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(54) **Food container with sieving means**

(57) A food container (1) comprising at least one sealing means (5) and a removeable sieving means (9) wherein the or each sealing means (5) is removeable to expose the sieving means (9).

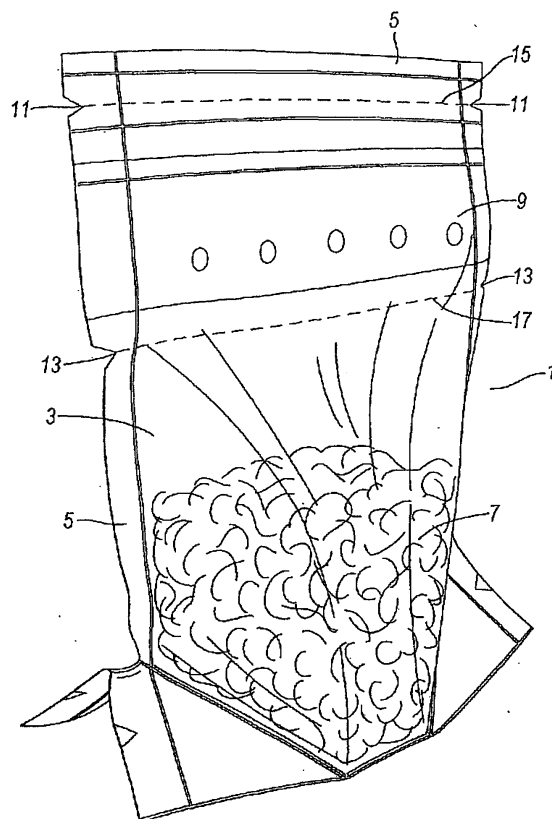


Fig.3

Description

[0001] The present invention relates to a food container and, in particular to a food container used for storing and cooking food contained therein.

[0002] Food storage containers including those suitable for cooking food are well known in the art. Commonly the food in such containers is cooked in a microwave. Such containers usually comprise a food-containing tray and a removeable lid. If the food is to be cooked without adding any further ingredients, a user is often required to pierce the lid prior to cooking. This allows steam to escape from the container so that the food is cooked safely. It is also known for food containers to be used for storing food wherein the food contained therein is cooked by adding boiling water, without the need for additional cooking. The foodstuffs, such as noodles, are re-hydrated and cooked by soaking up the boiling water.

[0003] However, if foodstuffs such as pasta or rice are to be cooked, this requires the foodstuff to be cooked in boiling water. A user is then required to use separate utensils to remove excess water after cooking. This is messy and time consuming. It also makes the food container unsuitable for use in situations where additional cooking equipment is not available, such as when camping.

[0004] The present invention sets out to provide an improved food container, which alleviates the problems described above, by providing a container which can be used for cooking food stuff container therein by boiling in water, or simply adding boiling water, without the need for any additional cooking equipment.

[0005] In one aspect, the invention provides a food container comprising at least one sealing means and a removeable sieving means wherein the or each sealing means is removeable to expose the sieving means.

[0006] Within the context of this specification "a sieving means" is understood to include but not be limited to a means with mesh or perforations through which liquid may be drained.

[0007] Within the context of this specification the word "comprises" is taken to mean "includes, among other things". It is not intended to be construed as "consists of only".

[0008] A food container with integral sieving means allows food contained therein to be quickly and conveniently cooked without the need for additional kitchen equipment. It also ensures that food contained within the container undergoes a minimum of handling during transportation and cooking so that the likelihood of damage or contamination of the food is minimised. This is also an advantage when the food product is fragile, as is the case for fresh pasta products. An integral sieving means also reduces the risk of a user burning themselves after the container has been used for cooking because a user does not have to come into contact with the hot liquid removed from the container.

[0009] Preferably, the container further comprises at

least one line of weakness substantially parallel to the sieving means to allow the sieving means to be removed from the container.

[0010] Preferably, the container is inwardly tapered towards the sieving means.

[0011] The shape of the container is configured to minimise the escape of water from the pouch during cooking. This avoids splashing of water onto a microwave during cooking because any water bounces back off the walls of the container and is contained therein,

[0012] Preferably, the container comprises a plastics material.

[0013] More preferably, the container comprises polyethylene terephthalate (PET).

[0014] Preferably, the container is heat-sealed.

[0015] A heat sealed container reduces the risk of contamination of a foodstuff held within the container. In the present invention, the integral sieving means is also sealed from contaminants.

