

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 807 079 B1

(12)

EUROPEAN PATENT SPECIFICATION

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

14.04.1999 Bulletin 1999/15

(21) Application number: **96900892.9**

(22) Date of filing: **31.01.1996**

(51) Int. Cl.⁶: **B65D 81/34, A47G 19/16**

(86) International application number:
PCT/DK96/00053

(87) International publication number:
WO 96/23713 (08.08.1996 Gazette 1996/36)

(54) **A DISPOSABLE PACKAGING FOR THE PRODUCTION OF BEVERAGES ESPECIALLY TEA, AND
A METHOD FOR PRODUCTION OF SUCH PACKAGING**

WEGWERFVERPACKUNG ZUR HERSTELLUNG VON GETRÄNKEN, INSBESONDERE TEE, UND
VERFAHREN ZUR HERSTELLUNG EINER SOLCHEN VERPACKUNG

EMBALLAGE JETABLE POUR LA PRODUCTION DE BOISSONS, EN PARTICULIER DE THE, ET
SON PROCEDE DE FABRICATION

(84) Designated Contracting States:
AT BE CH DE DK ES GB IE LI NL SE

(30) Priority: **07.02.1995 DK 13795**

(43) Date of publication of application:
19.11.1997 Bulletin 1997/47

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Description

[0001] The invention concerns a disposable packaging in accordance with the preamble of claim 1. The envelope serves the purpose of protecting the extraction bag and its contents.

[0002] The known disposable packaging of this kind are usually making use of an extraction bag, with fixed string and label, consisting of separate chambers in a rectangular shape containing extractable material wrapped in an equally rectangular envelope. In this embodiment the envelope only serves the purpose of protecting the contents before use and then it has to be discarded. Subsequently, the practical and aesthetic problem arises as to remove the wet or humid extraction bag which often will be placed into or upon available unsuitable objects as e.g. ash trays, waste paper baskets, plates or the like. In many cases the contents of the wet bag will furthermore leave undesired spots on table surfaces, table cloths etc. from which they can be difficult to remove.

[0003] By using the embodiment known from German Patent Application No. DE A1 3826911 the above mentioned discarding problem can, principally, be solved, as said improvement is pressing the moisture out of the bag by using a special twisting device and thereafter is re-using an enclosed envelope or envelope-like object as in open and closed version, respectively, functions as cover for the used bag

[0004] The embodiment is obviously bearing the impress of being an adjusted solution based on the previously mentioned known rectangular extraction bag and is such encumbered with a number of disadvantages in relation to the problem it pretends to solve.

1. The shown and described twisting device in which the string is taken all the way around the extraction bag, fixed in a number of sliding loops or similar, is making the production process difficult, since precisely the attachment of the string to the bag is the critical point in the production of the previously mentioned disposable packaging and consequently an already difficult production process is being complicated.

2. A second disadvantage in relation to the production is the complicated operation to take the string, with or without label through the envelope in the shown and described embodiments.

3. In practical use with the varying qualities of filter material there may be a risk that too hard a pull in the string will cut the bag into pieces and thus empty the used, extracted contents in an undesired way, e.g. down into the ready-made beverage.

4. In the shown and described embodiments in which the envelope is open in the sides (fig. 1, 3

and 4) it does not seem immediately logical to place the packaging in such a way that the used bag is of no inconvenience. It can easily be tilted, being open in three out of four sides, and consequently the humid bag will continue to be able to make spots etc. on the undercover. The used bag furthermore still represents a problem of aesthetic matter exactly because it still is to be seen, the damp has only be reduced to humidity.

5. The lack of geometric harmony between extraction bag and envelope in the closed, tubular embodiment (fig. 2, 7, 8 and 9) gives prohibitive production costs as to waste of paper regarding the envelope and also disadvantageous assembling processes by putting on the "lid" to the tubular embodiment, and also taking the string through this. This principle can also provide consumptuous disadvantages due to the fact that the embodiment not always guarantees that the bag e.g. will not stick to the edge of the opening of the envelope by withdrawal of the bag to this.

[0005] Regarding the German Patent Application No. DE A1 3826911 it can altogether be concluded that said problems basically exist because of a lacking co-ordination of the forming of the individual parts of the packaging: bag, string and envelope which probably is due to the fact that the patent application specifically comprises a twisting principle and not a co-ordinated re-using of the envelope in correlation with the bag and the string.

[0006] Extraction bags, which after use can be kept in the packaging, are known from US-patents no.: 2308241, 3057729, 3047397, 2800408 and especially no. 2860989. The known extraction bags are, however, all defective in relation to a very decisive point: they all operate with solutions to the storing problem, limited by the prejudice about the rectangular tea bag, instead of analysing the basic problem: that a closed bag containing tea via an attached string taken through the envelope-like object having the opening downwards turning, is to be pulled up into this without the tea bag risks to stick in the sides of the opening of the envelope.

[0007] In the common embodiment where the string is attached to the tea bag about its vertical symmetry line, two corners arise which by leading-in into a rectangular envelope precisely will stick in this opening unless the action is performed with, in relation to practical use, an excessive accuracy and concentration. In order to enable the action to be performed without problems the envelope must be broader than the tea bag.

