



- (51) **International Patent Classification:**
B65D 77/04 (2006.01) *B65D 77/24* (2006.01)
B65D 77/28 (2006.01)
- (21) **International Application Number:**
PCT/EP2016/058804
- (22) **International Filing Date:**
20 April 2016 (20.04.2016)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
1550546-4 30 April 2015 (30.04.2015) SE
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- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) **Title:** A PACKAGE ASSEMBLY AND A METHOD FOR PRODUCING A PACKAGE ASSEMBLY

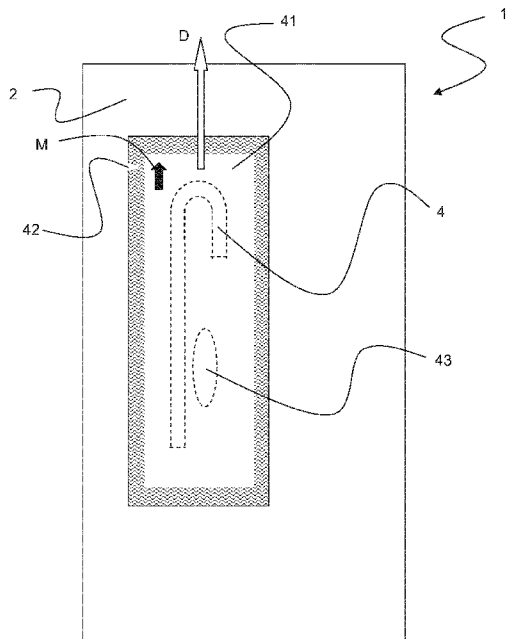


Fig. 1

(57) **Abstract:** The invention relates to a package assembly (1), comprising a primary package (2) adapted to contain a food product, and a supplementary package (41) adapted to contain an item (4) associated with the food product. The supplementary package (41) comprises a notch (42) and is attached to the primary package (2) at an attachment point (43). The notch (42) and the attachment point (43) are positioned in relation to each other such that the supplementary package (41) will break at the notch (42) when pulled in an opening direction (D). The invention also relates to a method for producing a package assembly (1).

A PACKAGE ASSEMBLY AND A METHOD FOR PRODUCING A PACKAGE ASSEMBLY

Technical field

The invention relates to a package assembly comprising a primary package adapted to contain a food product and a supplementary package containing an item associated with said food product. The application also
5 relates to a method for producing a package assembly.

Background art

In the food packaging industry food is packaged into different types of packages, distributed to storing locations for further distribution to retail stores
10 where the food is sold to the end consumer. Packages for beverages, such as fruit juices, still drinks and also dairy products or derivate thereof can be divided into portion packages and family packages. Those packages differ mainly by their respective volume size and consequently weight. Particularly, portion packs are available in different volumes ranging from about 80ml to
15 several 100ml. Portion packages are normally consumed at once and due to their smaller volume suitable not only for adults, but also for children or teenagers.

Very often, items associated with the content of the primary package are to be enclosed with the same when the product is sold to a customer. The
20 item is usually placed in a supplementary package. For a juice package the item could be a straw inside a plastic bag attached to the primary package. With conventional methods, such supplementary packages with items are often attached to the exterior of the primary package. When the end consumer intends to use the attached item, the supplementary package is
25 ripped off from the primary package and the end consumer will then open the supplementary package to reach the item. However, the supplementary package is often difficult to open which may lead to damage of the item and/or an annoyed end consumer.

There is thus a need for improving the state of the art to provide better
30 packaging solution for supplementary packages carrying items associated with packages.

Summary of the invention

It is an object of the present invention to improve the current state of the art, to solve the above problems, and to provide an improved package assembly. These and other objects are achieved by a package assembly,
5 comprising a primary package adapted to contain a product, and a supplementary package adapted to contain an item. The supplementary package comprises a notch and is attached to the primary package at an attachment point. The notch and the attachment point are positioned in relation to each other such that the supplementary package will break at the
10 notch when pulled in an opening direction. With such an arrangement the supplementary package will automatically be opened when it is removed from the primary package by the consumer. Thus, both the problem of potentially damaging the item in the supplementary package during the opening process and of annoying the consumer will be eliminated.

15 The product contained in the primary package may be a food product or a liquid product. However, any suitable product could be contained in the primary package. The item may be an item associated with said product.

In another preferred embodiment of the present invention, the package assembly comprises at least one primary package adapted to contain a food
20 product, a secondary package attached to said at least one primary package to retain said at least one primary package, a space positioned between said at least one primary package and said secondary package, said space being adapted to accommodate an item associated with said food product, and a supplementary package adapted to contain said item, said supplementary
25 package comprising a notch and being attached to said primary package or said secondary package at an attachment point. The notch and said attachment point are positioned in relation to each other such that said supplementary package will break at said notch when pulled out of said space. As stated above, the supplementary package is accommodated within
30 said space and will be opened when removed from said space. The same advantages as presented above apply for this embodiment.

The opening direction may extend substantially from said attachment point towards said notch. This design will ensure that the supplementary

package is opened when being pulled in the opening direction to be removed from the primary package.

