

(19)



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Office européen des brevets



(11)

EP 0 984 891 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:

08.01.2003 Bulletin 2003/02

(21) Application number: **98925975.9**

(22) Date of filing: **27.05.1998**

(51) Int Cl.7: **B65D 81/00**

(86) International application number:
PCT/NL98/00308

(87) International publication number:
WO 98/054067 (03.12.1998 Gazette 1998/48)

(54) **CONTAINER BAG UNIT**

BEHÄLTER-BEUTEL-EINHEIT

SAC POUR CUISSON D'ALIMENTS

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**

(30) Priority: **27.05.1997 EP 14206142**

(43) Date of publication of application:
15.03.2000 Bulletin 2000/11

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(56) References cited:
**DE-U- 29 622 256 GB-A- 2 282 059
GB-A- 190 919 839 NL-A- 6 909 883
US-A- 4 828 850**

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Description

[0001] The present invention relates to a container bag unit for filling with foods, herbs and the like, and for placing in a container such as a pan, comprising a container bag made of porous synthetic material provided with an insertion opening and closing means for said opening.

[0002] Such container bag units are generally known in the prior art. An example is described in European Patent Application 0,098,981, which discloses a floating pack for herbs, consisting of a water-permeable container bag provided with a closing lip at the free end. The container bag is provided with a number of holes made by perforation, which holes are relatively large, in order to permit optimum extraction of the herbs. In addition, cavities are provided near the outside of the bag, in order to guarantee the buoyancy of the bag.

[0003] When dishes are being prepared on a commercial scale, it is not uncommon for stock and the like to be produced by placing a large quantity of material, such as bones, from which such stock is extracted in a relatively large pan (for example, an 80-litre pan) and heating or boiling said pan with its contents for a long period. The result of this is, inter alia, that the flavourings are extracted from the solid material which is added to the liquid such as water in the pan. After some time, when this process is complete, it is necessary to separate the solids from the liquids, which is carried out by sieving the solids/liquid mixture in various stages. In practice, this means that the contents of the pan are transferred to another pan of the same size with the interposition of a sieve. This is carried out a number of times with an increasingly fine sieve.

[0004] It is customary in the prior art for two cooks to do this, because the weight of such pans is considerable. It is important here to note that the authorities are aiming to achieve a maximum lifting weight of 25 kg. If account is also taken of the fact that the contents of the pan can be at a raised temperature, it will be understood that such a transfer operation gives rise to problems and is time-consuming. This applies all the more so if stock has to be extracted twice.

[0005] Another problem which occurs during the preparation of certain types of stock is that the stock in question becomes cloudy because of the proteins coagulating during boiling. In such a case it is necessary to apply a large number of additional steps in order to remove such cloudiness. For example, there is cooling of the liquid, the introduction of a further protein mass, and clarification. This causes the undesired material to float on top, so that it can be skimmed off.

[0006] While the above steps are being carried out, the liquid has to remain at temperature, in order to meet the various requirements set by the authorities. This means that heating up is used regularly as an intermediate step.

[0007] Another step used in kitchens and the like is

the separation of solids and liquids.

[0008] DE-29622256 U1 which is the nearest prior art document, discloses a food product package comprising dried food products filled in a liquid permeable bag. Product together with the bag is inserted in the container and cooked for its consumption. This procedure has the drawbacks as indicated above.

[0009] It is the object of the present invention to avoid the above disadvantages and provide a more efficient way of producing stock and performing other cooking or preparation operations.

[0010] This object is achieved with a container bag unit of the type described above by the fact that the container bag comprises a synthetic material in which the holes in the material have a size between 50 and 450 μm , more particularly-between 100 and 150 μm .

[0011] The container bag according to the present invention is suitable for accommodating all, kinds of foods, herbs and the like and can be opened and closed in a simple manner. For the preparation of stock in large quantities the solid material concerned can be introduced into the container bag in a simple manner and the container bag unit subsequently placed in the container or pan concerned. The stock is then prepared, and when it is ready the container bag unit is easily removed by one person.

[0012] In addition, it has surprisingly been found that no problems of cloudiness of stock such as described above occur, because the coagulating proteins are retained in the bag.

[0013] It has been found that it is also possible with the container bag unit according to the invention to prepare dishes such as rice and pasta and certain vegetables by placing these dishes in the bag and subsequently placing the bag in a container with heated water. After boiling or preparation in some other way, the bag can simply be removed from the container. For certain applications it is necessary to cool down such dishes rather quickly, and this can be achieved easily by placing the container bag unit with the dishes in another pan with liquid brought to a suitable temperature. This ensures that flavour and vitamins are retained, while the risk of bacterial contamination is reduced (HACCP requirements).