[0008] The mentioned US-patents are said to solve this geometric problem in two ways: By the fact that the envelope is open at 3 sides so that a rectangular tea bag never will stick in the opening of the envelope whereby the packaging only, however, solves the problem half as to disposal of the tea bag, since it only is

possible to press the water out of the bag. This principle is regarding the US-patents no.: 2308241, 3057229, 2800408 and 3047397.

[0009] US-patent no. 2860989 is based on the principle: To draw the used tea bag up into a rectangular envelope being open only at one side: To ensure the lead-in of the tea bag into the envelope it has been provided with a number of slits and foldings, which enable the opening of the envelope to expand and thus a kind of funnel effect is created. The problem to this solution is only that these slits and foldings of the envelope inevitable will complicate and raise the production process to an unreasonable extend. It can be objected that the solution could be simplified by making the envelope so much bigger than the tea bag itself, that this latter always will be able to be pulled up into the envelope without sticking into its sides. That "simplification" will, however, imply a completely unreasonable waste of paper together with much too high transportation costs due to the fact that a lot of unnecessary air will be freighted around. Furthermore Us-patent No. 2860989 tries to meet said in-leading problem by attaching the string to one of the upper corners of the rectangular tea bag so that it is a "pointed" part of the tea bag which in the beginning is taken into the opening of the envelope. This solution implies, however, one essential problem: When a rectangular tea bag is lowered into a container with liquid, most often boiling water, it will deposit on the container's horizontal bottom, resting on that edge of the tea bag which turns opposite of the edge to which the string is attached.

[0010] When the tea bag, with the string attached at the above named corner, is pulled out of the liquid, the deposit's solid mass will spread asymmetric in relation to the vertical axis which the string now creates. The uneven weight distribution in relation to the vertical axis (the string) implies that the upper point of the tea bag probably can be taken rather safely into the opening of the envelope, but when the lower part of the tea bag containing the solid mass is to be pulled "on board" it will stick to one of the two sides of the opening of the envelope because of the asymmetric weight distribution at the string. Furthermore, the uneven weight distribution will have a tendency to put the tea bag in rotation about its own vertical axis (the string) when the tea bag is pulled up into the envelope, whereby the lead-in into this is made difficult since the tea bag easily can place itself crosswise in the opening of the envelope.

[0011] These problems is according to the invention eliminated with a disposable packaging in which an extraction bag consists of one or more separate or connected, in their primary form, triangular chambers of a 2-ply filtering material, that the string is attached to one of the corners of the triangular bag, that the envelope consists of at least two overlapping, in their primary form triangular flaps of a flexible, moisture absorbing, but not moisture penetrating material, in particular paper, that the string attached to the extraction bag has

been taken through one of the corners of the triangle and that the two sides of the triangle, on each side of the corner, lengthways have been assembled in such a way that a triangular envelope thereby is created, which connected to the extraction bag and to the string attached to this latter form a disposable packaging based on the funnel principle, where the triangular extraction bag after use, via withdrawal of the string, thus easily will re-enter the triangular envelope which hereby hides the used bag and then can absorb the extra liquid from the bag without using ingenious and complicated twisting devices or the like. The principle ensures that the string, in the production process is attached to the envelope without penetrating the envelope material. Thereby a much simpler production is ensured than is the case with the known patented principles.

[0012] Thus a disposable packaging is obtained which by co-ordination of the forming of the individual packaging parts: Extraction bag, string and envelope obtain an overall solution to the problems mentioned before and thereby ensures a simple, logical and hygienic re-use of the envelope without risking spots etc. and which is based upon an uncomplicated production process with a minimum waste of resources. At the same time the final product is simple to use and can be introduced as a natural development of the known principles.

[0013] In an unique embodiment for disposable packaging according to the invention there is to the envelope attached a flap as most often is corresponding in size and shape to the envelope, which flap in packing is folded and closed over the opening of the envelope, so that the extraction bag and its contents are hygienic sealed and protected before use. The flap can in use be folded around the envelope and after use re-folded back to the sealing position along a weak adhesive strip or similar so that the used bag in this way is sealed.

[0014] In another embodiment for the disposable packaging according to the invention the string is in packing attached to the said flap which is connected to the envelope along a perforated tearing off line in a form having the advantage that the flap by opening the packaging merely can be torn off from the envelope and then be used as a label. Production-wise this embodiment requires less possible operations and without loss of kindness to the user.

[0015] The invention also relates to a method for production of the disposable packaging. Said method is unique in that the extraction bag is being produced by a, in principle, infinite tube of 2-ply filtering material alternately being closed crosswise along lines in slanting angles, measured in relation to the two lengthways sides of the tube by hot welding or similar technique, and each of the extraction bags thus closed is cut off along the crosswise closures, whereafter a piece of string, perhaps with a label, is attached to one of the three corners of the extraction bag by hot welding, gluing or a similar technique, that the envelope is produced by an, in principle, endless length of moisture absorb-

ing, but not moisture penetrating material, is marked crosswise along lines in slanting angles analogous to the ones used in the extraction bag, measured in relation to the two length-going sides of the length, whereafter these are cut off from the length in a number of at least two connected flaps, and then the extraction bag is placed upon one of these two flaps, with the string taken out beyond one of the two corners where the two flaps are connected, then the two flaps are folded over one another along the crosswise line connecting these two flaps, which hereafter are attached to one another along at least one of the two open sides of the envelope by crimping, gluing or a similar technique in such a way that the extraction bag and its string are attached to the envelope.

