Nahrungsverpackung (4) zwischen dem Deckelabschnitt (12) und einer zusätzlichen Folie (5) ausgebildet ist, die an dem Deckelabschnitt (12) befestigt ist, wobei die zusätzliche Folie (5) bei Aufbewahrung flach gefaltet ist, so dass die Lebensmittelverpackungsfolie (10) als Folienrolle bereitgestellt werden kann.
- 2. Lebensmittelverpackungsfolie nach Anspruch 1, dadurch gekennzeichnet, dass jeder Deckelabschnitt (12) dazu konzipiert ist, an eine Lebensmittelschale (2) heiß angesiegelt zu werden.
- Lebensmittelverpackungsfolie nach Anspruch 2, dadurch gekennzeichnet, dass die zusätzliche Nahrungsverpackung (4) einen Öffnungsabschnitt (7) zum Füllen der zusätzlichen Nahrungsverpackung (4) umfasst.
- 4. Lebensmittelverpackungsfolie nach Anspruch 3, dadurch gekennzeichnet, dass der Öffnungsabschnitt (7) eine trichterförmige Eintrittsöffnung (9) umfasst.
- 5. Lebensmittelverpackungsfolie nach Anspruch 3, dadurch gekennzeichnet, dass der Öffnungsabschnitt (7) innerhalb des Randabschnitts (14) des Deckelabschnitts derart angeordnet ist, dass der

- Öffnungsabschnitt nicht die Heißversiegelung des Deckels an die Lebensmittelschale behindert.
- Lebensmittelverpackungsfolie nach Anspruch 3, dadurch gekennzeichnet, dass sich der Öffnungsabschnitt (7) in den Zwischenfolienabschnitt (11) der Folie (10) erstreckt.
- Lebensmittelverpackungsfolie nach einem der Ansprüche 3 bis 6, dadurch gekennzeichnet, dass der Öffnungsabschnitt (7) ein Rückschlagventil (15) umfasst.
- 8. Lebensmittelverpackung (1), umfassend eine Lebensmittelschale (2) und einen Deckel (3), der aus einem Deckelabschnitt (12) einer Lebensmittelverpackungsfolie (10) nach einem der Ansprüche 1 bis 7 hergestellt ist.
- Lebensmittelverpackung nach Anspruch 8, dadurch gekennzeichnet, dass der Öffnungsabschnitt (7) zum Füllen der zusätzlichen Nahrungsverpackung (4) verschlossen wird, wenn der Deckel (3) durch Heißversiegelung an der Lebensmittelschale (2) befestigt wird.
 - 10. Lebensmittelverpackung nach einem der Ansprüche 8 oder 9, dadurch gekennzeichnet, dass die zusätzliche Nahrungsverpackung (4) durch eine temperaturempfindliche Vorrichtung derart an dem Deckel (3) befestigt ist, dass sich die zusätzliche Nahrungsverpackung (4) öffnet, wenn die Versiegelung zwischen der zusätzlichen Nahrungsverpackung (4) und dem Deckel (3) über einer bestimmten Temperatur liegt.
 - 11. Lebensmittelverpackung nach einem der Ansprüche 8 oder 9, dadurch gekennzeichnet, dass die zusätzliche Nahrungsverpackung (4) durch eine mikrowellenempfindliche Vorrichtung derart an dem Deckel (3) befestigt ist, dass sich die zusätzliche Nahrungsverpackung (4) öffnet, wenn die Versiegelung zwischen der zusätzlichen Nahrungsverpackung (4) und dem Deckel (3) einer vorher festgelegten Menge an Mikrowellenstrahlung ausgesetzt wird.
 - 12. Lebensmittelverpackung nach einem der Ansprüche 8 bis 11, dadurch gekennzeichnet, dass die zusätzliche Nahrungsverpackung (4) ein Material umfasst, das zumindest teilweise nicht durchlässig für Mikrowellen ist.
 - 13. Lebensmittelverpackung nach einem der Ansprüche 8 bis 12, dadurch gekenntzeichnet, dass der Deckel (3) fest an der Lebensmittelschale (2) befestigt ist und dass die Lebensmittelschale ferner einen Boden (14) umfasst, der mittels einer an dem Boden (14) befestigten Entfernungsvorrichtung von der Le-

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bensmittelschale entfernt werden kann, wenn die Lebensmittelschale auf einer Servieroberfläche aufliegt.

