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(54) RESEALABLE PACKAGING FOR FOOD SUCH AS SLICED MEAT

(57) Resealable packaging (100) for sliced food products (152) comprising a first portion (120) formed from a first laminate material comprising a core layer (122) comprising adhesive (122a) and a heat sealable layer (121) connected via a heat seal (130) to a second portion (110) formed from a second material so as to form a sealed compartment. The second portion (110) contains a removable area (200) that may be removed taking with it part of the heat seal (130) to reveal the adhesive (122a), which then allows the enclosure to be resealed. The second portion (110) preferably contains a zone of weakness (115) separating the removable area (200) from the remainder of the second portion (110), to allow the removable area to be easily torn away. The disclosure also relates to a method of opening and resealing such a resealable packaging (100), and also a method of forming the resealable packaging.

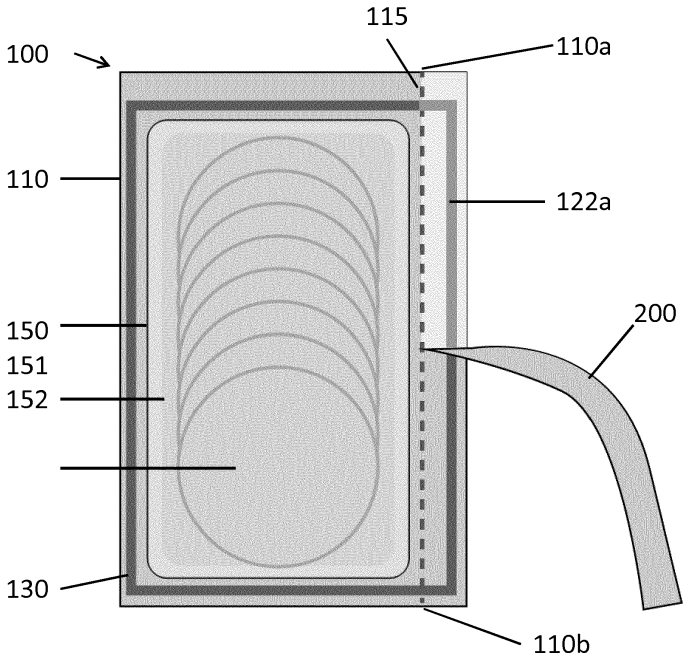

Fig. 2a

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Description

[0001] The present disclosure relates to a resealable packaging for food such as sliced meat, sliced cheese or the like. The packaging contains a removable portion that reveals an adhesive when removed, said adhesive being capable of allowing the packaging to be resealed. The disclosure also relates to methods of making such resealable packaging.

BACKGROUND OF THE DISCLOSURE

[0002] Thinly sliced food products such as ham, salami and cheese are often sold in heat sealed packaging formed from impermeable laminated materials. The impermeable materials help to keep the food products fresh before opening.

[0003] A typical construction for this type of packaging comprises an envelope formed by the impermeable material together with the food product arranged on a thin thermoformed tray that can be removed from and reinserted into the envelope. For instance, the envelope may be formed by a single piece of impermeable laminate material folded over on itself and heat sealed along three edges.

[0004] Heat sealing is an advantageous sealing methodology, as it typically provides water and gas tight seals. This is particularly important in packaging for food products, as they are prone to spoiling.

[0005] Typically this type of packaging may contain around 100 grams or so of sliced food product, which is often several servings. It is therefore desirable that the packaging can be resealed after opening, preferably repeatedly opened and resealed. This allows the tray containing the slices of food product to be reinserted and the packaging sealed to minimise the risk of spoiling, and prolonging the shelf-life of the sliced food product.

[0006] A typical method of resealing involves an adhesive strip, for instance a pressure sensitive adhesive. Suitable adhesives are well known in the art that are capable of sealing the laminated materials together, peeling apart and resealing numerous times. However, due to the low peel strength and generally low adhesive strength of these adhesives, they are not suitable for use as the sealing means for the packaging as it leaves the factory. These pressure sensitive adhesives are typically only suitable for resealing the packaging after opening, and must always therefore be used in combination with an additional sealing means which provides a more durable seal suitable for transport and storage.

[0007] One such resealable package is disclosed in WO 2013/144363 A1. The package in WO 2013/144363 A1 is formed from a film material which is folded and sealed by using adhesive, or heat welding. The package includes a tear away strip that has a weakened portion made by laser scoring the packaging material. Initial opening of the resealable package is performed by tearing off the tear away strip and at the same time forming a fold-over sealing flap. Resealability is provided by a resealable adhesive layer being applied on the surface of a portion of the film material constituting the fold-over sealing flap.

[0008] A further reclosable package is disclosed in US 2012/0207410 A1. The package in US 2012/0207410 A1 is made from two opposing panels of sheet material which have been sealed into a pouch shape. Reclosability is provided by a discrete tape interposed between the panels at an opening end of the pouch, the tape including a base strip and a layer of pressure sensitive adhesive applied to the base strip.

[0009] One further known solution is to provide an envelope formed from impermeable laminate material folded over on itself and heat sealed down the two side edges to leave the end open with a fold over flap. The flap is then folded over and sealed with a high strength adhesive to provide the sealed packaging with low water and gas permeability. When the high strength adhesive is peeled apart, it is not suitable for resealing. The resealing capability is instead provided by a pressure sensitive adhesive located on the fold over flap, adjacent to the high strength adhesive. As the pressure sensitive adhesive is only required for resealing, it is conveniently protected by a peel away strip which is removed once the packaging is opened, allowing resealing.

[0010] A drawback of such solutions is the necessity to fully or partly rely on adhesives to provide the seal strength of the initial packaging. Adhesives generally provide an inferior seal to heat sealing, and can add to the costs and complexity of the process for manufacturing the packaging. There is also the risk that the adhesive may contaminate the food product which the packaging contains, particularly if the food product exudes fluids that may solubilise the adhesive, as can often be the case with meat products.

[0011] There is consequently a need to provide further packaging for food products that provides excellent storage conditions for the initially sealed packaging, and that can be opened and resealed preferably multiple times.

[0012] WO2013/015867 discloses a reclosable pouch or bag produced from a multilayer film which is folded and heat sealed along its edges. The film contains an internal adhesive layer that is revealed when the pouch is opened, and which allows resealing of the pouch.

SUMMARY OF THE DISCLOSURE

[0013] The present disclosure relates to a resealable packaging for sliced food products in accordance with claim 1, a method of opening and resealing an enclosure according to claim 14 and a method of forming a resealable packaging according to claim 15.