The package assembly may comprise a plurality of attachment points as well as a plurality of notches in order to ensure that the supplementary
5 package is opened when removed from the primary package, or when it is pulled in the opening direction.

The primary package may comprise a marking illustrating said opening direction in order to facilitate the opening process for a consumer. As an alternative, the marking may be provided on the supplementary package.

10 The item may be a straw or a spoon to be used when consuming said food product, and the supplementary package may be made of a plastic material. The plastic material will ensure a sanitary environment for the item in the supplementary package. It is also a suitable material for a package with this type of opening process. The item may be any item facilitating consuming the
15 product or any item enhancing the product or the experience of consuming the product. For some products the item may be a napkin and for others it may be spices or substances adding flavour to the food product.

In one preferred embodiment of the package assembly, the attachment point(s) may be constituted by a glue dot or hot melt adhesive.

20 According to a second aspect, these and other objects are achieved, in full or at least in part, by a method for producing a package assembly comprising a primary package adapted to contain a product, and a supplementary package adapted to contain an item associated with the product, the supplementary package comprising a notch. The method
25 comprises attaching the supplementary package to the primary package at an attachment point. The notch and the attachment point are positioned in relation to each other such that the supplementary package will break at the notch when pulled in an opening direction.

Generally, all terms used in the claims are to be interpreted according
30 to their ordinary meaning in the technical field, unless explicitly defined otherwise herein. All references to "a/an/the [element, device, component, means, step, etc.]" are to be interpreted openly as referring to at least one

instance of said element, device, component, means, step, etc., unless explicitly stated otherwise.

Brief description of the drawings

5 The above objects, as well as additional objects, features and advantages of the present invention, will be more fully appreciated by reference to the following illustrative and non-limiting detailed description of preferred embodiments of the present invention, when taken in conjunction with the accompanying drawings, wherein:

10 Fig. 1 is a front view of a package assembly according to one embodiment of the present invention.

 Fig. 2 is a front view of the package assembly according to another embodiment of the invention.

15 Fig. 3 is a front view of the package assembly according to yet another embodiment of the invention.

 Fig. 4 is a perspective view of the package assembly according to yet another embodiment of the invention.

 Fig. 5 is a front view of the package assembly according to yet another embodiment of the invention.

20 Fig. 6 is a front view of the package assembly according to yet another embodiment of the invention.

Detailed description of preferred embodiments of the invention

25 Fig. 1 shows a package assembly 1 in accordance with a first embodiment of the invention. A primary package 2 containing a food product has a supplementary package 41 attached to it via an attachment point 43. The supplementary package 41 contains an item 4 associated with the food product, the item 4 being a straw in Fig 1. The supplementary package 41 comprises a notch 42 at which the supplementary package is intended to
30 break when an end user grips the supplementary package 41 upper part in Fig. 1 and pulls it upwards, i.e. in the direction D from the attachment point 43 towards the notch 42 gripping the supplementary package 41 further along that direction than the position of the notch 42. The direction D in which the

supplementary package 41 is to be pulled is marked with a marking M. When the supplementary package 41 breaks at the notch 42, the item 4, or straw in Fig. 1, is exposed and easy to pull out of the supplementary package 41 without removing the entire supplementary package 41 from the primary
5 package 2.

Fig. 2 shows a package assembly 1 in accordance with a second embodiment of the invention. A primary package 2 containing a food product has a supplementary package 41 attached to it via two attachment points 43. The supplementary package 41 contains an item 4 associated with the food
10 product, the item 4 being a straw in Fig 2. The supplementary package 41 comprises two notches 42 at which the supplementary package 41 is intended to break when an end user grips the supplementary package 41 upper part in Fig. 2 and pulls it upwards, i.e. in the direction D from the attachment point 43 towards the notch 42 gripping the supplementary
15 package 41 further along that direction than the position of the notch 42. The direction D in which the supplementary package 41 is to be pulled is marked with a marking M. When the supplementary package 41 breaks at the notches 42, the item 4, or straw, is exposed and easy to pull out of the supplementary package without removing the entire supplementary package
20 41 from the primary package 2.

Fig. 3 shows a package assembly 1 in accordance with a further aspect of the invention. A primary package 2 containing a food product has a supplementary package 41 attached to it via four attachment points 43. The supplementary package 41 contains an item 4 associated with the food
25 product, the item 4 being a straw in Fig 3. The supplementary package 41 comprises two notches 42. The supplementary package 41 is intended to break either at the upper notch 42 or at the lower notch 42 when an end user grips the supplementary package 41 upper part and pulls it upwards or if the end user grips the supplementary package 41 lower part and pulls it
30 downwards, i.e. a pull in a direction D from an attachment point 43 towards a notch 42 gripping the supplementary package 41 further along that direction than the position of the notch 42. The direction D in which the supplementary package 41 is to be pulled is marked with a marking M. When the

supplementary package 41 breaks at the notches 42, the item 4, or straw, is exposed and easy to pull out of the supplementary package without removing the entire supplementary package 41 from the primary package 2. In this embodiment the supplementary package 41 may thus be optionally opened
5 either from the upper side or from the bottom side.