[0016] Optionally, the container comprises an adhesive seal.

[0017] Preferably, the container is self-standing.

[0018] Preferably, the container is microwaveable.

[0019] A self-standing container is easier to store and safer and more convenient to use when placed in a microwave oven.

[0020] For the purposes of clarity and a concise description, features are described herein as part of the same or separate embodiments; however it will be appreciated that the scope of the invention may include embodiments having combinations of all or some of the features described.

[0021] The invention will now be described by way of example with reference to the accompanying diagrammatic drawings, in which:-

Figure 1 is a schematic front view of an food container constructed in accordance with the present invention;

Figure 2 is a plan view of the net from which the food container of Figure 1 is constructed; and

Figure 3 is a perspective view from the side of the filled food container of Figure 1.

[0022] Referring to Figure 1, the food container 1 comprises a pouch 3 made of a plastics material. It is envisaged that the container 1 is made of a polyester material, such as polyethylene terephthalate (PET). Alternatively, the container 1 is made of an aluminium foil, a non-orientated or a cast polypropylene film, or of bio-orientated Nylon. As shown in Figure 2, the pouch 3 comprises a "gusseted" base 3a, a front wall 3b and a rear wall 3c. In use, the "gusseted" base enables the filled pouch to remain upright without additional supporting means. It is envisaged that the pouch 3 can be of any shape and can have a rectangular, triangular, circular or oval cross-section.

tion. The pouch 3 is a self-standing "retort" pouch; however a similar container construction can also be used with a non-retort pouch. The plastics material from which the pouch is made is suitable for printing so that cooking instructions are marked on the wall/s of the container 1. The plastics material is also suitable to absorb and transmit microwave radiation.

[0023] For storage and transportation purposes, the pouch 3 is sealed across its upper edge by means of adhesive or by heat sealing. The pouch 3 is also adhesively or heat sealed around its outer edges. The seal 5 prevents the foodstuff 7, which is held within the container 1, from escaping and prevents dirt or other contaminants, for example airborne contaminants, from entering the container 1. The food stuff 7 can be any fresh or dried food suitable for cooking in a boiling liquid. For example, the container may hold fresh or dried pasta, rice or noodles. The foodstuff is usually cooked in water, but may also be cooked in a stock or sauce. Alternatively, the foodstuff may be suitable for re-hydration by adding boiling water but without any further cooking.

[0024] An integral sieve 9 is held within the pouch 3 and is positioned above the level of the food stuff 7 within the container 1. The sieve 9 comprises a plastic sheet sealed to the walls 3b, 3c of the container 1 with a series of perforations, holes or slits through it. Two points of weakness in the form of indents 11, 13 are cut into the seal 5 around the outer edges of the food container 1.

[0025] To manufacture the container 1, known machinery used for production of gusseted pouches and zipper bags can be used. A roll of plastics material is fed into the machinery and a sheet is cut to form the net shown in Figure 2. The sheet is folded to define a front wall 3b, a rear wall, 3c and a gusseted base 3a. Indents 11, 13 or "tear notches" are cut into the perimeter of the sheet. The sieve 9 is in the form of a folded strip with holes therethrough. The strip is asymmetrically folded so that a first edge 9a of the sieve 9 extends and is exposed above the second edge 9b when the sieve 9 is folded. The folded sieve 9 is laid onto the net of the pouch 3. The pouch 3 is folded and then heat sealed or adhesively sealed around its side and base edges on only one side of the pouch 3. The asymmetric folding of the sieve 9 is such that the second edge 9b does not prevent heat sealing of the first edge 9a to the pouch wall 3c. The exposed edge of the sieve 9a is heat sealed to the wall 3c of the pouch 3 along its entire length. "Top fill technology" is used to insert a foodstuff 7 through the upper opening of the pouch 3. The pouch 3 is then heat sealed to secure the second edge of the sieve 9b to the adjacent wall of the pouch 3b and to seal the uppermost edge of the pouch 3. The pouch 3 is then sealed around its entire perimeter.

[0026] Prior to use, the seal 5 across the upper edge of the container 1 is removed by cutting or tearing along a first cutting line or line of weakness 15, which runs between the first indents 11. The pouch 3 is opened outwards to expose the integral sieve 9. Water is poured into the container 1 through the holes in the sieve 9 and

added to the food stuff 7. The pouch 3 acts as a funnel to direct water through the sieve 9 into the foodstuff 7 with a minimum of water escaping and the pouch 3 is upwardly tapered. The container 1 is placed in a microwave oven and heated for the required cooking time. It has been found that the shape of the container 1 serves to reduce pockets of gas building up in the boiling water. This reduces any splashing and escape of the water contained within the pouch 3, when compared with a conventional container such as a bowl or tray.