[0014] This means that a quantity of water at raised temperature remains in the first container or pan. This water can be used for preparing further dishes. In this way less water and energy are wasted.

[0015] It will be understood that the container bag can have any imaginable dimensions. For instance, it is possible to place between 100 g and 10 kg, and more particularly 2.5 - 5 kg, in weight in it. Of course, the minimum dimensions of such a bag are considerably greater than those of bouquet garni sachets and the like. In other words, the minimum content of the container bag is at least 0.3 litre.

[0016] It has been found that the dimensions of the mesh in the container bag described above produce the

optimum interaction with the surrounding liquid, without any escape of undesirable constituents being found. This applies more particularly if the size of the holes in the synthetic material lies between 50 and 100 μm . The container bag described above can be made of any synthetic material, such as laminated material and/or perforated film, in other words, non-woven material. However, according to an advantageous embodiment, the synthetic material consists of woven or knitted material.

[0017] The bag described above is preferably in the form of washable material. This means that it can simply be placed in a (dish)washing machine after use. For this purpose, it is preferable to use a synthetic material which shrinks no more than 2.5% in boiling water after heating for the first time. Of course, this is also important during the preparation of the foods concerned.

[0018] The weight of the fabric preferably lies between 50 and 250 g/m^2 .

[0019] The synthetic material can comprise any suitable synthetic material, and synthetic materials which both meet the above requirements and are also compatible with foods include polypropylene, polyester, polyamide and polyethylene.

[0020] The closing means described above can comprise any design known in the prior art. An example which can be given is a cord which extends in the free peripheral edge of the container bag and can be fixed by a knot in a certain closing position. According to an advantageous embodiment, the closing means comprise a rigid tubular part, and a stop interacting therewith, the free end of said container bag being pinched between said stop and said tubular part. The stop can be clamped on the tubular part by means of a clamping closure, while the bag is placed between them. It will be clear that it is not important for the above to be liquid-tight, but that it is above all important that no material should be able to escape from the opening of the bag.

[0021] In order to be able to position the container bag unit according to the invention simply in a container such as a pan and to remove it therefrom, this unit is preferably provided with hook means.

[0022] The invention will be explained in greater detail below with reference to an exemplary embodiment shown in the drawing, in which:

Fig. 1 shows in perspective view the component parts of the container bag unit according to the invention; and

Fig. 2 shows the container bag unit in the combined position.

[0023] In the figures, and more particularly in Fig. 2, the container bag unit according to the invention is indicated in its entirety by 1. It can be seen that it consists of a container bag 2 provided with a closure 3. The container bag is preferably made of a woven fabric material with a mesh of, for example, 70 μm . The fabric weight is, for example, 150 g/m^2 . Polyamide can be used as

the material. This bag is accommodated inside a collar 4 of closure 3, and the free end is folded over at the top, as can be seen from Fig. 2. Collar 4 is also provided with a hinge 5, on which a lid or stop 6 is fixed. On the opposite end, this stop 6 is provided with a lip 8 which can interact with a toggle lever 7. When the toggle lever 7 acts upon the lip 8, the lid 6 can be wedged on collar 4, so that the peripheral edge of the container bag 2 is confined between them. A hook 9 is also fitted on the collar, by means of which hook the container bag unit thus obtained can be suspended from the edge of a pan or the like. Instead of such a hook it is also possible to use a chain or other fixing means according to the prior art.

[0024] The size of the holes in the fabric depends on the use of the container bag. For example, if vegetables or other dishes are to be cooked or prepared in the container bag, a relatively small size will have to be selected for these holes, while a rather larger size will be selected for extracting stock. Of course, this depends on the material from which the stock is being extracted.

[0025] It is therefore proposed that different bags should be used for different applications. These bags can be provided with different features, in order to distinguish them from other bags, inter alia in connection with the HACCP requirements. One possibility is to indicate these differences with colours, i.e. a fabric with relatively large holes having a different colour from a fabric with relatively small holes.

[0026] It is important that the woven fabric or knitted material for the container bag unit described here should be flexible, so that it adapts to the product placed therein.

[0027] The container bag described above is simple to manufacture, by cutting the parts out of a web of woven fabric or knitted material. In the case of such a design the bag can simply be made cylindrical.

