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(54) Title: FLEXIBLE STAND-UP POUCH WITH INTEGRAL FITMENT AND INTERNAL STRAW

(57) Abstract: A fitment for a liquid containing pouch wherein the fitment is attached to the top portion of the pouch by sealing the top portion of the pouch together and to the sealing portion of the fitment. The fitment having a straw therein and a removeable cap for sealing the liquid in the pouch. The cap can be removed to allow access to the straw and the liquid in the pouch. The cap can be replaced on the fitment to reseal the pouch. Since the straw is already in the fitment it is easier to use than liquid containing pouches where the straw has to be inserted into the pouch by breaking a seal. Further the straw in the fitment helps prevent spills and injuries associated with straws having to break the seal of the pouch.



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FLEXIBLE STAND-UP POUCH WITH INTEGRAL FITMENT AND INTERNAL STRAW

Field of the Invention

5 The invention relates to flexible stand-up pouches can more particularly to the fitments for straws and drinking spouts.

Background of the invention

10 The stand-up pouches may be constructed out of a wide range of food grade materials including plastics, foils and laminations or plastic and foils. The fitments and straws re constructed of flexible food grade plastic materials. The pouch shapes vary but they are all sealed on three of the four sides. In all cases the fitment /straw is inserted in the opening at the top of the pouch. The fitment and top side are then sealed together to make a liquid tight enclosure.

15 There are many stand-up pouches available with external straw fitments. The external straw is punctures through the side of the pouch creating messy and sometimes unsafe conditions. The pouches containing fitments eliminate the straw problems, however made it necessary to tilt or squeeze the pouch to drink the contents. The integral fitment containing the internal straw has the benefits of the drinking straw and the sanitary trouble free benefits of the fitment.

20 The top or drinking port of the fitment may be fabricated in many different ways including: re-sealable snap off caps, non resealable snap off caps, twist to open and close caps, screw on and off caps, and clasp-end closures.

Brief Description of the Drawings

25 Figure 1 shows an example of a flexible stand-up pouch containing an internal straw and an integral fitment.

 Figure 2 shows a side view of the fitment, cap, straw and the tabs for holding the straw in place.

Objects of the Invention

30 It is an object of the invention to eliminate the need to puncture a whole through the pouch to insert the straw.

 It is an object of the invention to eliminate the use of pointed straw ends which can injure the user.

 It is an object of the invention to eliminate the spills caused by straw insertion.

It is an object of the invention to increase the safety of drinking pouches.

It is an object of the invention to provide resealable drinking pouches.

It is an object of the invention to be more sanitary by sealing the straw in the pouch and preventing openings around the straw preventing foreign material from entering the
5 pouch.

It is an object of the invention to eliminate leaks and the associated mess.

It is another object of the invention to ensure that the straw remains with the drinking
pouch.

It is another object of the invention to provide a safety seal on the drinking pouch.

10 It is another object of the invention to provide an easy to open drinking pouch.

Other objects, advantages and novel features of the present invention will become apparent from the following description of the preferred embodiments when considered in conjunction with the accompanying drawings.

Detailed Description of the Preferred Embodiment

15 Figure 1 shows an example of a flexible stand-up pouch 20 containing an internal straw 7 and an integral fitment 6. The flexible stand-up pouch 20 has vertical walls 2, a base 5, sealed sides 3 and 4, and a top end with a sealing portion 1, containing a fitment 6. The fitment 6 has an internal straw 7 and a screw cap 8. The fitment 6 also has seal wall 30 for a sealing engagement with the sealing portion 1 on the top of the pouch.

20 Figure 2 shows the details of the fitment 6 with a screw cap 8 which screws unto the fitment 6. The screw cap 8 also has a tamper evident ring 9 that disassociates from the screw cap 8 along perforations 19 so that it is evident if the cap 8 has been tampered with. The straw 7 is a free moving straw which can be moved up and down in the fitment 6. The straw is initially held in place by tabs 10 from the walls of the cap 8 engaging the straw 10. The
25 fitment 6 has a base portion 16 with the sealing portion 1 on the side and a neck portion 18 on the top. The neck portion 18 may have threads 11 for engagement with threads 12 on a cap 8.

The cap 8 may be of any design and may have ears 15 for grasping and turning the cap. The caps may be resealable snap-off caps, non resealable snap off caps, twist to open caps, screw on and off caps, clasp end caps or any other style. The cap 8 has a concave
30 portion for covering the top of straw 7 and is removed from straw 7 to allow the user access to the straw.