[0027] When the foodstuff 7 is cooked, the container 1 is removed from the microwave. The pouch 3 is inverted and the water is drained from the foodstuff 7 through the holes in the sieve 9. The plastics material from which the container 1 is made allows a user to pick up the container 1 directly without the risk of burning. The sieve 9 is then removed by cutting or tearing along a second cutting line or line of weakness 17, which runs between the second indents 13. This removes the sieve 9 and allows the foodstuff 7 to be removed from the container 1 to be served and eaten.

[0028] The above described embodiment has been given by way of example only, and the skilled reader will naturally appreciate that many variations could be made thereto without departing from the scope of the claims.

Claims

1. A food container (1) comprising a removable sieving means (9); at least one sealing means (5), which is removeable to expose the sieving means (9), wherein the sieving means (9) comprises a folded strip with holes therethrough, which is asymmetrically folded so that a first edge (9a) of the sieving means (9) extends and is exposed above the second edge (9b) when the sieving means (9) is folded.
2. A food container (1) according to claim 1 further comprising at least one line of weakness (17) substantially parallel to the sieving means (9) to allow the sieving means (9) to be removed from the container (1).
3. A food container (1) according to claim 1 or claim 2 wherein the container (1) is inwardly tapered.
4. A food container (1) according to any preceding claim wherein the container comprises a plastics material.
5. A food container (1) according to claim 4 wherein the container (1) comprises polyethylene terephthalate (PET).
6. A food container according to any preceding claim wherein, the container is heat-sealed.

7. A food container (1) according to any one of claims 1 to 5 wherein the container comprises an adhesive seal.
8. A food container (1) according to any preceding claim wherein the container is self-standing. 5
9. A food container (1) according to any preceding claim wherein the container is microwaveable. 10
10. A food container (1) according to any preceding claim wherein the sieving mean (9) comprises a mesh or a perforated sheet. 15

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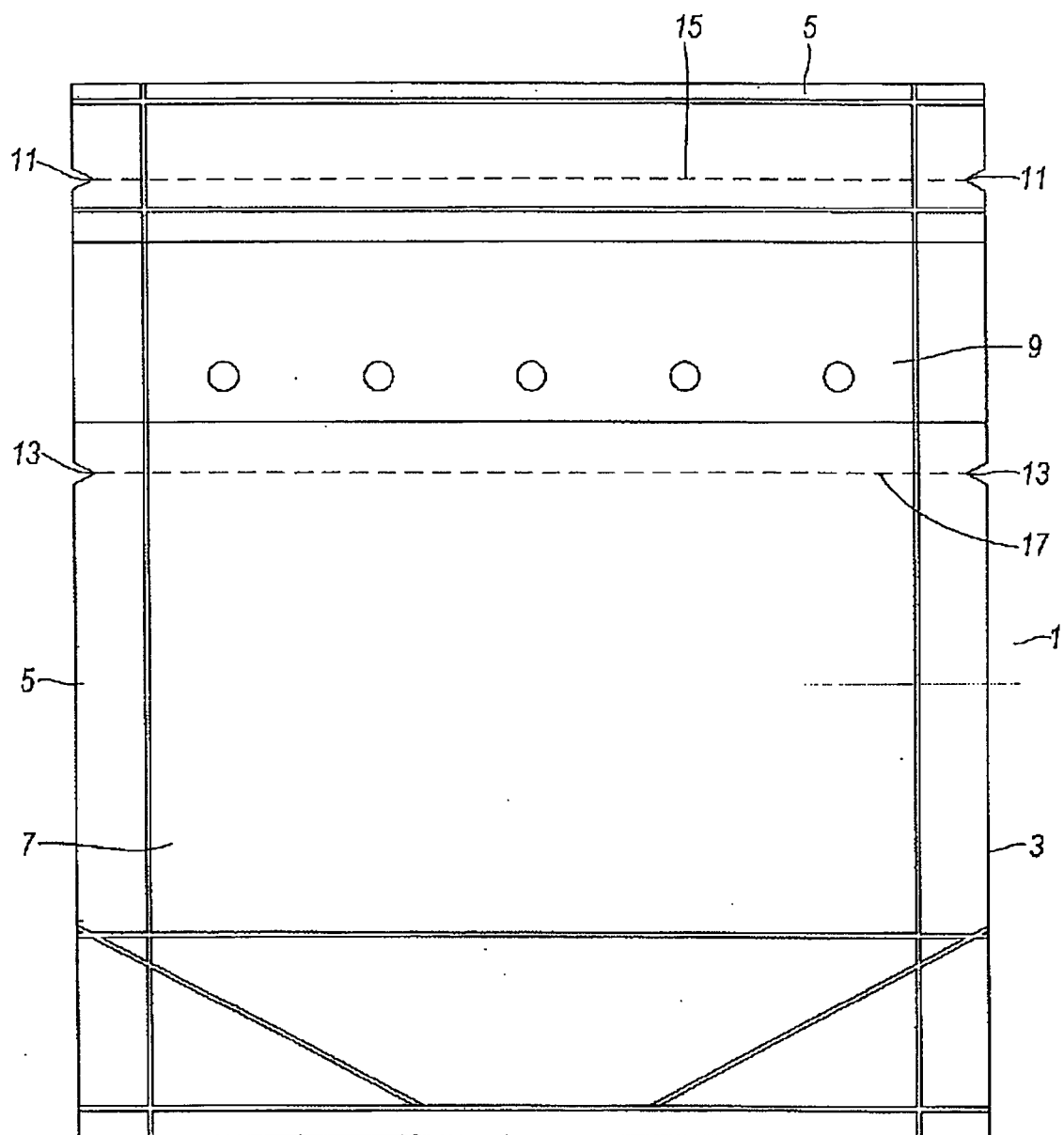