[0028] Although the invention is described above with reference to a preferred embodiment, it will be clear that for anyone skilled in the art variants lying within the scope of the appended claims will quickly emerge.

Claims

1. Container bag unit (1) for filling with foods, herbs and the like, and for placing in a container such as a pan, comprising a container bag (2) of porous synthetic material provided with an insertion opening and closing means (3) for said opening, **characterized in that** the container bag comprises a synthetic material in which the holes in the material have a size between 50 and 450 μm .
2. Container bag unit according to Claim 1, in which the container bag comprises a knitted or woven synthetic material.
3. Container bag unit according to one of the preced-

ing claims, in which said holes in the synthetic material have a size between 100 and 150 μm .

4. Container bag unit according to one of the preceding claims, in which said synthetic material comprises a washable material. 5
5. Container bag unit according to one of the preceding claims, in which said synthetic material comprises -polypropylene, polyester, polyamide or polyethylene. 10
6. Container bag unit according to one of the preceding claims, in which said closing means comprise a clamp closure (7, 8).
7. Container bag unit according to Claim 6, in which said closing means comprise a rigid tubular part (4), and a stop (6) interacting therewith, the free end of said container bag being pinched between said stop and said tubular part. 20
8. Container bag unit according to one of the preceding claims, provided with hook means (9).

Patentansprüche

1. Behälterbeuteleinheit (1) zum Einfüllen von Nahrungsmitteln, Kräutern und dergleichen und zum Einsetzen in einen Behälter, wie z. B. eine Schale, mit einem Behälterbeutel (2) aus porösem Kunststoff, der mit einer Einlegeöffnung und einer Schließeinrichtung (3) für die Öffnung versehen ist, **dadurch gekennzeichnet, daß** der Behälterbeutel einen Kunststoff aufweist, bei dem die Poren im Material eine Größe zwischen 50 und 450 μm aufweisen. 30
2. Behälterbeuteleinheit nach Anspruch 1, wobei der Behälterbeutel einen gewirkten oder gewebten Kunststoff aufweist. 40
3. Behälterbeuteleinheit nach einem der vorstehenden Ansprüche, wobei die Poren in dem Kunststoff eine Größe zwischen 100 und 150 μm aufweisen. 45
4. Behälterbeuteleinheit nach einem der vorstehenden Ansprüche, wobei der Kunststoff ein waschbares Material aufweist. 50
5. Behälterbeuteleinheit nach einem der vorstehenden Ansprüche, wobei der Kunststoff Polypropylen, Polyester, Polyamid oder Polyethylen aufweist. 55
6. Behälterbeuteleinheit nach einem der vorstehenden Ansprüche, wobei die Schließeinrichtung einen Klemmverschluß (7, 8) aufweist.

7. Behälterbeuteleinheit nach Anspruch 6, wobei die Schließeinrichtung einen starren röhrenförmigen Teil (4) und einen damit wechselwirkenden Anschlag (6) aufweist, wobei das freie Ende des Behälterbeutels zwischen dem Anschlag und dem röhrenförmigen Teil eingeklemmt wird.

8. Behälterbeuteleinheit nach einem der vorstehenden Ansprüche, die mit einer Hakeneinrichtung (9) versehen ist.

Revendications

1. Ensemble à sachet (1) destiné à être rempli d'aliments, d'herbes et analogue, et à être placé dans un récipient tel qu'une casserole, comprenant un sachet (2) constitué d'un matériau synthétique poreux pourvu d'une ouverture d'insertion et de moyens de fermeture (3) de ladite ouverture, **caractérisée en ce que** le sachet est constitué d'un matériau synthétique dont les trous ont une taille comprise entre 50 et 450 μm . 15
2. Ensemble à sachet selon la revendication 1, dans lequel le sachet comprend un matériau synthétique tricoté ou tissé. 25
3. Ensemble à sachet selon l'une des revendications précédentes, dans lequel lesdits trous du matériau synthétique ont une taille comprise entre 100 et 150 μm . 30
4. Ensemble à sachet selon l'une des revendications précédentes, dans lequel ledit matériau synthétique comprend un matériau lavable. 35
5. Ensemble à sachet selon l'une des revendications précédentes, dans lequel ledit matériau synthétique comprend du polypropylène, du polyester, du polyamide ou du polyéthylène. 40
6. Ensemble à sachet selon l'une des revendications précédentes, dans lequel lesdits moyens de fermeture comprennent une fermeture à pinces (7, 8). 45
7. Ensemble à sachet selon la revendication 6, dans lequel lesdits moyens de fermeture comprennent une partie tubulaire rigide (4), et une butée (6) coopérant avec celle-ci, l'extrémité libre dudit sachet étant pincée entre ladite butée et ladite partie tubulaire. 50
8. Ensemble à sachet selon l'une des revendications précédente, pourvue de moyens formant crochets (9). 55