In Fig. 4, a package assembly 1 in accordance with a further aspect of the present invention is illustrated. A plurality of primary packages 2 are arranged in a 3x1 pattern, meaning three primary packages in a single row. The primary packages 2 are from brick shape structure and are placed next
10 to, but otherwise separated from each other. The package assembly 1 also comprises a secondary package 3 attached to the primary packages 2 in the defined 1x3 pattern.

The secondary package 3 comprises a bottom panel 32, on which the packages are placed and (not shown) slightly attached to. For example, a
15 small adhesive portion can be used to fixate the primary packages to bottom panel 32. Secondary package 3 also comprises a main panel 3, which is divided by two weakened lines 36 in longitudinal direction L to form main portions 3a to 3c, respectively. The weakened lines 36 are perforated lines and also extend in the bottom panel (not shown) in extension to the cut-outs
20 37. The cut-outs and the perforation line enable a consumer to easily separate individual packages 2 from the assembly 1.

A space 10 is formed between the primary and the secondary packages 2, 3. The space 10 is used to accommodate an item 4 associated with the food content of the primary package. The item is placed in a
25 supplementary package 41 attached to the primary package or the secondary package in an attachment point 43. The attachment point 43 may e.g. be accomplished with glue. A notch 42 is present in the supplementary package at which notch the supplementary package is intended to break when pulling in the supplementary package so that the item 4 is exposed for the end
30 consumer. In one preferred embodiment, the item 4 is constituted by a straw which is to be used by a consumer when drinking the content of the primary package 2. To access the space and remove the straw 4, each main portion 3a, 3b and 3c comprise a cut-out 39 of "U"-shape extending from the

uppermost part of the respective main portion in downwards direction. The space 10 may for example be provided using the method (described in detail below) according another aspect of the present invention.

The secondary package 3 also includes a top panel, which is also
5 separated by perforation lines 36a into different top portions 31 for simple separation. The top panel and more particular the top portion 31 is attached to the top side of the primary packages, in this example to the top notch seal of the primary package. In other words, due to cut-out 38 of the top panel, the top panel does not mask or conceal opening 5.

10 A cover 35 is placed over the cut-outs 38 and 39 and adjacent parts of top portion 31 and respective main portion 3a, 3b and 3c. Cover 35 is glued or otherwise rigidly attached to the top and main portion thereby at least partly sealing the space. In this example, cover 35 is transparent at least in the area of the cut-outs to provide visibility into the space. To open the space, cover 35
15 comprises a tab or lid 35a which is arranged on the top portion in this embodiment. A consumer may for example pull tab 35a towards the edge and main portion 3a, 3b and 3c, thereby ripping apart the cover and opening cut-outs 38 and 39.

Fig. 5 shows a package assembly 1 in accordance with a first
20 embodiment of the invention. A primary package 2 containing a food product has a supplementary package 41 attached to it via an attachment point 43. The supplementary package 41 contains a straw 4. The supplementary package 41 comprises a notch 42 at which the supplementary package is intended to break when an end user grips the supplementary package 41
25 upper part in Fig. 5 and pulls it upwards, i.e. in the direction D from the attachment point 43 towards the notch 42 gripping the supplementary package 41 further along that direction than the position of the notch 42. The direction to pull in is indicated by the mark M, being an arrow. The supplementary package has a sealing 47 along the edges and in a larger
30 area where the straw 4 is not folded double. When the supplementary package 41 breaks at the notch 42, the user will get the upper part of the supplementary package 41 and the straw in his/her hand as further shown in Fig. 6.

Fig. 6 shows the supplementary package 41 when a user has pulled the supplementary package 41 in the direction of the marking M, thereby separating the upper part from the bottom part. The straw will follow the upper part since the sealed part 47 is narrower at the bottom part of the supplementary package 41 than at the bottom part, the sealing following the shape of the straw 4 so that the straw is trapped in the upper part forcing the straw 4 to remain in the upper part of the supplementary package 41 when the supplementary package 41 is divided. For this embodiment to work, the notch 42 has to be placed below the part of the folded part of the straw 4, i.e. the notch 42 has to be placed at the part where the sealing 47 is wider and the straw is narrower (not folded).

The skilled person realizes that a number of modifications of the embodiments described herein are possible without departing from the scope of the invention, which is defined in the appended claims.