Fig.1

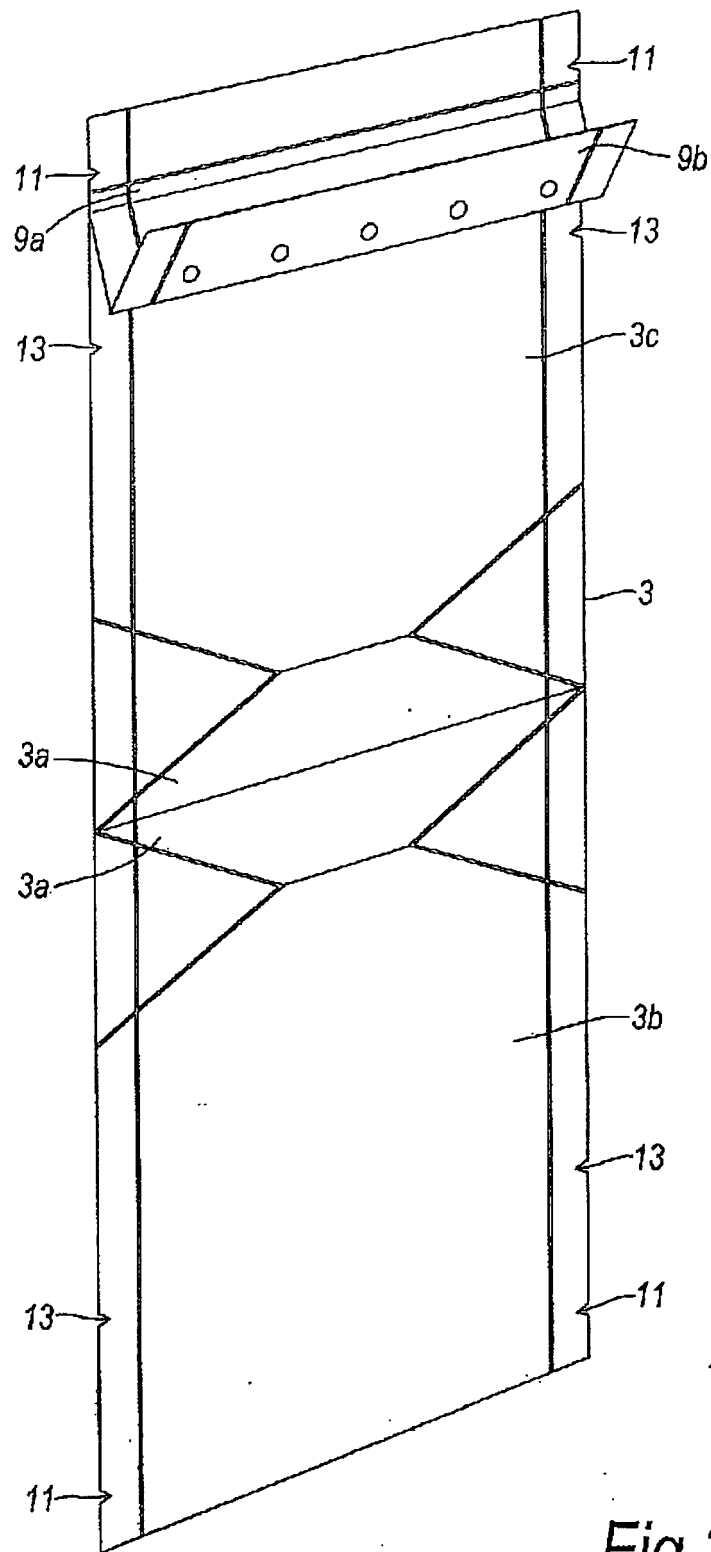


Fig. 2

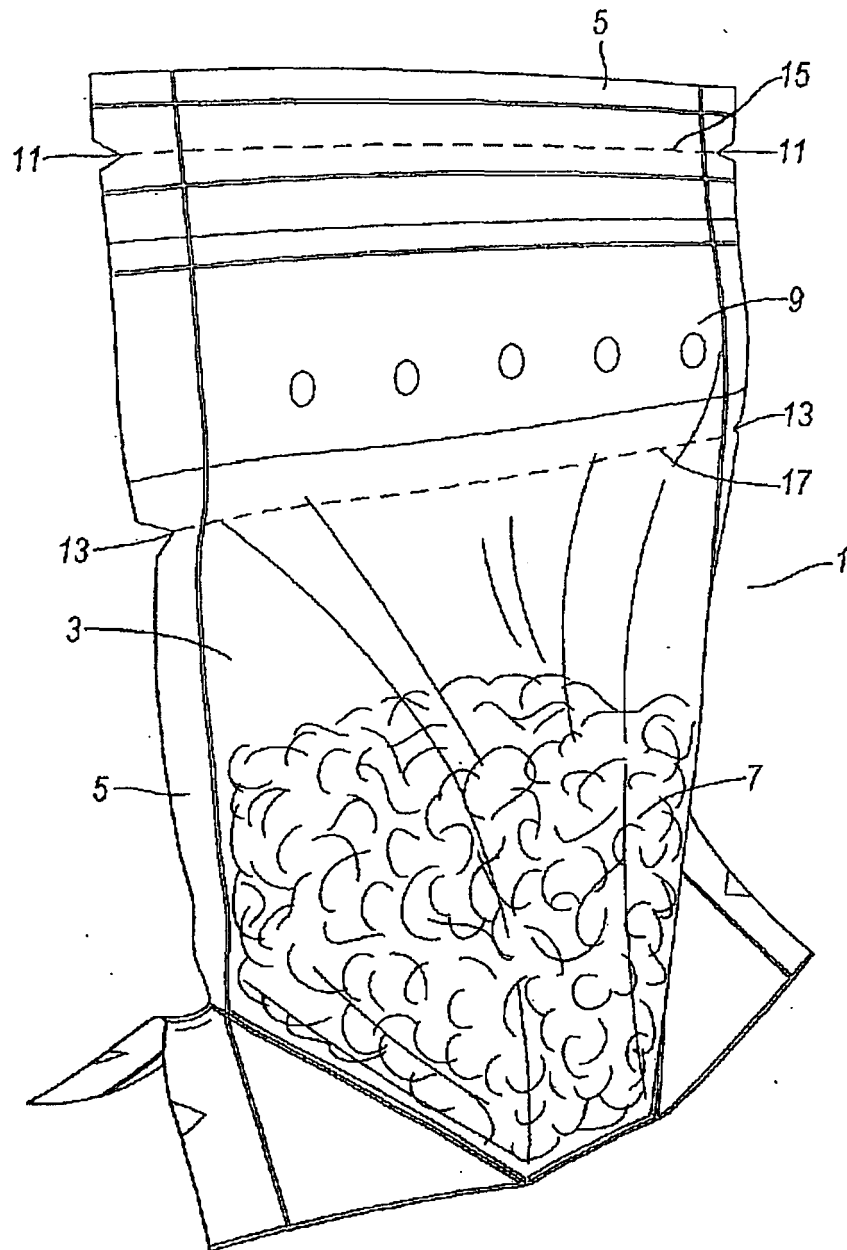


Fig.3



EUROPEAN SEARCH REPORT

Application Number
EP 10 25 0069

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 9 June 2010	Examiner Cazacu, Corneliu
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			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 25 0069

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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09-06-2010

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