[0014] The resealable packaging for sliced food products as disclosed herein comprises

a first portion formed from a first laminate material comprising a heat sealable layer and a core layer

comprising adhesive, the first portion having an inner and an outer surface,

a second portion formed from a second material comprising a heat sealable layer, the second portion having an inner and an outer surface,

wherein the inner surfaces of the first and second portions are connected to one another via a heat seal to form a sealed compartment,

characterised in that

the second portion comprises a fixed portion and a removable portion capable of being detached from the fixed portion of the second portion, said removable portion extending from a first edge of the second portion to a second edge of the second portion, said removable portion encompassing part of the heat seal between the first and second portion,

wherein said removable portion is configured to be releasably peeled away together with part of the heat sealable layer of the first portion being located in an area of the first portion corresponding to the heat seal between the first portion and the removable portion of the second portion, revealing the core layer comprising adhesive on the inner surface of the first portion within the area of the first portion corresponding to the heat seal between the first portion and the removable portion of the second portion when the removable portion of the second portion is detached from the fixed portion of the second portion to open the sealed compartment.

[0015] The resealable packaging is heat sealed for instance with perimeter seals to form a sealed enclosure formed from the inner surfaces of the first and second portions. The enclosure may be formed from two separate materials, or alternatively from a single laminate material that is folded over and heat sealed to itself.

[0016] The removable portion is typically configured to be releasably peeled away by ensuring that said part of the heat seal encompassed by the removable portion has a peel strength which is greater than a cohesive force between the adhesive and the heat sealable layer in the first portion.

[0017] The second portion preferably contains a zone of weakness, for instance a laser perforation, which is located between at least part of the fixed portion and the removable portion of the second portion (i.e. the fixed portion and removable portion are at least partly separated by the zone of weakness). The zone of weakness typically runs from a first to a second edge of the second portion, transecting the heat seal between the first and second portions.

[0018] The zone of weakness has a lower tear strength (as compared to the rest of the second portion) and so allows the removable portion of the second portion to be more easily torn away and removed to open the sealed compartment.

[0019] The second portion contains a removable portion that may be removed taking with it part of the heat seal between the first and second portions of the packaging to reveal the adhesive in the core layer of the first portion, which then allows the packaging to be resealed.

[0020] The removable portion of the second portion is configured to be releasably peeled away and removed from the resealable packaging together with a part of the heat sealable layer of the first portion which is located within the area of the heat seal between the first portion and the removable portion of the second portion. By removing the portion of the heat sealable layer of the first portion which has been heat sealed to the removable portion of the second portion, the core layer comprising the adhesive in the first portion is exposed within the area of the heat seal. This is typically achieved by ensuring that the peel strength of the heat seal between the first and second portions in the removable portion of the second portion is higher than the peel strength between the heat sealable layer and the adhesive containing core layer of the first portion, such that peeling away the removable portion of the second portion causes the laminate material of the first portion to delaminate between the heat sealable layer and the core layer in the area that has been heat sealed, thereby revealing the adhesive.

[0021] The first portion is formed from a laminate material comprising a heat sealable layer and a core layer comprising adhesive. The core layer is typically present over the entire area of the heat seal between the first and the second portion. Typically, the core layer extends in the vicinity of a peripheral edge of the first portion, e.g. from the first edge to the second edge. Preferably, the core layer and the heat sealable layer are present over the entire first portion.

[0022] Once the removable portion of the second portion has been removed, the second portion has a smaller area than the first portion, the difference in size corresponding to the area of the removable portion. In effect, the first portion extends beyond the second portion to provide an enclosure having an opening and a flap formed from the first portion which can be folded over to seal the enclosure using the adhesive which has been exposed by removing the removable portion of the second portion and the part of the heat sealable layer of the first portion which is heat sealed to the removable portion of the second portion. The enclosure is typically open along one side, with the remaining sides being formed by the heat seal between the first and second portion, much like an envelope.

[0023] Thus, the first portion has an inner surface and an outer surface, the inner surface facing into the sealed compartment before the removable portion is removed and the outer surface forming the outside of the packaging. Once the removable portion of the second portion is removed to open the sealed compartment, the length of the first portion is longer than the length of the second portion. The first portion extends beyond the second portion in the vicinity of the opening to the enclosure (e.g. like the sealing flap in an envelope).

[0024] The removal of the removable portion of the

second portion is configured to expose the adhesive configured to allow resealing of the package. In the first portion, the surface of the core layer comprising adhesive which is revealed by removal of the removable portion of the second portion therefore faces in a direction away from the outer surface of the first portion.

[0025] The present disclosure also relates to a method of opening and resealing an enclosure comprising

a. providing the resealable packaging of the disclosure;

b. peeling away the removable portion of the second portion and part of the heat sealable layer of the first portion in an area corresponding to the heat seal between the first portion and the removable portion of the second portion, revealing the adhesive in the core layer of the first portion on the inner surface of the first portion in the area corresponding to the heat seal between the first portion and removable portion of the second portion, thereby opening the sealed compartment;

c. folding the first portion over and bonding the inner surface of the first portion to the outer surface of the second portion using the revealed adhesive, thereby sealing the packaging.

[0026] There are various ways that the resealable packaging material of the disclosure may be formed. For instance, the packaging may be formed by arranging presized blanks of the first and second portions in registration with one another with the heat sealable layer of the first portion facing the second portion; and heat sealing the first and second portions around the perimeter. If required, the zone of weakness may then be formed in the second portion, or alternatively this may already be present in the second portion prior to heat sealing.

[0027] Alternatively, the resealable packaging may be formed by providing a laminate material comprising a heat sealable layer and a core layer comprising adhesive; folding this to provide a first and second portion joined along the folded edge such that the heat sealable layer faces itself, and heat sealing the remaining perimeter to form a sealed enclosure. Again, the zone of weakness (if present) may then be formed on the second portion, or alternatively this may already be present prior to heat sealing, for instance prior to folding the laminate material to form the first and second portions.

[0028] The resealable packaging may also be formed from larger sized materials (e.g. continuous rolls) which are then cut to size. For instance, the resealable packaging may be formed in a process comprising providing an first heat sealable material and a second heat sealable material, the first heat sealable material being a laminate comprising a heat sealable layer and a core layer comprising adhesive; heat sealing the heat sealable layer of the first heat sealable material to the second heat sealable material to provide a perimeter of heat seals; then separating individual packagings from the continuous web of heat sealed first and second heat sealable materials by cutting the first heat sealable material and second heat sealable material adjacent to the outer edge of the perimeter of heat seals. Again, the zone of weakness (if required) may then be introduced to the second portion, or alternatively this may already be present in the second portion prior to heat sealing. Typically, the first and second heat sealable materials are provided as continuous sheets, for instance from a roll.