CLAIMS

1. A package assembly (1), comprising
a primary package (2) adapted to contain a product, and
5 a supplementary package (41) adapted to contain an item (4), said
supplementary package (41) comprising a notch (42) and being attached to
said primary package (2) at an attachment point (43),
wherein said notch (42) and said attachment point (43) are positioned
in relation to each other such that said supplementary package (41) will break
10 at said notch (42) when pulled in an opening direction (D).
2. A package assembly (1), comprising
at least one primary package (2) adapted to contain a product,
a secondary package (3) attached to said at least one primary package
15 to retain said at least one primary package (2),
a space (10) positioned between said at least one primary package (2)
and said secondary package (3), said space (10) being adapted to
accommodate an item (4),
a supplementary package (41) adapted to contain said item (4), said
20 supplementary package (41) comprising a notch (42) and being attached to
said primary package (2) or said secondary package (3) at an attachment
point (43),
wherein said notch (42) and said attachment point (43) are positioned
in relation to each other such that said supplementary package (41) will break
25 at said notch (42) when pulled out of said space (10).
3. The package assembly (1) according to claim 1 or 2, wherein said
opening direction (D) extends substantially from said attachment point (43)
towards said notch (42).
30
4. The package assembly (1) according to any one of the preceding
claims, comprising a plurality of attachment points (43).

5. The package assembly (1) according to any one of the preceding claims, comprising a plurality of notches (42).

6. The package assembly (1) according to any one of the preceding
5 claims, wherein said primary package (2) comprises a marking (M) illustrating said opening direction (D).

7. The package assembly (1) according to any one of the preceding
10 claims, wherein said supplementary package (41) comprises a marking (M) illustrating said opening direction (D).

8. The package assembly (1) according to any one of the preceding
15 claims, wherein said item (4) is a straw or a spoon or toy to be used when consuming said food product.

9. The package assembly (1) according to any one of the preceding
claims, wherein said supplementary package (41) is made of a plastic material.

20 10. The package assembly (1) according to any one of the preceding claims, wherein said attachment point(s) (43) is constituted by a glue dot or hot melt adhesive.

11. The package assembly (1) according to any one of the preceding
25 claims, wherein an interior of said supplementary package (41) is shaped in a tapering manner such that said item (4) provided in said supplementary package (41) remains in an upper part of said supplementary package (41) when divided into said upper part and a lower part.

30 12. A method for producing a package assembly (1) comprising a primary package (2) adapted to contain a food product, and a supplementary package (41) adapted to contain an item (4) associated with said food

product, said supplementary package (41) comprising a notch (42), said method comprising

attaching said supplementary package (41) to said primary package (2) at an attachment point (43),

- 5 wherein said notch (42) and said attachment point (43) are positioned in relation to each other such that said supplementary package (41) will break at said notch (42) when pulled in an opening direction (D).