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- 14. Verfahren zum Füllen und Verschließen einer zusätzlichen Nahrungsverpackung, die in einem Deckel einer Lebensmittelschale enthalten ist, gekennzeichnet durch die folgenden Schritte:
 - Einführen eines Füllwerkzeugs in eine Öffnung an einem Randabschnitt des Deckels der zusätzlichen Nahrungsverpackung,
 - Füllen der zusätzlichen Nahrungsverpackung mit einem zusätzlichen Lebensmittelprodukt,
 - Entfernen des Füllwerkzeugs,
 - Befestigen des Deckels an dem Randabschnitt an der Lebensmittelschale mittels eines Heißversiegelungsvorgangs und
 - gleichzeitig Verschließen der Öffnung an dem Randabschnitt der zusätzlichen Nahrungsverpackung.

Revendications

- Feuille de récipient de nourriture (10) conçue pour être utilisée comme un couvercle pour un récipient de nourriture (2), comprenant une pluralité de parties de couverture (12), dans laquelle chaque partie de couverture est conçue pour être scellée sur un plateau à aliments (2) au niveau d'une section de rebord (14) de la partie de couverture et une pluralité de parties de feuille intermédiaires (11) reliant les parties de couverture (12), dans laquelle la feuille de récipient de nourriture (10) comprend en outre un récipient alimentaire supplémentaire (4) compris dans la partie de couverture (12) de la feuille (10), caractérisée e n ce que le récipient alimentaire supplémentaire (4) est formé entre la partie de couverture (12) et une feuille supplémentaire (5) qui est fixée à la partie de couverture (12), dans laquelle la feuille supplémentaire (5) est repliée à plat lorsqu'elle est stockée, de sorte que la feuille de récipient de nourriture (10) peut être fournie sous la forme d'un rouleau de feuille.
- Feuille de récipient de nourriture selon la revendication 1, caractérisée en ce que chaque partie de couverture (12) est conçue pour être scellée à chaud à un plateau pour aliments (2).
- 3. Feuille de récipient de nourriture selon la revendication 2, caractérisée en ce que le récipient alimentaire supplémentaire (4) comprend une partie d'ouverture (7) pour remplir le récipient alimentaire supplémentaire (4).
- 4. Feuille de récipient de nourriture selon la revendica-

tion 3, **caractérisée e n** ce que la partie d'ouverture (7) comprend une ouverture d'entrée en forme d'entonnoir (9).

- 5. Feuille de récipient de nourriture selon la revendication 3, caractérisée e n ce que la partie d'ouverture (7) est positionnée à l'intérieur de la section de rebord (14) de la partie de couverture, de sorte que la partie d'ouverture ne gêne pas le scellage à chaud de la couverture sur le plateau à aliments.
- Feuille de récipient de nourriture selon la revendication 3, caractérisée e n ce que la partie d'ouverture (7) s'étend dans la partie de feuille intermédiaire (11) de la feuille (10).
- Feuille de récipient de nourriture selon la revendication 3, caractérisée e n ce que la partie d'ouverture (7) comprend une soupape anti-retour (15).
- 8. Récipient de nourriture (1) comprenant un plateau à aliments (2) et une couverture (3) constituée d'une partie de couverture (12) d'une feuille de récipient de nourriture (10) selon l'une quelconque des revendications 1 à 7.
- 9. Récipient de nourriture selon la revendication 8, caractérisé en ce que la partie d'ouverture (7) pour remplir le récipient alimentaire supplémentaire (4) est scellée lorsque la couverture (3) est fixée au plateau à aliments (2) par scellage à chaud.
- 10. Récipient de nourriture selon l'une quelconque des revendications 8 ou 9, caractérisé e n ce que le récipient alimentaire supplémentaire (4) est fixé à la couverture (3) par un moyen sensible à la température, de sorte que le récipient alimentaire supplémentaire (4) s'ouvre lorsque le joint entre le récipient alimentaire supplémentaire (4) et la couverture (3) est au-dessus d'une température spécifique.
- 11. Récipient de nourriture selon l'une quelconque des revendications 8 ou 9, caractérisé e n ce que le récipient alimentaire supplémentaire (4) est fixé à la couverture (3) par un moyen sensible aux micro-ondes, de sorte que le récipient alimentaire supplémentaire (4) s'ouvre lorsque le joint entre le récipient alimentaire supplémentaire (4) et la couverture (3) est exposé à une quantité prédéfinie de rayonnement par micro-ondes.
- 12. Récipient de nourriture selon l'une quelconque des revendications 8 à 11, caractérisé en ce que le récipient alimentaire supplémentaire (4) comprend un matériau qui est au moins partiellement non perméable aux micro-ondes.
- 13. Récipient de nourriture selon l'une quelconque des