[0016] The principle of cutting out and folding mutually connected equilateral triangles is production-wise optimum because it requires less possible mechanical operations together with an optimum resource use (minimum of paper waste).

[0017] By a particular embodiment in production of disposable packaging according to the invention, the extraction bag is cut out in a number of at least two connected extraction bags, which are folded over one another along the crosswise closure. The two opposite pointed corners of the two extraction bags are then attached to one another by hot welding, gluing or a similar technique.

[0018] The invention is explained in the following referring to the drawings where:

Fig. 1 shows cutting out and folding of an embodiment of an extraction bag according to the invention, consisting of two chambers, from a section of an, in principle, endless tube of mutual laterally reversed, triangular extraction bags, consisting of 2-ply filtering material,

Fig. 2 shows the extraction shown in fig. 1 with attached string and label,

Fig. 3, 4 and 5 show stages of the packing of the extraction bag shown in fig. 2 in a folded envelope according to the invention, cut out from a section of an, in principle, endless row of mutual laterally reversed, triangular flaps, consisting of a flexible moisture absorbing, but not moisture penetrating material. As a matter of illustration the use of both 2 flaps and 3 is shown, according to the paragraph of the description of the envelope.

Fig 6 shows a typical embodiment of a disposable packaging according to the invention, in sealed, but ready to use version. The use of a possible third flap according to the description of the envelope is also shown in this figure.

Fig. 7 shows the same, but now in open condition.

Fig. 8 shows the withdrawal principle of a used extraction bag to the envelope.

Fig. 9, 10 and 11 show the same as fig. 6, 7 and 8, but in an version where the flap connected to the envelope is torn off and used as label.

[0019] Fig. 1 shows a section of an, in principle, endless tube of 2-ply filtering material (i) which through hot welding or similar technique continues to be divided into a number of connected, mutually separated extraction bags (a) shaped as triangular chambers, each containing divided portions of a material extractable in a fluid. The drawing shown illustrates the most prevailing double chamber bag consisting of two connected chambers, cut off along the centre line (h) by the crosswise closures (b) and folded over the centre line (c) in the crosswise closure between the two connected chambers.

[0020] Fig. 2 shows a complete extraction bag (a), in principle consisting of one or more separate or connected chambers as shown in fig. 1 with a piece of string attached to one of the 3 corners of the extraction bag. At the opposite free end (t) of the string (e) a label (f) is fixed possibly provided with a couple of slits (g) for rolling up the string.

[0021] Fig. 3 shows a section of an, in principle, endless length of a flexible moisture absorbing, but not moisture penetrating material, especially paper, which continuously along crosswise lines (u) are marked as a row of triangular flaps. The drawing shows the first stage of the packing process of the shown extraction bag in an envelope as shown in fig. 2, where the extraction bag (a) is placed upon a flap (j) and then its opposite connected flap (k) is cut off along the line (m) and folded in over the extraction bag placed on the first flap (j) and the attached string (e) on this latter, which string has been taken through the corner (x) by folding over the line (n). The two flaps (j and k) are assembled to one another along the side (p) of the triangle by crimping, gluing or a similar technique and thereby forming an envelope which is connected to the extraction bag and its string. A possible third flap (l) which is connected to the envelope, is cut out and is started to be folded along the side (o) of the triangle over the envelope.

[0022] Fig. 4 shows next stadium of the packing process shown in fig. 3, where the string (e) is rolled up around the label's (f) two slits (g) (rolling up of the string can take place in other ways than the one shown here) and placed on one of the flaps (k) of the envelope, and then the possible third flap (l) is folded over the envelope's opening on the said flap (k) and the string rolled up around the label.

[0023] Fig. 5 shows the last stadium of the packing process shown in fig. 3 and 4 where the possible third flap (l) is folded completely over the flap (k) of the envelope and assembled with a fastening line (q) to one of the closed sides of the envelope perhaps by crimping or

similar technique. The drawing thus shows, according to the invention, a complete disposable packaging ready to use, but before use with an extraction bag sealed in an envelope and with the string (e) rolled up around the label practically placed and fixed between the possible third flap (l) and the envelope.

[0024] Fig. 6 shows the same as fig. 5 with the contents of the envelope: bag, string and label, indicated by the dot-and-dash line.

[0025] Fig. 7 shows the packaging of fig. 6 with the possible third flap (l) opened along the fastening line (q) and unfolded along the side (o) of the triangle while the string (e) is untwisted from the label (f). The extraction bag (a) is torn partly out of the envelope, ready for use.

[0026] Fig. 8 shows the invention in practical use, where the possible third flap (l) is folded along the side (o) of the triangle to the second flap (j) of the envelope so that the triangular envelope now forms a funnel into which the used extraction bag (a) by a vertical pull in the label (f) and string (e) is caught up naturally. The embodiment makes it possible to seal completely the used extraction bag by repeating the movements of the third flap (l) as shown in fig. 6 and 7, only in reverse order. For this purpose the fastening line (q) of the envelope can possibly be provided with a light gluing or similar so that the flap (l) can be re-fastened and kept to the envelope.