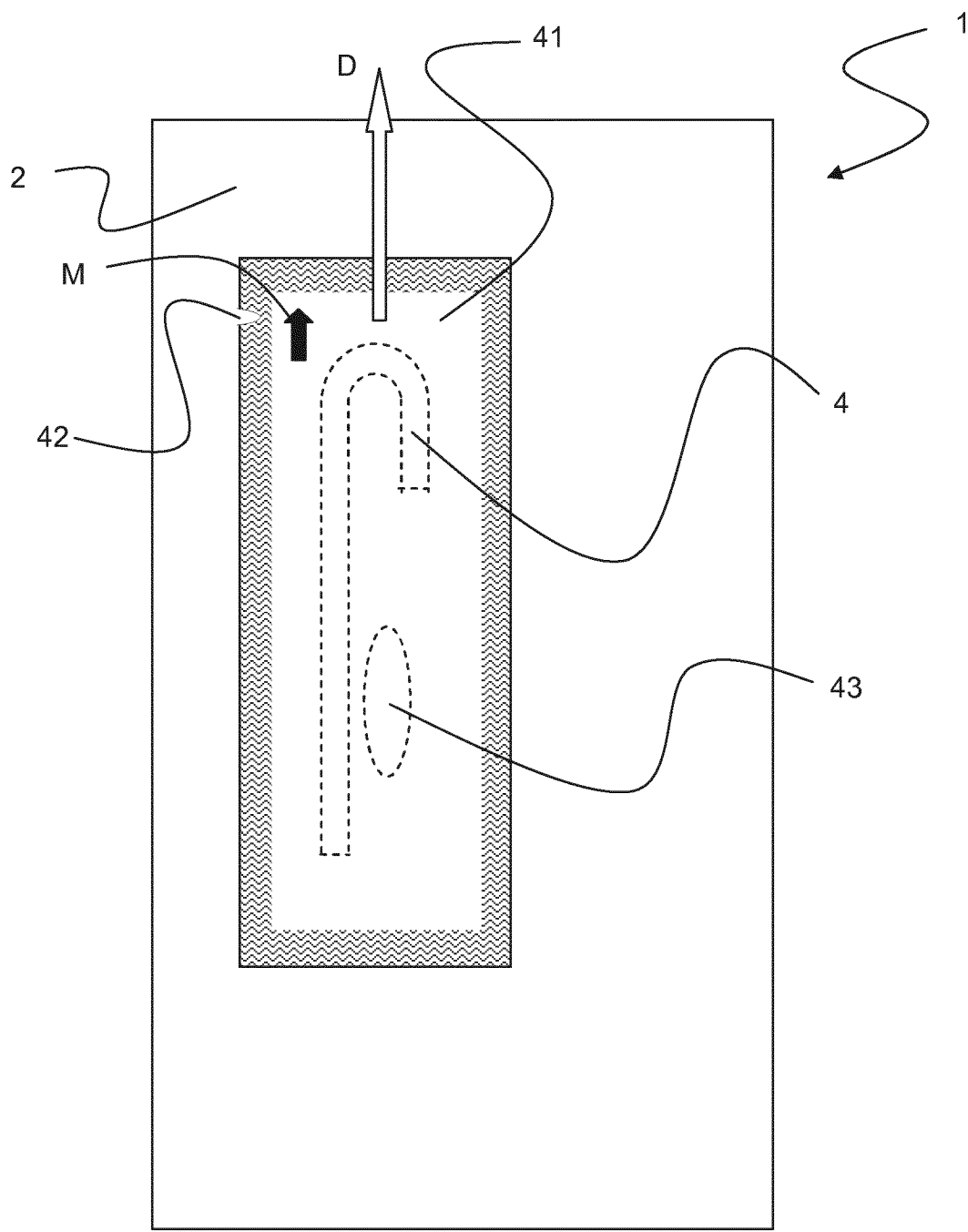


Fig. 1