[0029] As set out herein, a continuous process of producing the resealable packaging may alternatively be performed using a single continuous heat sealable material which is folded in the longitudinal direction of the material, heat sealed to form a continuous web of heat sealed packagings and finally separating individual packagings from the continuous web of heat sealed packagings by cutting along the heat seals between sequential packagings.

[0030] In the first case, the first and second heat sealable materials may be the same or different materials. In the second case, the single heat sealable material used to form the packagings has the structure of the first portion of the resealable packaging, comprising a heat sealable layer and a core layer comprising adhesive. In all instances, the heat sealable layer of the first portion is arranged such that it faces the second portion in the resealable packaging.

BRIEF DESCRIPTION OF THE FIGURES

[0031]

Fig. 1a	shows a cross sectional view of a sealed packaging of the disclosure
Fig. 1b	shows a plan view of a sealed packaging of the disclosure
Fig. 2a	shows a plan view of the packaging being opened
Fig. 2b	shows a plan view of an open packaging
Fig. 2c	shows the contents being removed from the enclosure
Fig. 3a	shows a cross sectional view of the resealed packaging
Fig. 3b	shows a plan view of the resealed packaging

DETAILED DESCRIPTION OF THE DISCLOSURE

[0032] Multilayer laminate materials suitable for use as the first portion and comprising a heat sealable layer and a core layer comprising adhesive are known in the art, for instance in WO2013/015867, US6,302,290, US6,511,723, US6,777,050 and EP2067717.

[0033] By "core layer" is meant an internal layer in the laminate, i.e. a layer that does not make up the external surface of the laminate. The laminate therefore contains at least three layers, such that the adhesive layer is not an external layer. The laminate may contain more than three layers, providing that the adhesive is not an external

layer.

[0034] The laminate typically comprises a heat sealable layer, an adhesive layer, a structural layer, and an optional barrier layer, providing the heat sealable layer is an external layer and the adhesive layer is a core layer.

[0035] A "heat sealable layer" is a layer capable of bonding to another heat sealable layer, which may be identical or different, via heat sealing.

[0036] By "heat sealing" is meant inputting energy to cause an area of the heat sealable layer to increase in temperature and cause the material in the heat sealable layer to locally soften or melt, thereby allowing the seal to form. The energy may be inputted by any means, for instance by pressing heated elements against the area (i.e. heat press sealing), via ultrasonic energy sources (i.e. ultrasonic bonding), via radiation (i.e. via a radiofrequency (RF) heat sealer), or induction heating.

[0037] The heat sealable layer allows the laminate to be heat sealed to another heat sealable material (for instance a heat sealable layer of another laminate) thus enabling the sealed packaging to be formed. The heat sealable layer is therefore an outer layer. When forming the packaging of the disclosure, the inner surface of the first and second portions are heat sealable layers.

[0038] Typical heat sealable materials are polymers with a relatively low melting point (e.g. 80-150°C, typically 100-130°C), such that when exposed to heat sealing conditions (temperatures of typically 120-160°C and pressure) the polymers melt and form a bond. Suitable heat sealable materials include APET (amorphous polyethylene terephthalate), polyethylene and polypropylene, desirably polyethylene and polypropylene with polyethylene being particularly suitable. An exemplary material that may be used is CA7230 of Borealis, which is a low density polyethylene that can be formed into films.

[0039] The structural layer provides structural integrity and strength to the laminate. Suitable materials for the structural layer include polymers such as polyesters or polyolefins; metal foils such as aluminium foil; paper, or metalised polymers.

[0040] Exemplary materials for the structural layer include polyesters such as polyethylene terephthalate (PET, such as Ramapet N180 from UAB Indoramer Polymers), polyolefins such as polypropylene, and polyvinyl alcohols (such as Eval F104B from Eval Europe). Typically, the structural layer is oriented to improve its strength. For example, the structural layer may be formed from oriented polyethylene terephthalate (O-PET, such as Mylar 800 from DuPont Teijin Films) or oriented polypropylene (O-PP). OPET (oriented polyethylene terephthalate) may be used primarily for its excellent heat resistance performance (melting point normally 230°), and good printability.

[0041] The optional barrier layer helps ensure the packaging has the desired gas and liquid permeability. Typically, the barrier layer is formed from an impermeable material, for instance metal foil such as aluminium foil.

[0042] The laminate of the first portion contains an adhesive that is revealed when the removable portion of the second portion is removed. To allow the adhesive to be revealed in this way, the laminate is typically peelable and has a relatively low peel strength between the adhesive and the heat sealable layer.

[0043] The peel strength of the film may be measured using ASTM F88, typically with a test speed of 100 mm/min, and usually with Technique A (unsupported).

[0044] Typical values for the peelable laminate are below 30 N/15 mm, desirably below 20 N/15 mm, for example from 2 to 30 N/15 mm, or from 2 to 20 N/15 mm.

[0045] The peel strength between the adhesive and additional layers is typically higher, such that when the laminate is subjected to a peeling force, delamination occurs between the adhesive and the heat sealable layer, leaving the adhesive adhered to the underlying layer.

[0046] Particularly preferably, the adhesive in the core layer of the first laminate material is a pressure sensitive adhesive.

[0047] By "pressure sensitive adhesive" is meant an adhesive that forms a bond when pressure is applied to marry the adhesive with the adherend (i.e. no solvent, water or heat is needed to activate the adhesive).

[0048] Suitable pressure sensitive adhesives are known in the art, for instance in US7,622,176.

[0049] The second portion is formed from a second material comprising a heat sealable layer.

[0050] Heat sealable materials are often relatively soft, and may not possess the most suitable strength or barrier properties to be used as the second portion. Consequently, the second portion is preferably formed from a laminate material comprising a heat sealable layer. The remainder of the layers in the laminate material of the second portion can provide the necessary strength and/or barrier properties.

[0051] The second portion is preferably formed from a laminate material comprising a heat sealable layer, a structural layer, and an optional barrier layer, with the heat sealable layer forming an outer layer of the laminate.

[0052] The various layers in the second portion can be formed from the same or different materials as the corresponding layers of the first portion.

[0053] The second portion typically contains a zone of weakness located between at least part of the removable portion and the fixed portion. In other words, the fixed portion (that is the portion of the second portion that remains as part of the enclosure when the packaging is opened by removing the removable portion) and removable portion are at least partly separated by a zone of weakness.