[0027] Fig. 9 shows the same as fig. 5 with the contents of the envelope: bag and string, indicated by the dot-and-dash line. The folding line (o) shown in fig. 6 has in this version been replaced by a perforated tearing off line (r).

[0028] Fig. 10 shows the packaging of fig. 9 with the possible third flap (l) opened from the envelope (j and k) and unfolded along the perforated line (r) with the string (e) visible, fixed (s) to the inner side of the third flap (l). The extraction bag (a) is torn partly out of the envelope, ready for use.

[0029] Fig. 11 shows the invention in practical use where the possible third flap (l) with the attached string (e) is torn off the flaps (j and k) of the envelope along the perforated line (r) in such a way that the triangular envelope now forms a funnel into which the used extraction bag (a) by a vertical pull in the torn off flap (f) of the envelope and string (e) can be caught up in a natural way.

Claims

1. A disposable packaging for the production of beverages, especially tea and of the type consisting of a 2-ply filtering material (i) in particular of filtering paper, divided into one or more separate extraction bags (a) each containing tea or a similar material extractable in a fluid, to which a piece of string (e) is attached, and where extraction bag and string are wrapped in an envelope (j,k) where the string attached to the bag with a label (f) has been taken

through the envelope in such a way that the withdrawal of the used bag into the envelope is made possible by pulling the string, **characterized** by the fact that the extraction bag consists of one or more separated or connected, in their primary form, triangular chambers of 2-ply filtering material, that the string is attached to one of the corners of the triangular bag, that the envelope consists of at least two overlapping, in their primary form, triangular flaps (j and k) of a flexible, moisture absorbing, but not moisture penetrating material, in particular paper, that the string attached to the extraction bag has been taken through one of the corners of the triangle (x) and that the two sides of this triangle, on each side of the corner, lengthways have been assembled as a triangular envelope which is connected to the extraction bag and the thereto attached string.

2. A disposable packaging according to claim 1, **characterized** by the fact that the triangular bag (a) and the triangular envelope (j,k) are mainly congruent.
3. A disposable packaging according to claim 1 or 2, **characterized** by the fact that a, in size and embodiment usually corresponding flap (i) is attached and connected to the triangular envelope, and that said flap by packing has been folded along a line (o) and closed over the opening of the envelope.
4. A disposable packaging according to claim 1, 2 or 3, **characterized** by the fact that the string (e) by packing has been attached to the above mentioned flap (i) which is connected to the envelope (j and k) along a perforated tear-off line or the like (r).
5. A method for the production of a disposable packaging for the production of beverages, especially tea and of the type, consisting of a 2-ply filtering material (o) in particular filtering paper, divided into one or more separate extraction bags (a) each containing tea or a similar material extractable in fluid, to which a piece of string (e) is attached and where the extraction bag and string are packed in an envelope through which the string attached to the bag with a label (f) has been taken through in such a way that the withdrawal of the used bag to the envelope is made possible by pulling the string, **characterized** by the fact that the extraction bag is made of a, in principle, endless tube of a 2-ply filtering material alternately closed crosswise along lines in slanting angles (b) measured in relation to the two lengthways sides of the tube, by means of hot welding or a similar technique, and each of the extraction bags thus closed in a triangular form are cut off along the crosswise sealing (h) whereafter a piece of string is attached e.g. with a label to one of the

three corners of the extraction bag by means of hot welding, gluing, or a similar technique (d), that the envelope is made of an in principle endless sheet of moisture absorbing, but not moisture penetrating material, marked lengthways along lines in slanting angles analogous with those used in the extraction bag (u) measured in relation to the two lengthways sides of the sheet, whereafter these are cut off from the sheet (m) in a number of at least two triangular connecting flaps (j and k) and the triangular extraction bag is hereafter placed on one of these two triangular flaps with the string placed over one of the two corners (x) where the two triangular flaps are connected, whereafter said triangular flaps are folded over one another along the crosswise line (n) which assemble these two, which hereafter are attached to one another along at least one of the two open sides of the envelope (p) with crimping, gluing or a similar technique thereby forming a triangular envelope containing the triangular extraction bag with its string extending through one of the corners of said envelope.

6. A method according to claim 5, **characterized** by the fact that the extraction bag is cut out in a number of at least two connecting extraction bags which are folded over one another along the crosswise sealing (c) whereafter the opposite pointed corners of the two extraction bags are attached to one another (d) by means of hot welding, gluing or a similar technique.