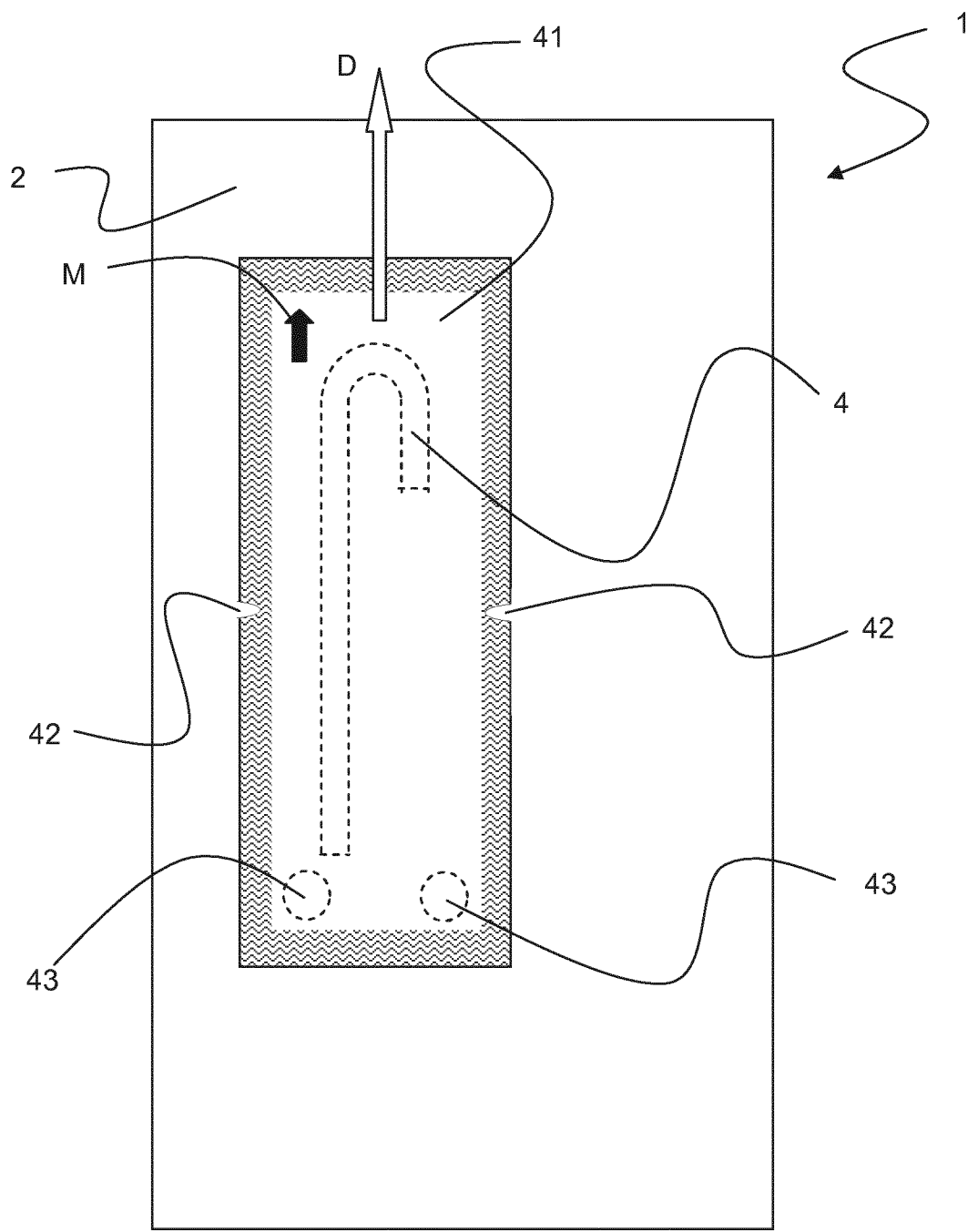


Fig. 2

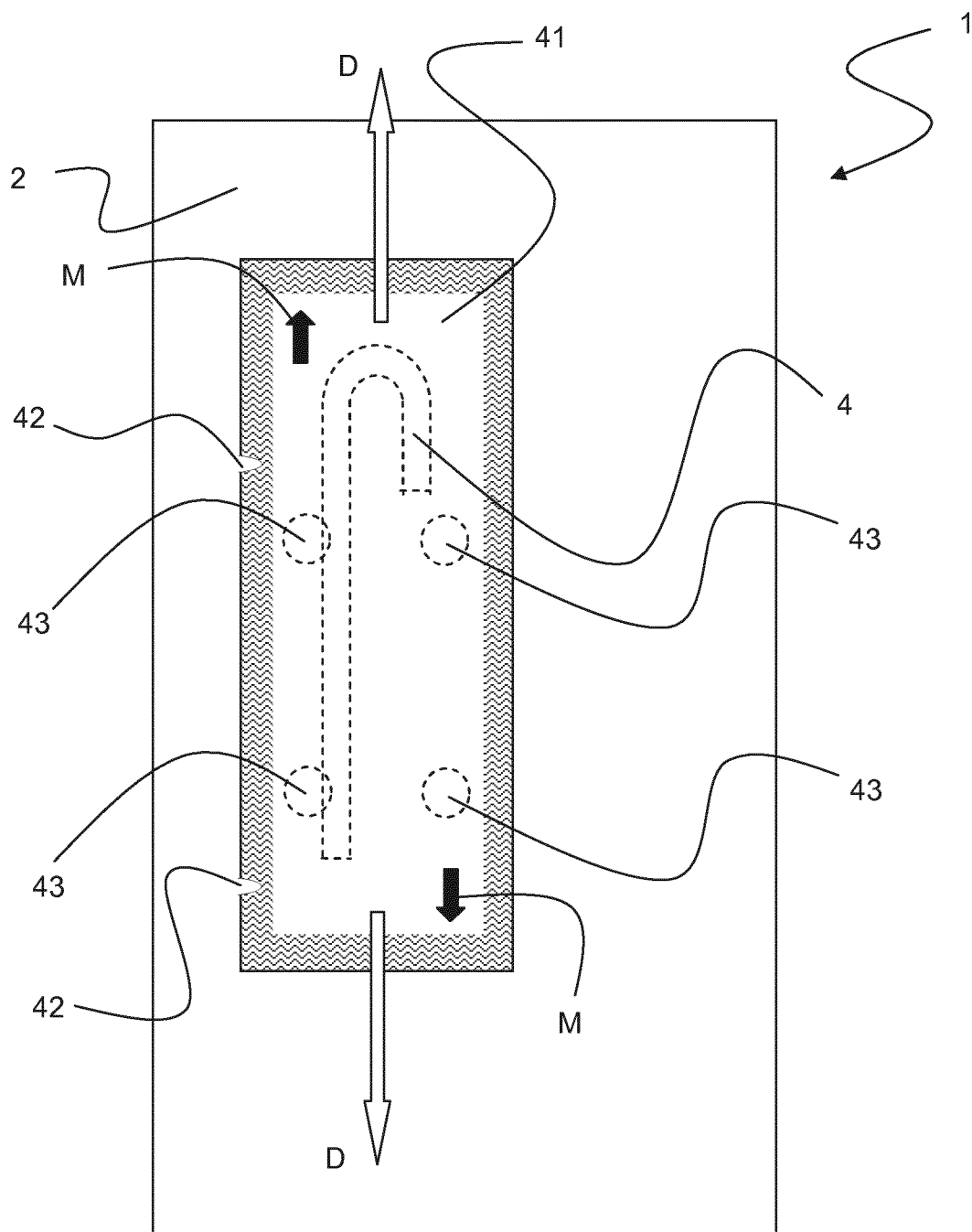