[0054] By "located between at least part of the fixed portion and the removable portion" is meant that the zone of weakness lies between at least part of the area of the removable portion and the fixed portion. Typically, the zone of weakness separates the entire removable portion from the fixed portion.

[0055] By "zone of weakness" is meant an area where the material of the second portion has been structurally

compromised to reduce its strength, i.e. a structurally compromised area (typically in the form of a line) in the second portion which has reduced strength (e.g. tensile and/or tear strength) compared to the remainder of the second portion (i.e. compared the an area of the second portion that has not been structurally compromised). In this way, the second portion is more easily broken along the zone of weakness when the second portion is subjected to a tearing force.

[0056] Typically, the zone of weakness is formed by laser etching the second portion, cutting part way through the thickness of the second portion (for instance through one or more layers of the second portion when it is in the form of a laminate).

[0057] Suitable apparatus for laser etching films are known in the art.

[0058] Other methods of forming the zone of weakness are of course possible, including mechanical means such as scoring the film.

[0059] The zone of weakness need not be a continuous line. For instance, the zone of weakness may be formed from a plurality of structurally compromised areas such as a perforation. It is nevertheless preferable that the zone of weakness is an approximately straight line formed from a continuous structurally compromised area, a plurality of structurally compromised areas arranged in an approximate line such as perforations, or a mixture thereof. When the zone of weakness is an approximately straight line, it facilitates easier tearing of the second portion when removing the removable portion.

[0060] The material in the zone of weakness has been structurally compromised to reduce its tear strength. However, typically the barrier properties of the second portion are retained. This may be achieved by compromising the integrity of the structural components in the second portion responsible for providing strength, while leaving the layers of the second portion responsible for barrier properties unharmed.

[0061] For instance, when the second portion is formed form a laminate comprising a structural layer, a barrier layer and a heat sealable layer, the zone of weakness may be formed by compromising the structural layer, e.g. by laser etching (i.e. forming a laser perforation) through part or all of the structural layer but not the barrier and heat sealable layers.

[0062] The laminates used in the packaging may contain additional layers, such as an ink layer for patterning the packaging and displaying information on the contents of the packaging.

[0063] The laminate of the first portion may contain a release layer between the adhesive and the heat sealable layer, to lower the peel strength of the laminate and facilitate separation of the heat sealable layer and the pressure sensitive adhesive.

[0064] The packaging, i.e. the sealed compartment prior to opening, is typically water and air tight. This ensures that the products kept inside stay fresh.

[0065] By "water tight" is meant that liquids such as water cannot escape from the packaging, i.e. the packaging is sealed with no holes or openings which allow liquids to leak out.

[0066] By "air tight" is meant that the compartment is sealed to be gas impermeable.

[0067] A gas impermeable material (or e.g. compartment) typically has an oxygen transmission rate as measured according to ASTM F1927 (in ml/m^2/24 hrs measured at 23°C, 50% relative humidity) of below 100, more typically below 50, desirably below 20, more desirably below 10, even more desirably below 1.

[0068] Typical requirements for the oxygen transmission rate of packaging materials are below around 10 for fresh food, and below 0.5 for fruit juices or dried foods such as coffee, powdered milk.

[0069] A water tight material (or packaging) may further be characterised by its water vapour transmission rate (WVTR), for example as measured by ASTM F1249. A water tight material typically has a WVTR as measured according to ASTM F1249 (in ml/m^2/24 hrs measured at 25°C, 75% relative humidity) of below 10, more typically below 5, more typically below 2, desirably below 1.

[0070] The packaging may in principle be any shape. However, typically the packaging is relatively flat being formed from two flat laminate materials, or alternatively a single laminate folded over on itself, heat sealed to form the sealed packaging.

[0071] The heat seal is typically formed around the perimeter of the first and second portion, although some material may extend beyond the heat seal if required. For instance, the second portion may extend beyond the end of the heat seal to provide a tab that allows the tear away portion to be more easily removed.

[0072] Suitably, the packaging is in the form of a rectangle (including a square), as this is the most space efficient shape which minimises waste of starting materials during manufacture.

[0073] The zone of weakness may likewise be of any form in principle, though straight lines are preferred as this makes it easier to remove the removable portion.

[0074] Preferably, the zone of weakness is a straight line that runs parallel to the heat seal along one edge of the second portion. This allows the removable portion to be easily removed, and facilitates peeling away the heat sealable layer of the first portion to reveal the adhesive.

[0075] If the zone of weakness is immediately adjacent to the heat seal, the remaining portion of the first portion will not form an adequately sized fold over tab which will make resealing more difficult. Moreover, if the zone of weakness is far away from the heat seal, the remaining portion of the first portion forms a very large tab, which although easy to reseal requires more packaging material to hold the same volume of product increasing the overall cost of the packaging.

[0076] Consequently, the zone of weakness preferably runs parallel to the heat seal along one edge of the second portion, about 5-30 mm from the heat seal, typically about 10-20 mm from the heat seal.

[0077] In order to facilitate opening, the second portion may contain a notch where the zone of weakness meets the edge of the second portion. In this way, the notch can act as the starting point for any tear.

[0078] Preferably, the heat seal between the first and second portion does not run all the way to the edge of the second portion where the zone of weakness runs. If it did, it can make tearing away just the second portion more difficult. The second portion therefore preferably extends beyond the heat seal to the first portion at the first and/or second position (i.e. where the zone of weakness transects the heat seal between the first and second portion) at least on the side of the second portion that is intended to be removed to reveal the adhesive.

[0079] The second portion may extend beyond the heat seal as it overhangs (i.e. extends beyond) the first portion, or because the heat seal is not formed at the very edge of the second portion, or both.

[0080] Preferably, the heat seal between the first and second locations is a continuous heat seal. In this way, the revealed adhesive can form a continuous seal with the remainder of the packaging when the flap is folded over and the packaging resealed.

[0081] The contents of the packaging are conveniently contained on a supporting structure which allows them to be easily removed and reinserted in the packaging. A suitable supporting structure may be made of plastic (e.g. a thermoformed tray), cardboard (e.g. laminated card), or the like.

[0082] Preferably, the zone of weakness does not lie over the contents of the packaging. In this way, the removable portion leaves a flap formed from the first portion that can be folded over to reseal the packaging while the contents are still inside.

[0083] An exemplary resealable packaging 100 is shown in Figures 1a and 1b. Figure 1a shows a cross sectional view of the packaging, while Figure 1b shows the packaging from the top view.