Patentansprüche

1. Wegwerf-Verpackung zur Produktion von Getränken, insbesondere Tee, die aus einem zweischichtigen Filtermaterial (i), insbesondere Filterpapier besteht, das in einen oder mehrere getrennte Extraktionsbeutel (a) aufgeteilt ist, die jeweils Tee oder ein ähnliches in einer Flüssigkeit extrahierbares Material enthalten, und an denen ein Stück Schnur (e) befestigt ist, wobei Extraktionsbeutel und Schnur in eine Hülle (j, k) eingewickelt sind, und die mittels eines Etiketts (f) am Beutel befestigte Schnur so durch die Hülle geführt ist, dass der gebrauchte Beutel mittels eines Zugs an der Schnur in die Hülle zurückziehbar ist, **dadurch gekennzeichnet**, dass der Extraktionsbeutel aus einer oder mehreren getrennten oder verbundenen, in ihrer ursprünglichen Form dreieckigen Kammern aus zweischichtigem Filtermaterial besteht, dass die Schnur an einer der Ecken des dreieckigen Beutels befestigt ist, dass die Hülle aus mindestens zwei einander überlappenden, in ihrer ursprünglichen Form dreieckigen Lappen (j und k) aus biegsamem, Feuchtigkeit absorbierendem, jedoch feuchtigkeitsundurchlässigen Material, insbesondere Papier besteht, dass die am Extraktionsbeutel

befestigte Schnur durch eine der Ecken des Dreiecks (x) geführt ist, und dass die beiden Dreiecksseiten beidseitig der Ecke in der Längsrichtung zur Bildung einer dreieckigen Hülle zusammengefügt sind, die mit dem Extraktionsbeutel und mit der an diesem befestigten Schnur verbunden ist.

2. Wegwerf-Verpackung nach Anspruch 1, **dadurch gekennzeichnet**, dass der dreieckige Beutel (a) und die dreieckige Hülle (j, k) im wesentlichen kongruent sind.
3. Wegwerf-Verpackung nach Anspruch 1 oder 2, **dadurch gekennzeichnet**, dass ein in Grösse und Ausbildung üblicherweise entsprechender Lappen (i) an der dreieckigen Hülle befestigt ist, und dass dieser beim Verpacken an einer Linie (o) entlang gefaltet ist und die Hüllenöffnung verschlossen hat.
4. Wegwerf-Verpackung nach Anspruch 1, 2 oder 3, **dadurch gekennzeichnet**, dass die Schnur (e) beim Verpacken am erwähnten Lappen (i) befestigt ist, der an einer aufreissbaren Perforationslinie (r) oder dergleichen entlang an der Hülle (j und k) befestigt ist.
5. Verfahren zur Herstellung einer Wegwerf-Verpackung zur Produktion von Getränken, insbesondere Tee, die aus einem zweischichtigen Filtermaterial (o), insbesondere Filterpapier besteht, das in einen oder mehrere jeweils Tee oder ein ähnliches in einer Flüssigkeit extrahierbares Material enthaltende getrennte Extraktionsbeutel (a) aufgeteilt wird, woran ein Stück Schnur (e) befestigt wird, wobei der Extraktionsbeutel und die Schnur in eine Hülle verpackt werden, durch die die mittels eines Etiketts (f) am Beutel befestigte Schnur so hindurchgeführt worden ist, dass der gebrauchte Beutel durch Ziehen an der Schnur in die Hülle zurückgezogen werden kann, **dadurch gekennzeichnet**, dass der Extraktionsbeutel durch Warmschweissen oder mittels einer ähnlichen Technik aus einem im Prinzip endlosen Rohr aus einem zweischichtigen Filtermaterial hergestellt wird, das in abwechselnden schrägen Winkeln (b) im Verhältnis zu den beiden in der Längsrichtung verlaufenden Rohrseiten verschlossen ist, dass jeder der so in dreieckiger Form verschlossenen Beutel an der Verschweissung (h) entlang abgeschnitten wird, wonach ein Stück Schnur beispielsweise mittels eines Etiketts an einer der drei Extraktionsbeutelecken durch Warmschweissen, Verleimen oder eine ähnliche Technik (d) befestigt wird, dass die Hülle aus einem prinzipiell endlosen Bogen aus einem Feuchtigkeit absorbierenden, jedoch feuchtigkeitsundurchlässigen Material hergestellt wird, das in Längsrichtung an Linien in Schrägwinkeln entsprechend denen des Extraktionsbeutels (u) entlang im

Verhältnis zu den beiden in Längsrichtung verlaufenden Bogenseiten markiert wird, wonach diese in einer Anzahl von mindestens zwei dreieckigen Verbindungslappen (j und k) vom Bogen (m) abgetrennt und anschliessend der dreieckige Extraktionsbeutel auf einem dieser beiden dreieckigen Lappen mit der Schnur über einer der beiden Ecken (x) angeordnet werden, wo die beiden dreieckigen Lappen verbunden sind, und dass anschliessend die beiden dreieckigen Lappen an der diese verbindenden Querlinie (n) entlang über einander gefaltet und dadurch mit einander verbunden werden, und danach die Lappen an mindestens einer der beiden offenen Seiten der Hülle (p) entlang durch Schrumpfen, Verleimen oder mittels einer ähnlichen Technik an einander befestigt werden, wodurch eine dreieckige Hülle entsteht, die den dreieckigen Extraktionsbeutel enthält, dessen Schnur sich durch eine der Hüllenecken erstreckt.

6. Verfahren nach Anspruch 5, **dadurch gekennzeichnet**, dass der Extraktionsbeutel in einer Anzahl von mindestens zwei verbundenen Extraktionsbeuteln ausgeschnitten wird, die an der Querschweissung (c) entlang über einander gefaltet werden, wonach die entgegengesetzt gerichteten Ecken der beiden Extraktionsbeutel durch Wärmeschweissen, Verleimen oder eine ähnliche Technik an einander (d) befestigt werden.