The stand-up pouch 20 with integral fitment and internal straw is made by producing the pouch and then sealing the fitment 6 into the top of the pouch by tack sealing and then

fully sealing the fitment into a filled pouch. The top seal 1 of the pouch is sealed along the seal wall 30 of fitment 6 with the fitment 6 in place. The fitment 6 is preferably elongated to help seal the pouch. A more elongated or tapered fitment results in a less wrinkled material on the pouch, resulting in a better seal and a better looking the seal on the fitment.

5 Pouch fitment neck 25 has wall 26 for slidably engaging straw 7. The straw 7 may therefore be adjusted for position relative the pouch 20.

A user will twist off the cap 8 by use of ears 15 which separates the tamper evident ring 9 along perforations 19 showing the product has been opened. Removing the cap 8 allows access to the straw 10 which may be adjusted to the desired height relative the pouch
10 by sliding the straw 7 in or out of the pouch fitment 6.

If a resealable cap is used the threads 12 on the cap 8 may be rethreaded onto the threads 11 on fitment 6 to reseal the stand-up pouch and preserve the contents for later use.

Although a stand up pouch has been used for illustration any pouch style may be used.

Obviously, many modifications and variations of the present invention are possible in
15 light of the above teachings. It is therefore to be understood that, within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A fitment with a straw for a pouch having a sealing top strip comprising:
a base having a sealing side portion, and a neck portion,
an aperture extending through the base and the neck portion,
a straw extending through the aperture in the base and neck portion,
5 a cap removeably attached to the neck portion of the base and covering the straw
extending out of the neck, wherein the sealing side portion of the base engages the sealing top
strip of the pouch to contain liquids in the pouch.
2. A fitment with a straw for a pouch having a sealing top strip as in claim 1 having
a tamper ring at the bottom of the cap and engaging the base, the tamper ring having a
10 breakable portion such that removing the cap will sever a portion of the tamper ring from the
cap showing that the cap has been tampered with.
3. A fitment with a straw for a pouch having a sealing top strip as in claim 2 having,
a perforated breakable portion on the cap.
4. A fitment with a straw for a pouch having a sealing top strip as in claim 1 having,
15 tabs in the neck of the base to engage the straw in the aperture of the neck.
5. A fitment with a straw for a pouch having a sealing top strip as in claim 1 having,
threads on the inside of the cap and threads on the outside of the neck portion such that the
cap and the neck portion can be treaded together.
6. A fitment with a straw for a pouch having a sealing top strip as in claim 1 having,
20 a concave portion on the inside of the cap for covering the portion of the straw extending out
of the neck portion.
7. A fitment with a straw for a pouch having a sealing top strip as in claim 1 having,
a screw off cap on the fitment.
8. A fitment with a straw for a pouch having a sealing top strip as in claim 1 having,
25 a snap off cap on the fitment.
9. A fitment with a straw for a pouch having a sealing top strip as in claim 1 having,
ears on the cap for assisting in turning the cap on the fitment.
10. A fitment with a straw for a pouch having a sealing top strip as in claim 2 having,
threads on the inside of the cap and threads on the outside of the neck portion such that the
30 cap and the neck portion can be treaded together.
11. A fitment with a straw for a pouch having a sealing top strip as in claim 10 having,
a concave portion on the inside of the cap for covering the portion of the straw extending out
of the neck portion.

12. A fitment with a straw for a pouch having a sealing top strip as in claim 11 having, tabs in the neck of the base to engage the straw in the aperture of the neck.