[0084] The packaging comprises a second portion 110 and a first portion 120, which together form an enclosure around the contents 150. The contents contain a tray 151 and sliced product 152.

[0085] The second portion 110 and first portion 120 are bonded via a heat seal 130 between a heat sealable layer 121 of the first portion 120 and the second portion 110. The first portion additionally contains a core layer 122 containing an adhesive.

[0086] The packaging further contains a zone of weakness 115 in the second portion 110 which zone of weakness 115 runs from a first edge 110a of the second portion 110 to a second edge 110b of the second portion 110 and transects the heat seal 130 at a first location 115a and a second location 115b as illustrated in Fig. 1b.

[0087] Figure 2a shows the packaging 100 being opened, such that the removable portion 200 of the second portion 110 and the part of the heat sealable layer 121 which has been heat sealed to the removable portion 200 are being peeled away from the adhesive containing core layer 122 of the first portion 120, tearing along the zone of weakness 115 from the first edge 110a to the second edge 110b and revealing part of the adhesive 122a in the adhesive containing core layer 122 of the first portion 120 which corresponds to where the heat seal 130 was formed. Thus, opening of the packaging 100 is performed by tearing away the strip-shaped removable portion 200 from the remainder of the second portion 110, which stays attached to the first portion 120 and constitutes a fixed portion of the second portion 110.

[0088] Figure 2b shows the opened package in which the second portion 110 is missing between point 110a and 110b to leave a flap 350 formed from the overhanging part of the first portion 120. The adhesive 122a is exposed on the flap 350 in the area corresponding to where a heat seal 130 was formed between the removable portion 200 of the second portion 110 and the heat sealable layer 121 of the first portion 120. The contents 150 of the packaging may be removed through the opening created between the first and second parts 120, 110 once the tear away or removable portion 200 has been peeled away from the adhesive containing core layer 122 of the first portion 120, as shown in Figure 2c.

[0089] Figure 3a shows the resealed packaging, in which the exposed portion 122a of the pressure sensitive adhesive 122 abuts the outer surface of the second portion 110 to reseal the packaging. Figure 3b shows the top view of the same resealed packaging.

Claims

1. A resealable packaging (100) for sliced food products comprising

a first portion (120) formed from a first laminate material comprising a heat sealable layer (121) and a core layer (122) comprising adhesive, the first portion having an inner and an outer surface, the heat sealable layer (121) of the first portion (120) being arranged on the inner surface of the first portion (120),

a second portion (110) formed from a second material comprising a heat sealable layer, the second portion having an inner and an outer surface, the heat sealable layer (121) of the second portion (110) being arranged on the inner surface of the second portion (110)

wherein the inner surfaces of the first and second portions (120,110) are connected to one another via a heat seal (130) to form a sealed compartment,

characterised in that

said second portion (110) comprises a fixed portion and a removable portion (200) capable of being detached from the fixed portion of the second portion (110), the removable portion (200) extending from a first edge (110a) of the second

portion (110) to a second edge (110b) of the second portion (110), the removable portion (200) encompassing part of the heat seal (130) between the first and second portions (120, 110),
wherein the removable portion (200) is configured to be releasably peeled away together with part of the heat sealable layer (121) of the first portion (120) being located in an area of the first portion (120) corresponding to the heat seal (130) between the first portion (120) and the removable portion (200) of the second portion (120), revealing the adhesive (122a) comprised in the core layer (122) of the first portion (120) within the area of the first portion (120) corresponding to the heat seal (130) between the first portion (120) and the removable portion (200) of the second portion (110) when the removable portion (200) of the second portion (110) is detached from the fixed portion of the second portion (110) to open the sealed compartment.

2. The packaging (100) of claim 1, wherein the part of the heat seal encompassed by the removable portion (200) has a peel strength which is greater than a cohesive force between the adhesive (122a) and the heat sealable layer (121) in the first portion (120).

3. The packaging (100) of claim 1 or claim 2, wherein a zone of weakness (115) is located between at least part of the fixed portion and the removable portion (200) of the second portion (110).

4. The packaging (100) of claim 3, wherein the zone of weakness (115) extends from the first edge (110a) of the second portion (110) to the second edge (110b) of the second portion (110), transecting the heat seal (130) between the first and second portions (120,110) at a first and second location (115a, 115b).

5. The packaging (100) of claim 4, wherein the heat seal (130) between the first and second locations (115a, 115b) is a continuous heat seal (130).

6. The packaging (100) of any one of claims 3 to 5, wherein the zone of weakness (115) is a straight line that runs parallel to an edge of the second portion (110).

7. The packaging (100) of any one of claims 3 to 6, wherein the second portion (110) contains a notch where the zone of weakness meets the edge of the second portion (110).

8. The packaging (100) of any one of claims 3 to 7, wherein the zone of weakness (115) comprises a laser perforation.

9. The packaging (100) of any preceding claim, wherein the packaging (100) is a rectangular shape.

10. The packaging (100) of any preceding claim, wherein the packaging (100) contains a food product (152) on a supporting structure (151).

11. The packaging (100) of any preceding claim, wherein the adhesive (122a) is a pressure sensitive adhesive.

12. The packaging (100) of any preceding claim, wherein the first and second portions (120,110) are formed from separate materials.

13. The packaging (100) of any one of claims 1 to 11, wherein the first and second portions (120, 110) are formed from one piece of laminate material that has been folded over along one edge.

14. A method of opening and resealing an enclosure comprising

a. providing the resealable packaging (100) of any preceding claim;
b. peeling away the removable portion (200) of the second portion (110) and part of the heat sealable layer (121) of the first portion (120) in the area corresponding to the heat seal (130) between the first portion (120) and the removable portion (200) of the second portion (110), revealing the adhesive (122a) in the core layer (122) of the first portion (120) in the area corresponding to the heat seal (130) between the first portion (120) and removable portion (200) of the second portion (110), thereby opening the sealed compartment;
c. folding the first portion (120) over and bonding the inner surface of the first portion (120) to the outer surface of the second portion (110) using the revealed adhesive (122a), thereby sealing the packaging (100).

15. A method of forming a resealable packaging (100) according to any one of claims 1-13 comprising

a. providing a first laminate material comprising a heat sealable layer and a core layer comprising pressure sensitive adhesive;
b. providing a second material comprising a heat sealable layer;
c. heat sealing the first laminate material to the second material to form the resealable packaging (100) of any one of claims 1-13, optionally containing a food product on a supporting structure.