Revendications

1. Emballage jetable pour la production de boissons, en particulier du thé et du type constitué par un matériau filtrant à 2 nappes (i) formé notamment de papier filtre, subdivisé en un ou plusieurs sachets d'extraction séparés (a) contenant chacun du thé ou un produit similaire pouvant être extrait dans un fluide et auxquels est rattaché un morceau de ficelle (e) et dans lequel le sachet d'extraction et la ficelle sont enveloppés dans une enveloppe (j, k) dans laquelle la ficelle fixée au sachet avec une étiquette (f) a été tirée à travers l'enveloppe de telle sorte que le retrait du sachet utilisé pour son introduction dans l'enveloppe est rendu possible par tirage de la ficelle, caractérisé par le fait que le sachet d'extraction est constitué par une ou plusieurs chambres triangulaires séparées ou raccordées, dans leur forme primaire, formées d'un matériau filtrant à 2 nappes, que la ficelle est rattachée à l'un des coins du sachet triangulaire, que l'enveloppe est constituée par au moins deux rabats triangulaires (j et k), qui se chevauchent, dans leur forme primaire, et sont formés d'un matériau flexible, qui absorbe l'humidité, mais ne transmet pas l'humidité, notamment du papier, que la ficelle fixée au sachet d'extraction a été tirée à travers l'un des sommets du triangle (x) et que les

deux côtés de ce triangle, de chaque côté du sommet, ont été assemblés sur leur longueur sous la forme d'une enveloppe triangulaire qui est raccordée au sachet d'extraction et à la ficelle fixée à ce dernier.

2. Emballage jetable selon la revendication 1, caractérisé par le fait que le sachet triangulaire (a) et l'enveloppe triangulaire (j, k) sont principalement congruents.
3. Emballage jetable selon la revendication 1 ou 2, caractérisé par le fait qu'un rabat (i), qui correspond habituellement du point de vue taille et forme de réalisation, est raccordé à l'enveloppe triangulaire et que ledit rabat est replié, par tassement, le long d'une ligne (o) et est rabattu sur l'ouverture de l'enveloppe, en la fermant.
4. Emballage jetable selon la revendication 1, 2 ou 3, caractérisé par le fait que la ficelle (e) est fixée par tassement sur le rabat (i) mentionné précédemment, qui est raccordé à l'enveloppe (j et k) le long d'une ligne perforée d'arrachement ou analogue (r).
5. Procédé pour la production d'un emballage jetable pour la production de boissons, en particulier du thé et du type constitué par un matériau filtrant à 2 nappes (i) formé notamment de papier filtre, subdivisé en un ou plusieurs sachets d'extraction séparés (a) contenant chacun du thé ou un produit similaire pouvant être extrait dans un fluide et auxquels est rattaché un morceau de ficelle (e) et dans lequel le sachet d'extraction et la ficelle sont enveloppés dans une enveloppe (j, k) dans laquelle la ficelle fixée au sachet avec une étiquette (f) a été tirée à travers l'enveloppe de telle sorte que le retrait du sachet utilisé pour son introduction dans l'enveloppe est rendu possible par tirage de la ficelle, caractérisé par le fait que le sachet d'extraction est formé d'un tube en principe sans fin formé d'un matériau filtrant à 2 nappes, qui est fermé alternativement d'une manière croisée le long de lignes correspondant à des angles d'inclinaison (b), mesurés par rapport aux deux côtés longitudinaux du tube, au moyen d'un soudage à chaud ou de techniques similaires, et on découpe chacun des sachets d'extraction ainsi fermés avec une forme triangulaire le long de l'élément d'étanchéité transversal (h), à la suite de quoi on fixe un morceau de ficelle, par exemple pourvu d'une étiquette, à l'un des trois coins du sachet d'extraction par soudage à chaud, par collage ou au moyen d'une technique similaire (d), que l'enveloppe est réalisée sous la forme d'une feuille en principe sans fin d'un matériau absorbant l'humidité, mais ne transmettant pas l'humidité, marquée dans le sens de la longueur le long de lignes correspondant à des angles d'incli-

naison analogues à ceux utilisés dans le sachet d'extraction (u) et mesurés par rapport aux deux côtés longitudinaux de la feuille, à la suite de quoi on découpe ces lignes à partir de la feuille (m) en formant un nombre d'au moins deux rabats triangulaires de liaison (j et k) et on place ensuite le sachet triangulaire d'extraction sur l'un de ses deux rabats triangulaires, la ficelle étant placée au-dessus de l'un des deux coins (x) où les deux rabats triangulaires sont raccordés, à la suite de quoi on replie lesdits rabats triangulaires l'un sur l'autre le long de la ligne transversale (n), qui réunit ces deux rabats que l'on fixe ensuite l'un à l'autre le long d'au moins l'un des deux côtés ouverts de l'enveloppe (p) par sertissage, par collage ou au moyen d'une technique similaire en formant ainsi une enveloppe triangulaire contenant le sachet triangulaire d'extraction, avec sa ficelle s'étendant à travers l'un des coins de ladite enveloppe.