revendications 8 à 12, **caractérisé en ce que** la couverture (3) est fixée de manière définitive au plateau pour aliments (2) et **en ce que** le plateau à aliments comprend en outre un fond (14) qui peut être retiré du plateau à aliments par l'utilisation d'un moyen de retrait fixé sur le fond (14) lorsque le plateau à aliments repose sur une surface de service.

14. Procédé de remplissage et de scellement d'un récipient alimentaire supplémentaire compris dans une couverture d'un plateau à aliments, **caractérisé par** les étapes suivantes :

- insertion d'un outil de remplissage dans une ouverture au niveau d'une section de rebord de la couverture du récipient alimentaire supplémentaire,

- remplissage du récipient alimentaire supplémentaire avec un produit alimentaire supplémentaire,

- retrait de l'outil de remplissage,

- fixation de la couverture au niveau de la section de rebord sur le plateau à aliments au moyen d'une opération de scellement à chaud et,

- en même temps, scellement de l'ouverture au niveau de la section de rebord du récipient alimentaire supplémentaire.

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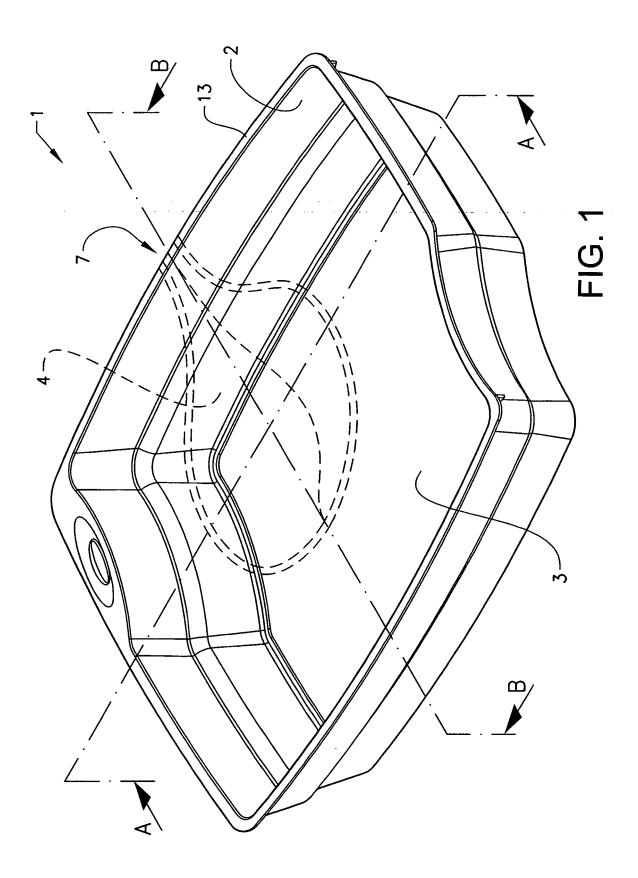
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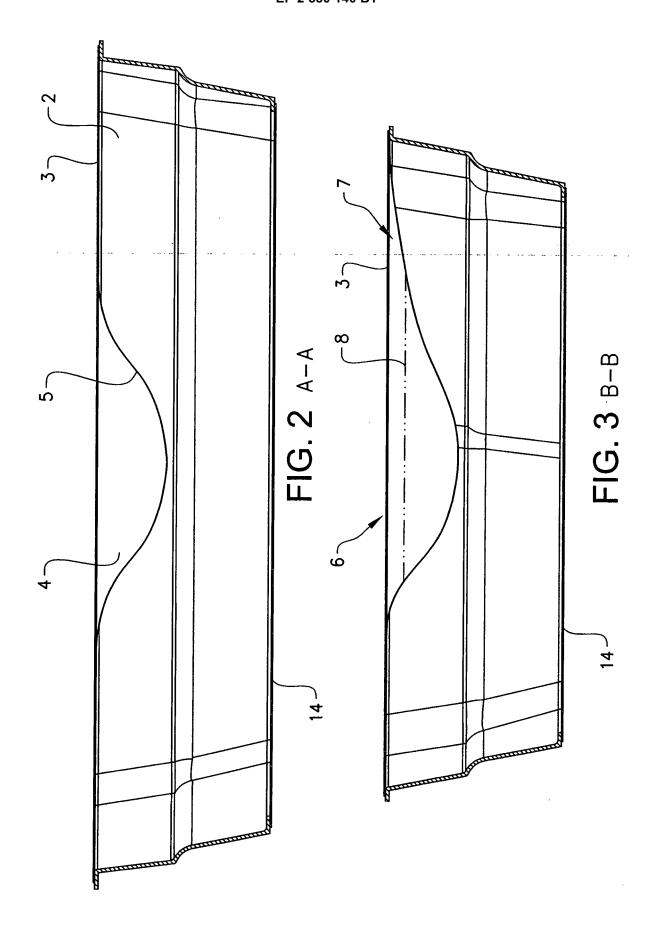
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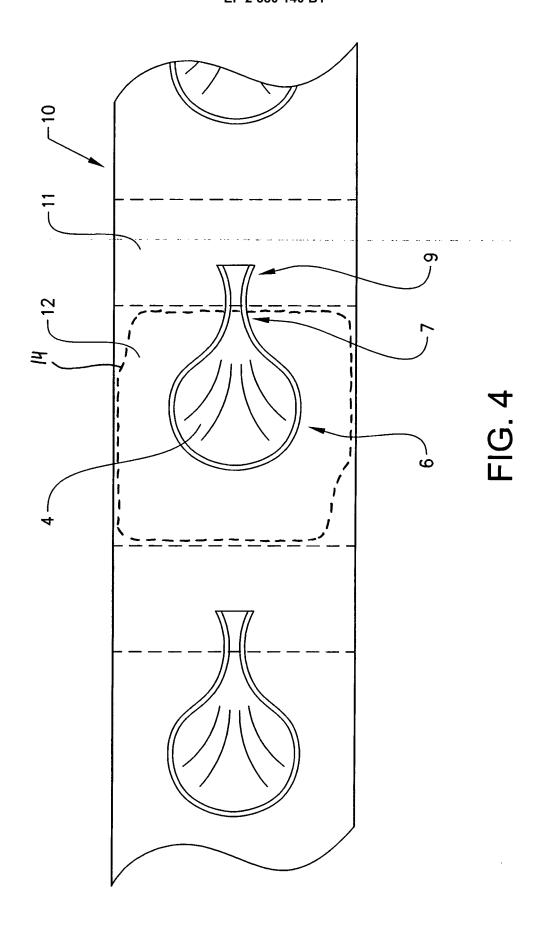
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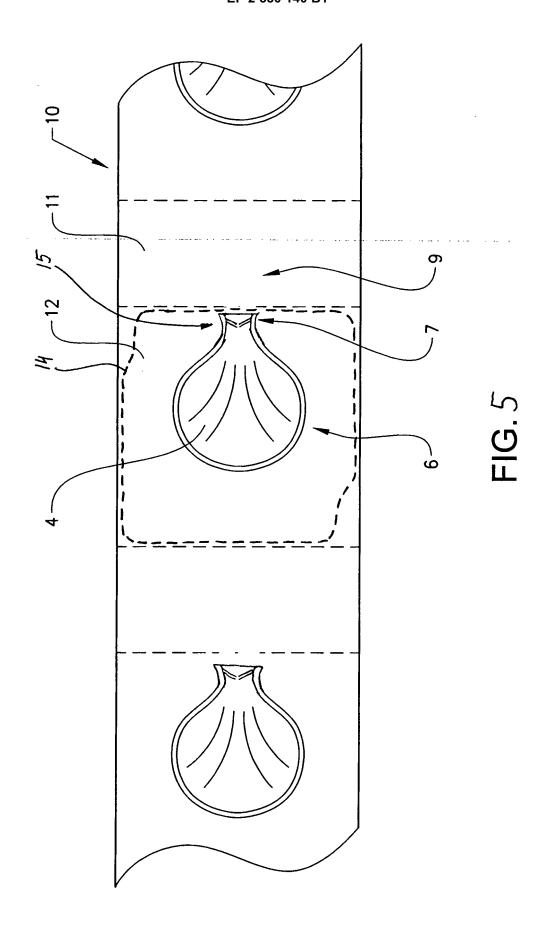
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REFERENCES CITED IN THE DESCRIPTION

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