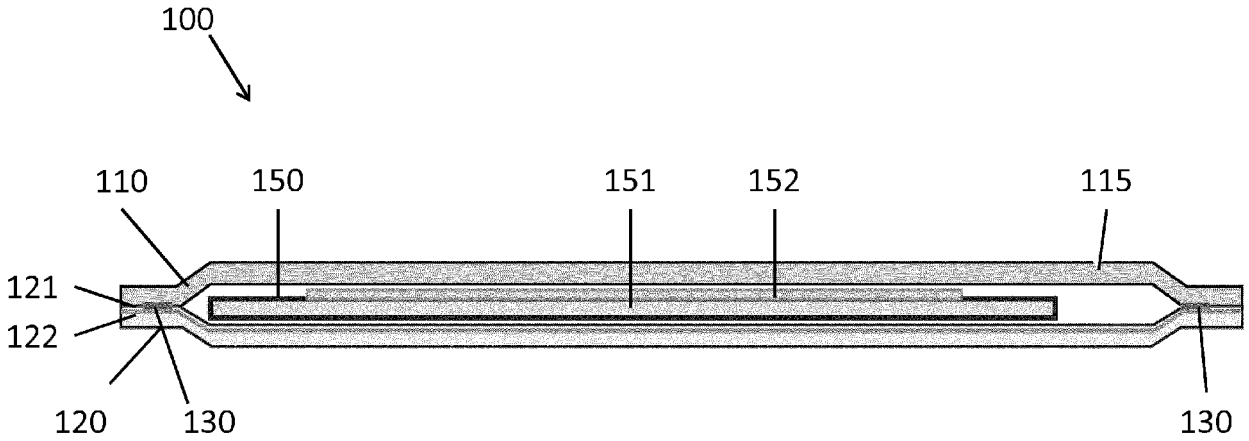

Fig 1a

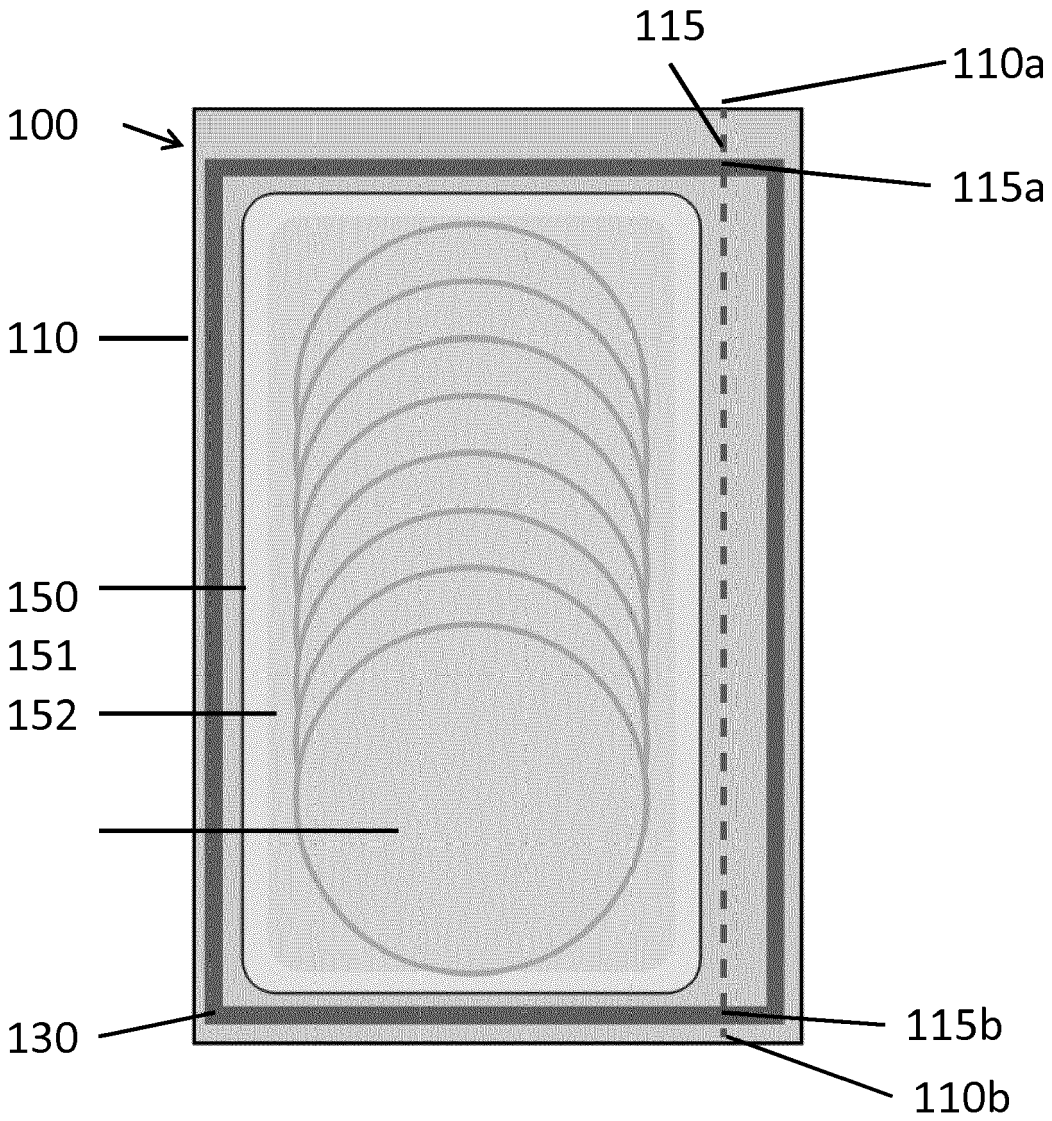

Fig 1b

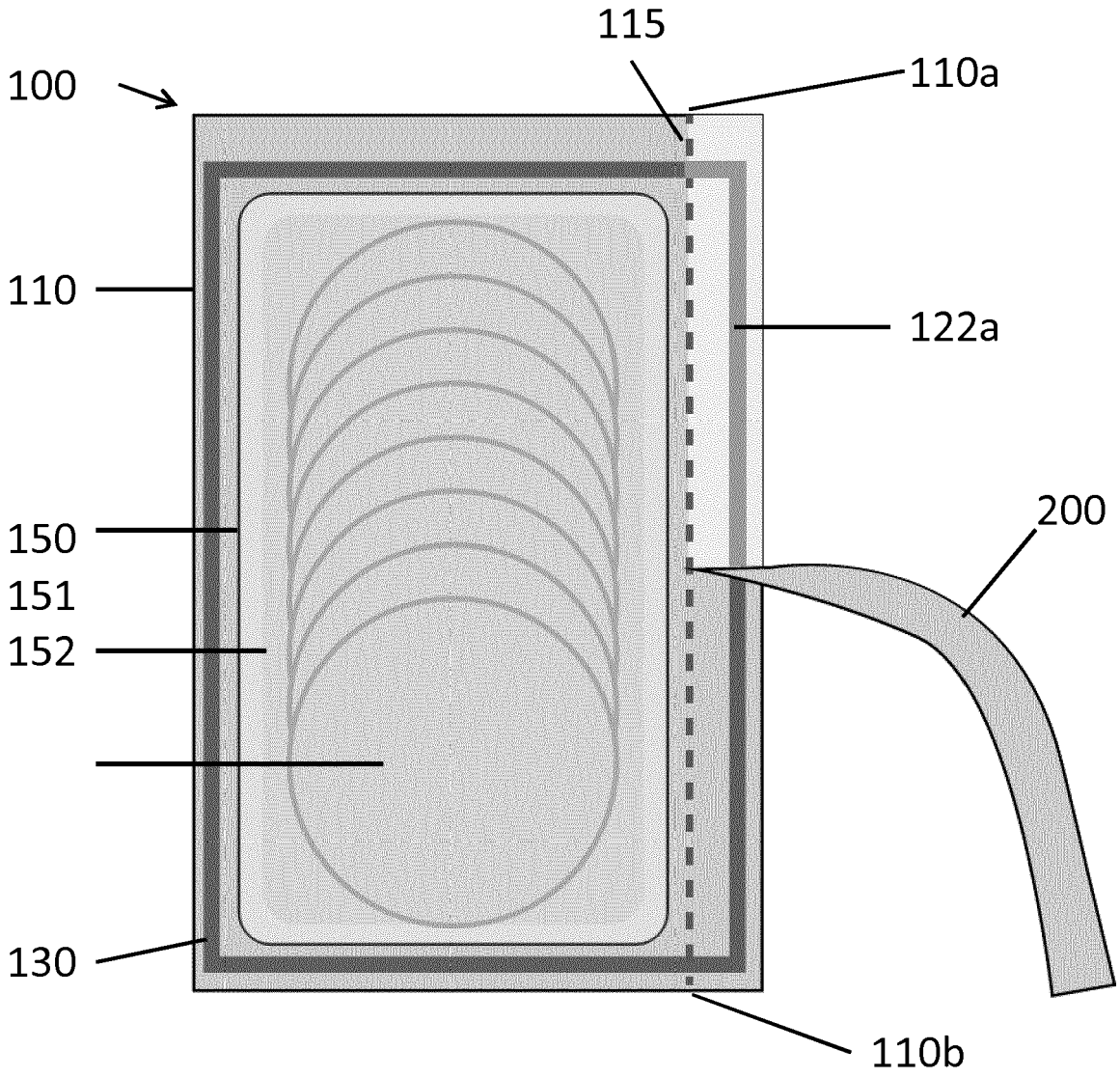

Fig. 2a