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6. Procédé selon la revendication 5, caractérisé par le fait qu'on découpe le sachet d'extraction en un certain nombre, égal au moins à deux, de sachets d'extraction réunis, qui sont repliés l'un sur l'autre le long de la ligne de scellement transversale (c), à la suite de quoi on fixe les coins pointus opposés des deux sachets d'extraction l'un sur l'autre (d) au moyen d'un soudage à chaud, d'un collage ou d'une technique similaire.

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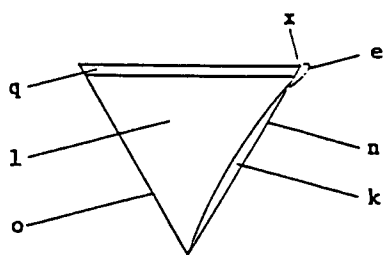


FIG. 5

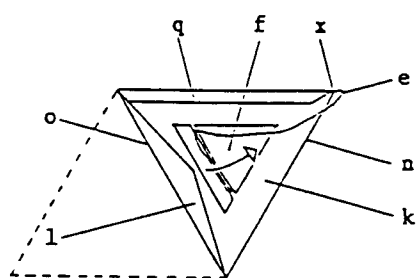
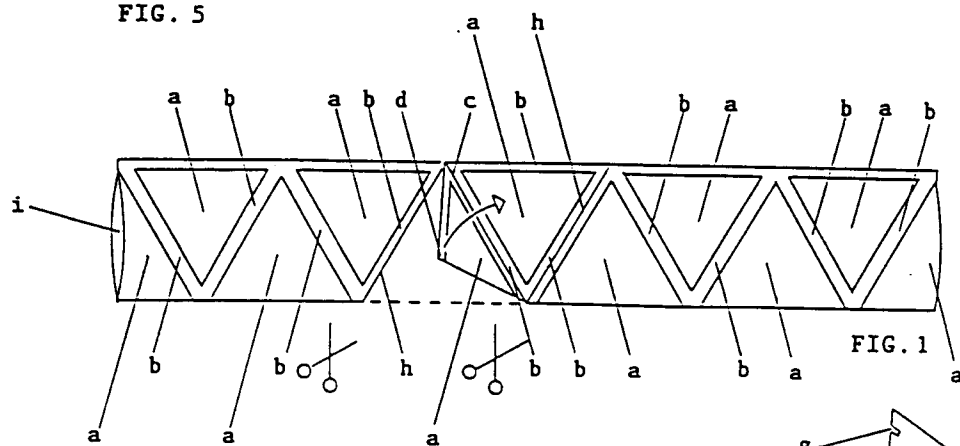