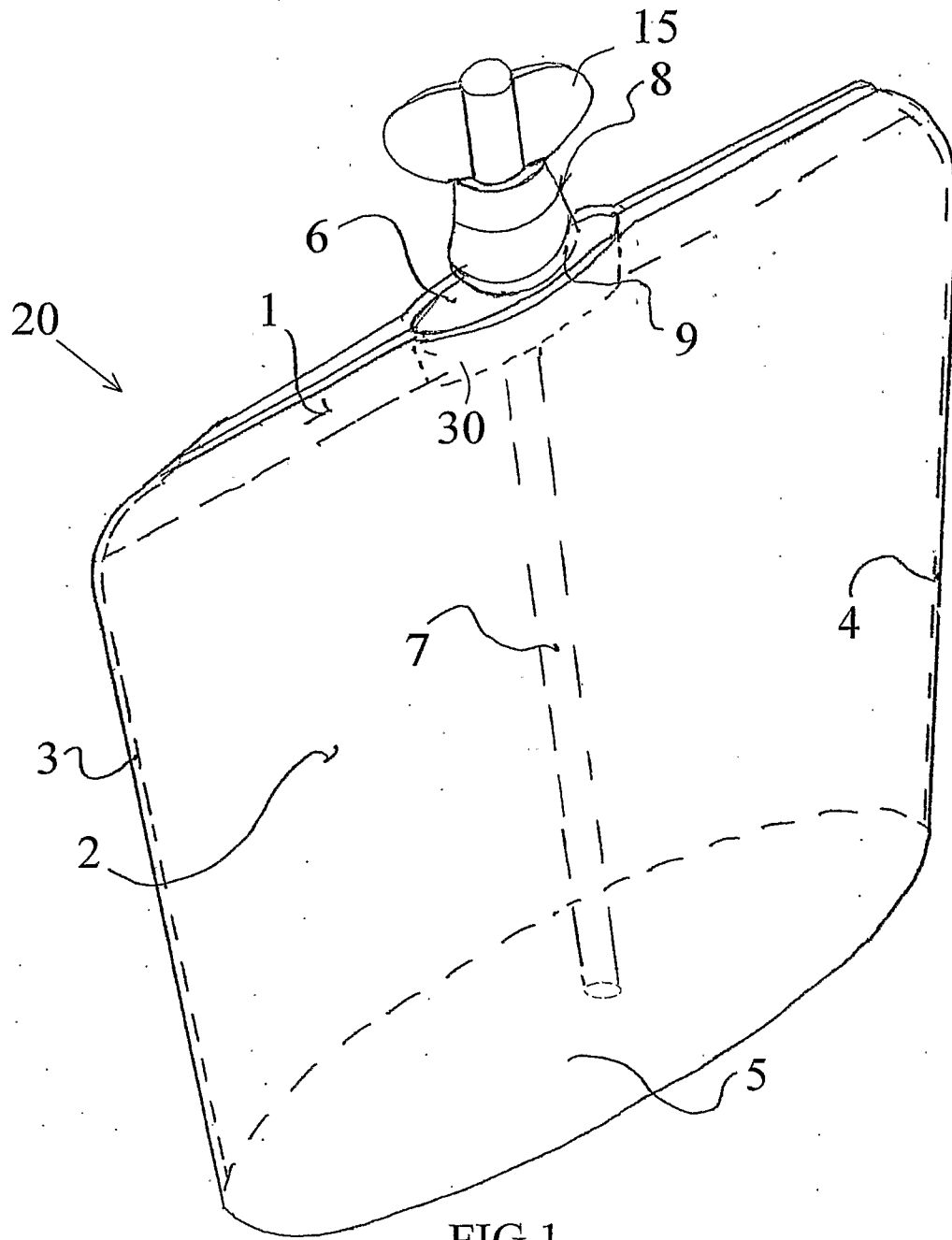


FIG 1

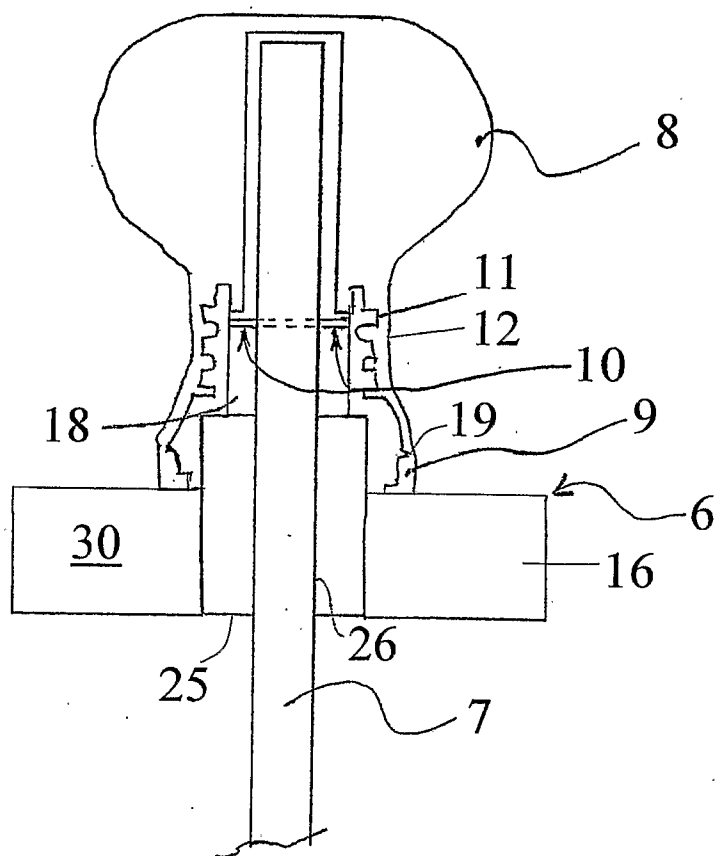


FIG 2