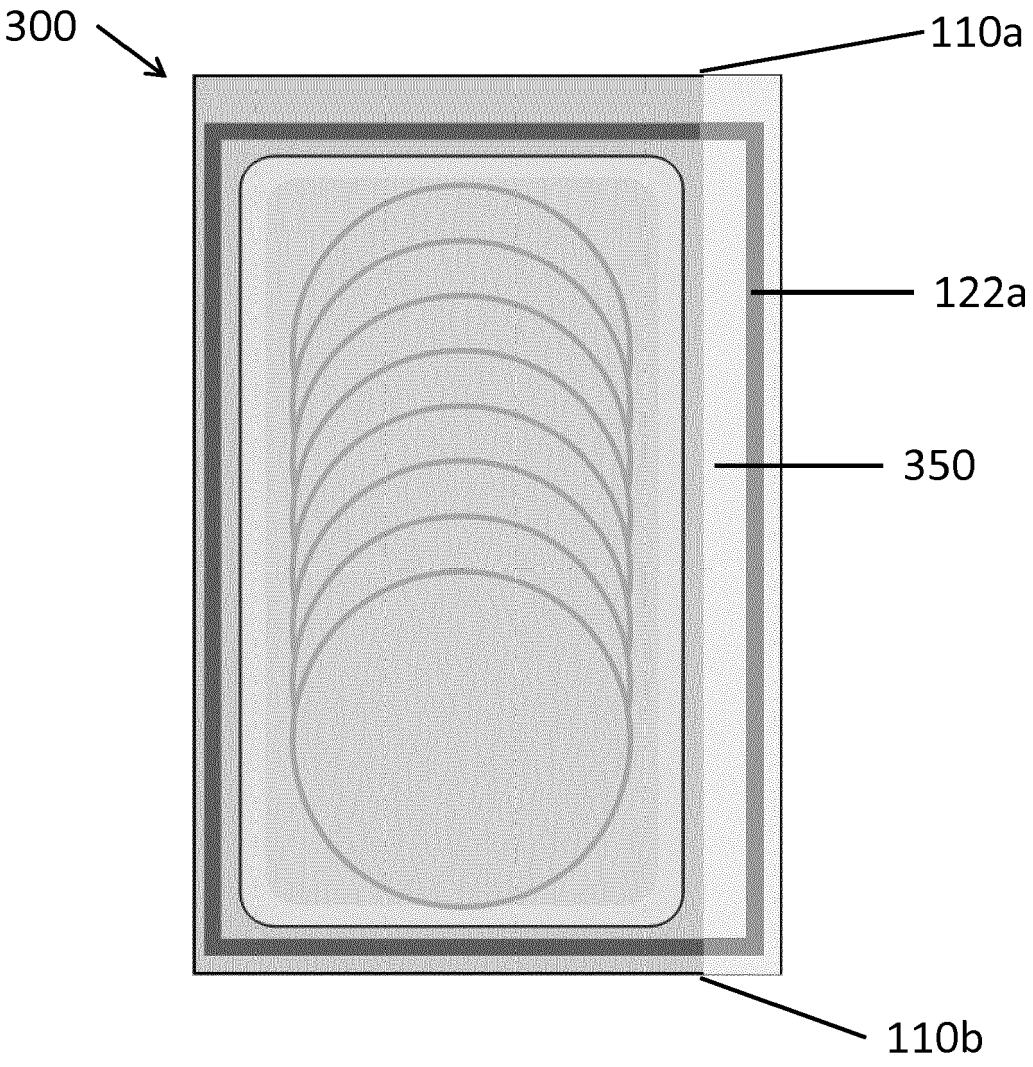

Fig 2b

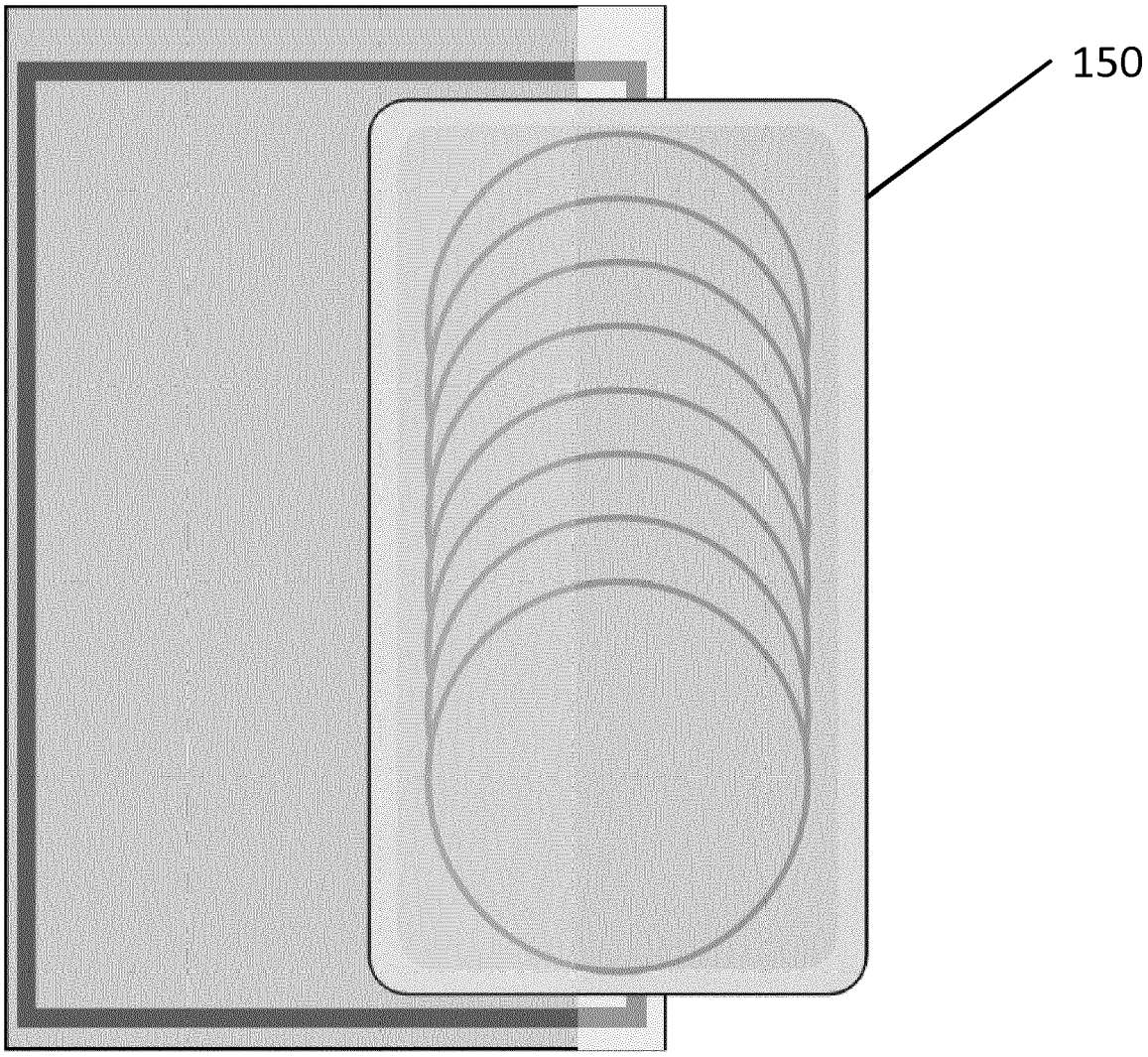

Fig. 2c

Fig. 3a

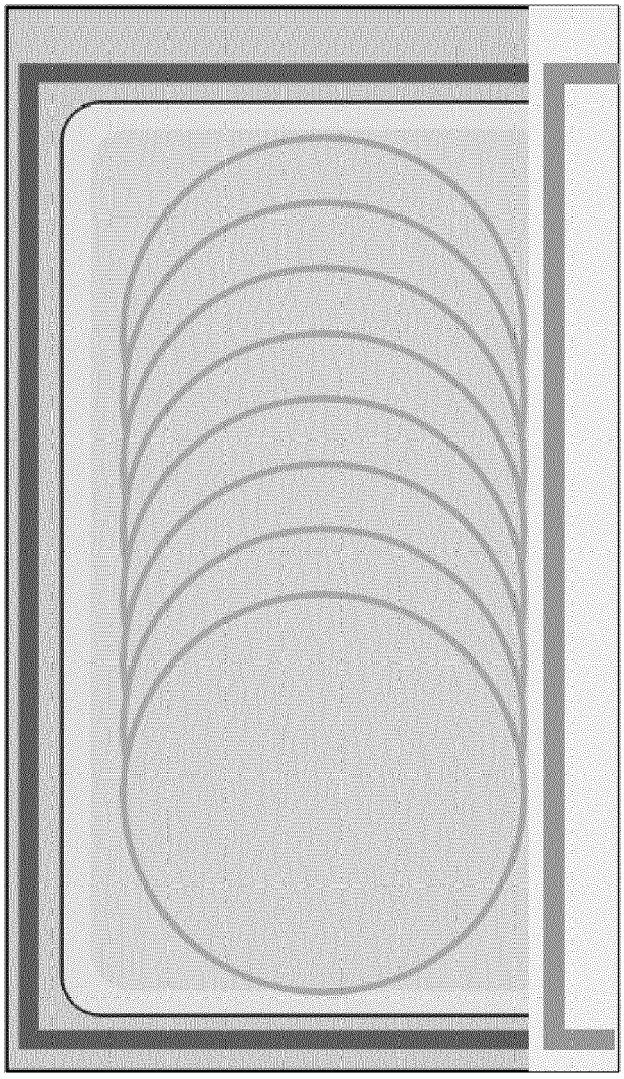

Fig. 3b

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EUROPEAN SEARCH REPORT

Application Number
EP 18 20 0026

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