FIG. 4

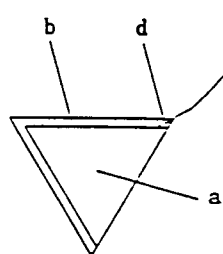


FIG. 2

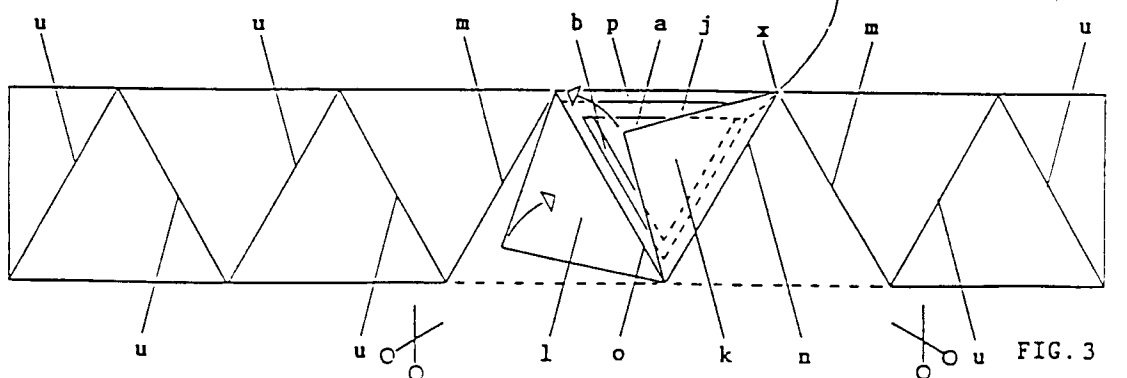


FIG. 3

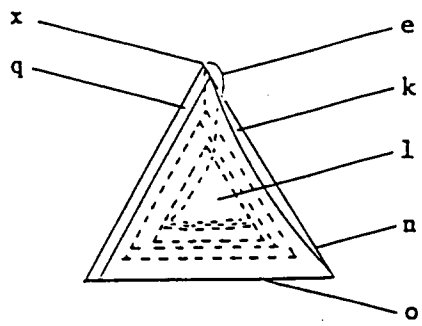


FIG. 6

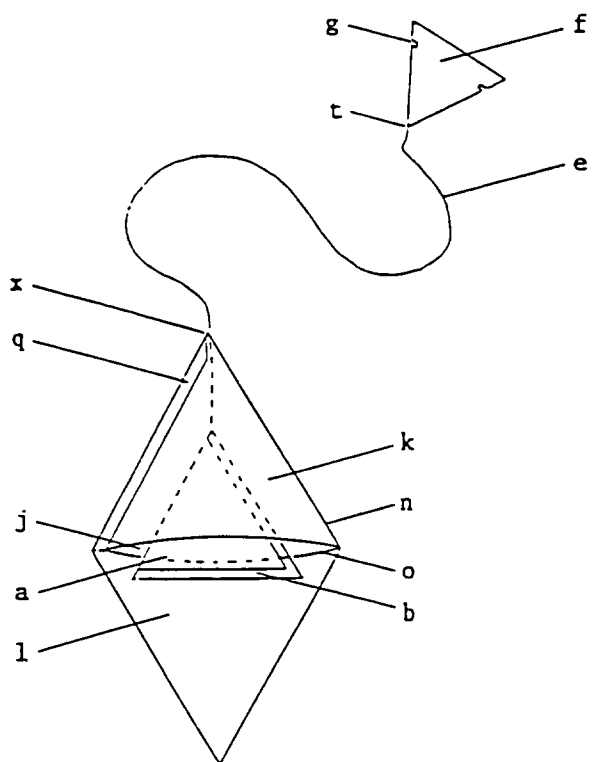


FIG. 7

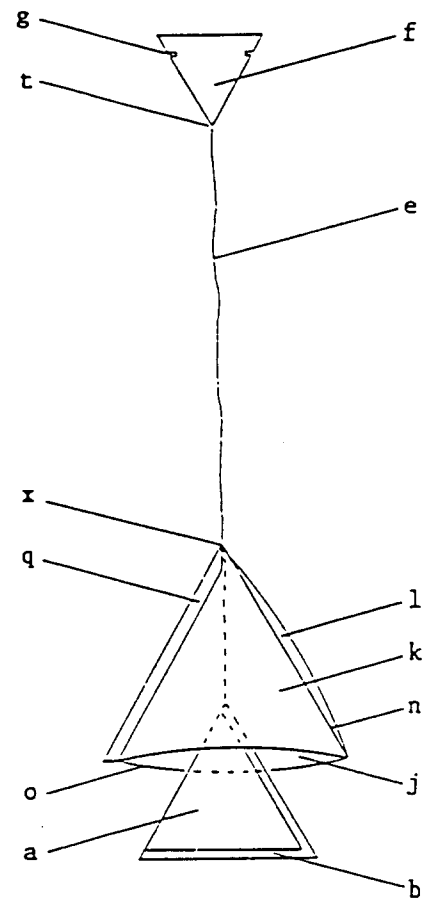


FIG. 8

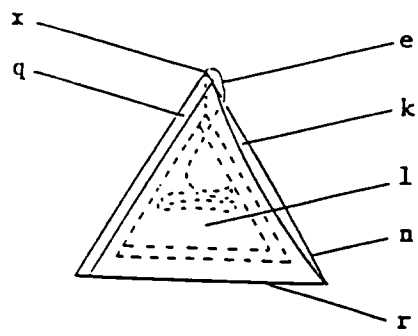


FIG. 9

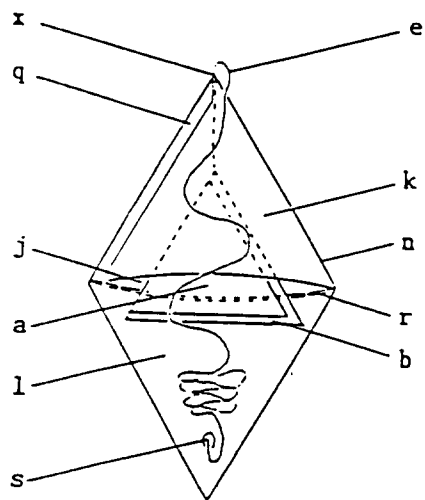


FIG. 10

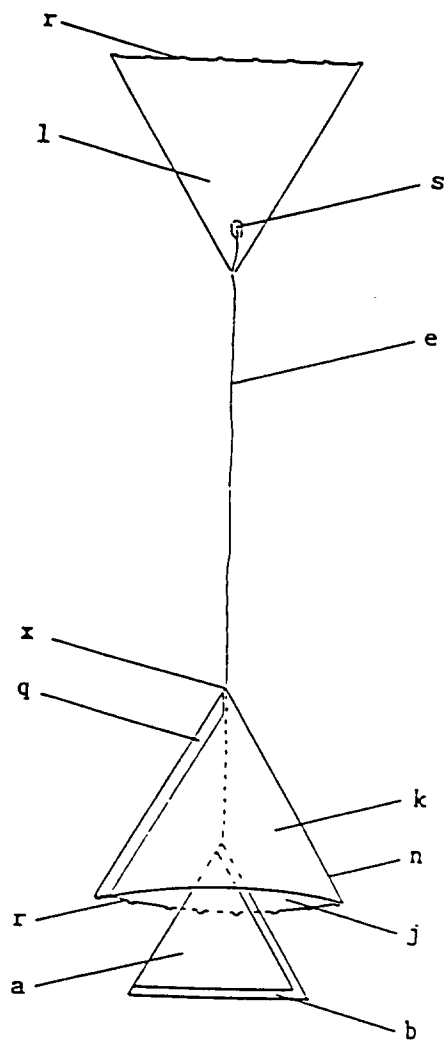


FIG. 11