fig- 1

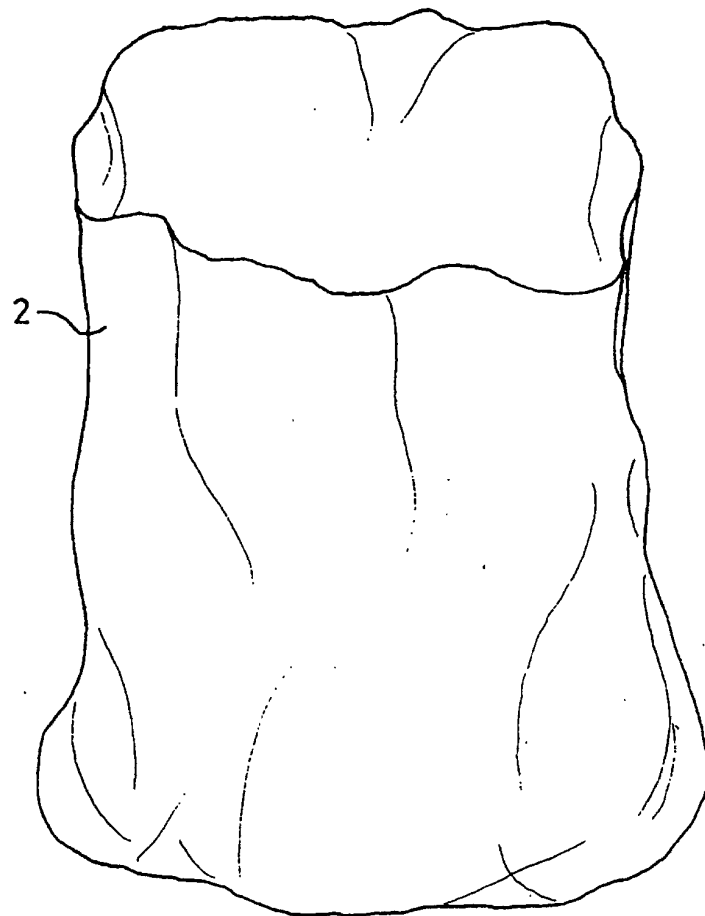
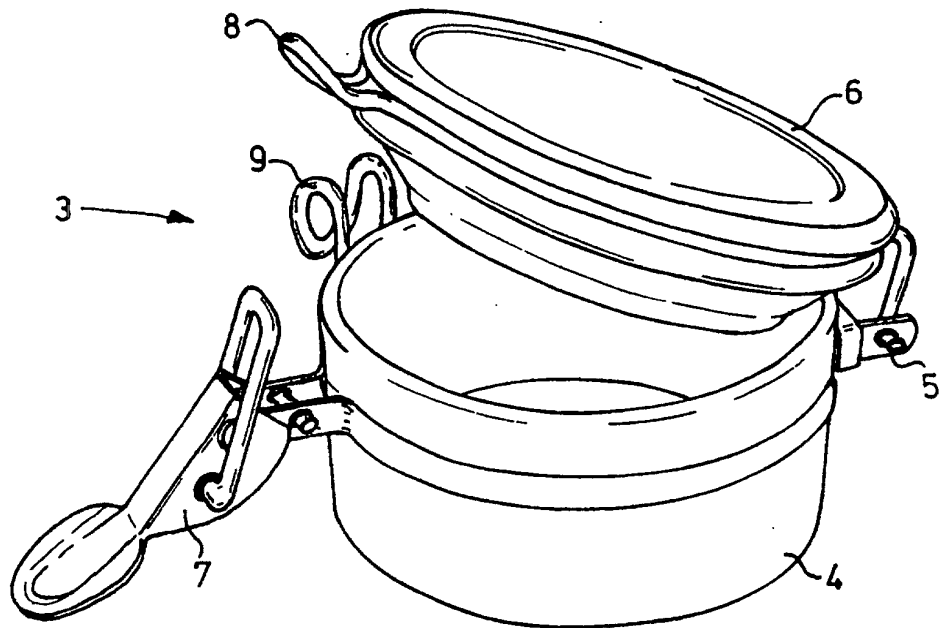


fig - 2