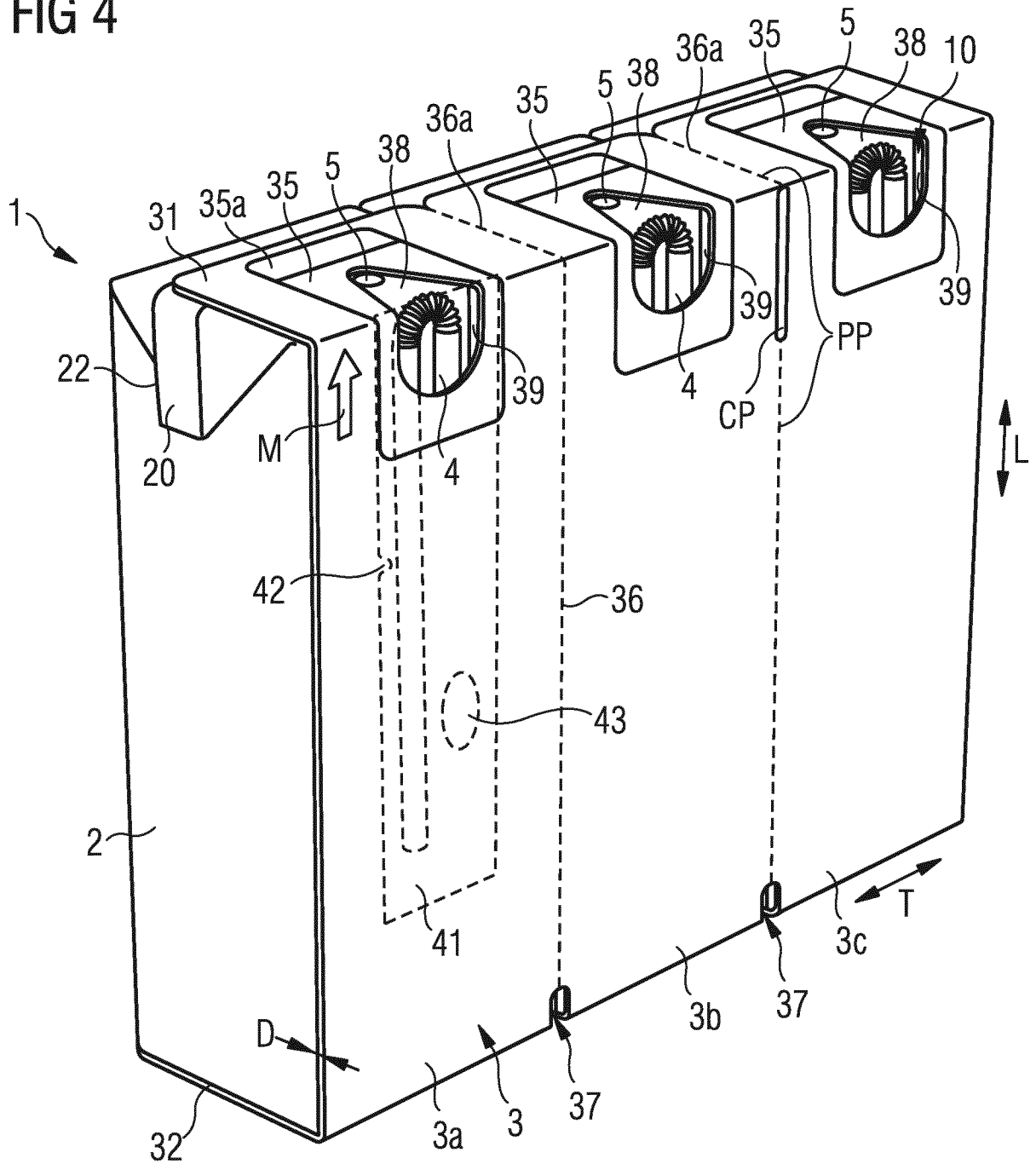


Fig. 3

FIG 4



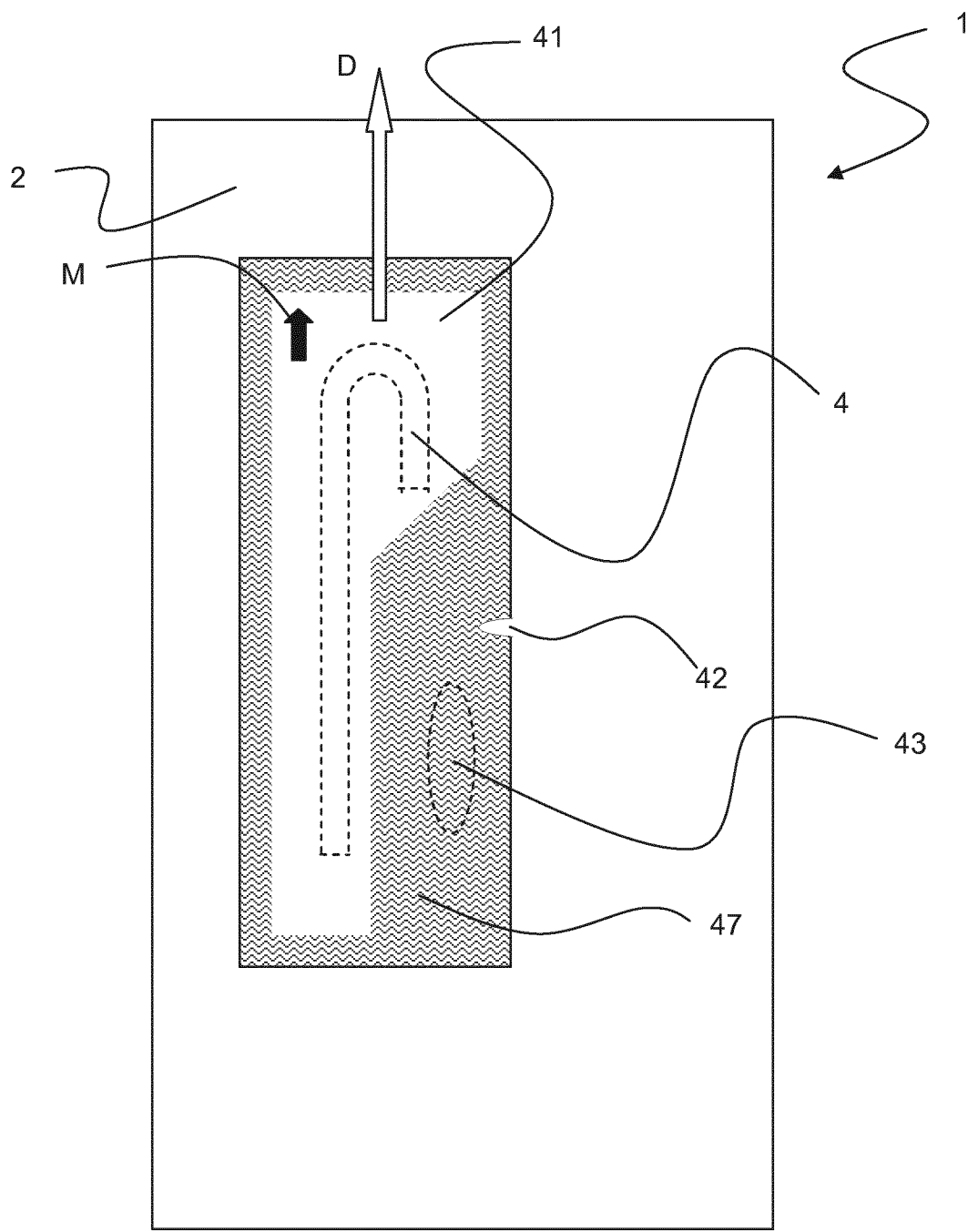


Fig. 5

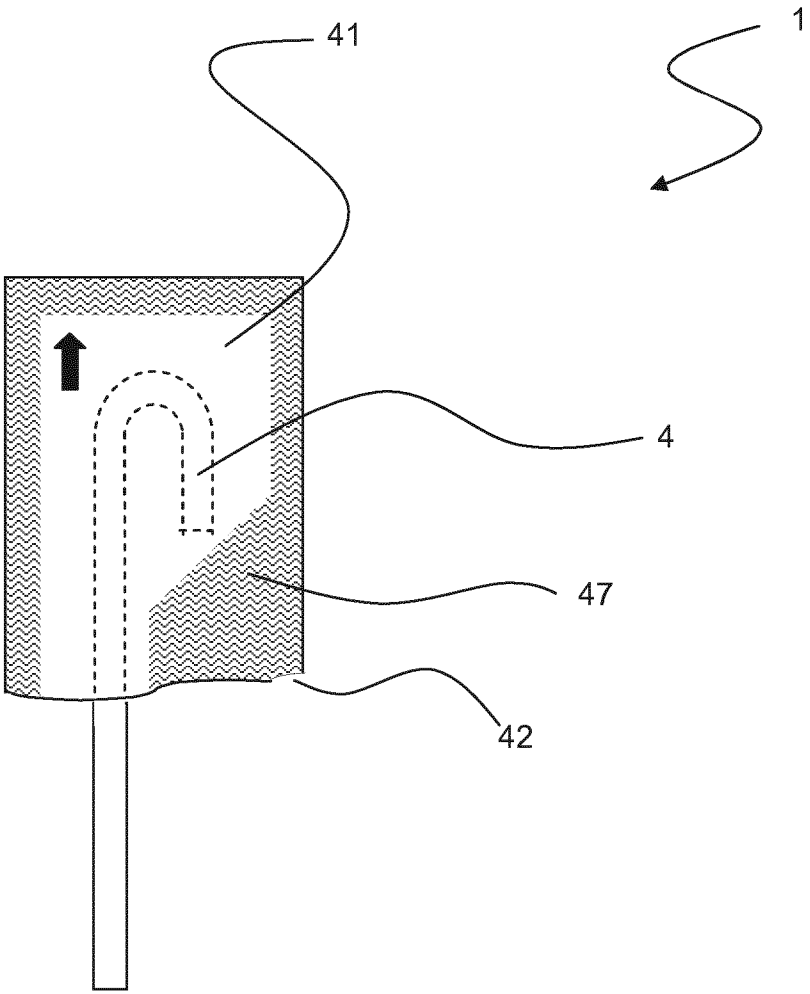


Fig. 6

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2016/058804

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65D77/04 B65D77/28 B65D77/24
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B65D B31B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	paragraphs [0022], [0023], [0027] - [0030]; figures 1-8	2,5,11
Y	----- WO 96/08987 A1 (DSA SRL [IT]; CONCETTI CLAUDIO [IT]) 28 March 1996 (1996-03-28)	2
A	page 4, line 9 - page 6, line 15; figures 1-3	1,3-12
Y	----- US 2015/056339 A1 (VAES ED [CA]) 26 February 2015 (2015-02-26)	11
A	paragraph [0068]; figure 1A	1-10,12
Y	----- US 2002/092857 A1 (CHANG SUNG-YOON [KR]) 18 July 2002 (2002-07-18)	5
A	paragraph [0026]; figures 1,3a, 3b	1-4,6-12
	----- -/-	



Further documents are listed in the continuation of Box C.



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Date of the actual completion of the international search

8 June 2016

Date of mailing of the international search report

16/06/2016

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2016/058804

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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