GUSSETED POUCH WITH PINNED GUSSETS

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ABSTRACT
The disclosure relates to a gusseted package, typically a re closable package, wherein the gusset walls are pinned or otherwise secured or connected together. Alternatively, the gusset walls may be folded so as to be pinned or otherwise secured or connected to the body of the package. The connection may be released thereby freeing the gussets. Alternatively, a line of weakness may be formed in the package so that the connected portions may be removed along with a removable header.
GUSSETED POUCH WITH PINNED GUSSETS

[0001] This application claims priority under 35 U.S.C. §119(e) of provisional patent application Ser. No. 61/368, 435, filed on Jul. 28, 2010, the contents of which are hereby incorporated by reference in their entirety.

BACKGROUND OF THE DISCLOSURE

[0002] 1. Field of the Disclosure
[0003] The present disclosure relates to a gusseted flexible pouch, which may be reclosable, wherein the gussets are pinned or otherwise joined in a closed position.
[0004] 2. Description of the Prior Art
[0005] In the prior art, gusseted flexible pouches are well-known. The pouches may be reclosable by way of a zipper-type closing, hook-and-eye (Velcro), adhesive, mushroom head closures or a similar configuration. Typical prior art includes U.S. Pat. No. 6,971,794 entitled “Package Having Reclosable Pour Spout and Method of Forming Same” issued on Dec. 6, 2005 to Yeager and U.S. Published Patent Application No. 2007/0258665 entitled “Wade Mouth Gusseted Pouches” filed on Nov. 8, 2007 by Greco and Ausnit.

[0006] As shown in FIG. 1, gussets of gusseted pouches tend to splay open at the top. This splayed open appearance often makes the top of the package appear to be unfinished, particularly when compared to the rectangular filled out bottom of the pouch. These splayed gussets may also result in a package similar to that disclosed in U.S. Pat. No. 7,040,810 entitled “Flexible Package with a Transverse Access Panel Device”, issued on May 9, 2006 to Steele.

SUMMARY AND OBJECTS OF THE DISCLOSURE

[0007] It is therefore an object of the present disclosure to provide a gusseted package which is able to avoid a splayed open appearance.
[0008] It is therefore a further object of the present disclosure to provide a gusseted package which tends to maintain a neat appearance.
[0009] These and other objects are attained by providing a gusseted package wherein the gussets may be pinned or otherwise joined to each other or to the face of the pouch. Typical methods of joining include, but are not limited to, pins, adhesive, heat sealing, clips and tape, as well as various similar methods.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] Further objects and advantages of the disclosure will become apparent from the following description and from the accompanying drawings, wherein:
[0011] FIG. 1 is a top view of a typical prior art package without pinned gussets.
[0012] FIG. 2 is a top view of a first embodiment of the present disclosure, wherein the gussets are pinned or otherwise joined together.
[0013] FIG. 3 is a perspective view of a first embodiment of the present disclosure, with a reclosure, prior to the pinning or joining together of the gussets.
[0014] FIG. 4 is a top view of a second embodiment of the present disclosure, wherein the gussets are pinned or otherwise joined to the face of the pouch.

FIG. 5 is a top view of the first embodiment of the present disclosure, with a reclosure, after the gussets have been opened.

FIG. 6 is a top view of the second embodiment of the present disclosure, with a reclosure, after the gussets have been opened.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] Referring now to the drawings in detail wherein like numerals indicate like elements throughout the several views, one sees that FIG. 1 is a top view of a prior art gusseted package 100 wherein the first and second gussets 102, 104 have splayed apart, as indicated by the angle α (alpha). Gusseted package 100 is formed from polymeric material forming a front wall 106 and a rear wall 108. The polymeric material may be provided as a single sheet or as two or more sheets. Particularly in the case of a gusseted package formed from a single sheet, a seal 110 may be formed on the rear wall 108, wherein the two edges 112, 114 of the single film are brought together and sealed to each other. First gusset 102 includes first front gusset wall 120 and first rear gusset wall 122, shown splayed apart from each other at the angle α (alpha). This angle α (alpha) can be slight or, as illustrated in FIG. 1, may exceed ninety degrees. Second gusset 104 includes second front gusset wall 124 and second rear gusset wall 126, shown splayed apart from each other at the angle α (alpha). The various assigned numerals in the illustrated prior art package of FIG. 1 will be assigned to corresponding elements in the subsequent figures. However, the gusseted packages of the subsequent figures will be illustrated as corresponding to numeral 101.

[0016] In FIG. 2, first front and rear gusset walls 120, 122 of first gusset 102 have been joined together by first joining element 130 and second front and rear gusset walls 124, 126 of second gusset 104 have been joined together by second joining element 132. First and second joining elements 130, 132 may include, but are not limited to, pins, adhesive, heat sealing, clips and tape, as well as various similar methods or devices. In this configuration, the first and second gussets 102, 104 stay virtually parallel with the mid portion of the pouch top, thereby presenting a much neater appearance.

[0017] FIG. 3 is a perspective view of an embodiment of the gusseted package 101, prior to the installation of the first and second joining elements 130, 132 of FIG. 2. FIG. 3 shows the sealed bottom 117 and mouth 119. Mouth 119 is reclosably sealed by reclosure 121. Typically, the reclosure 121 has opening flanges with an attached removable head 125, or the front and rear walls 106, 108 form the removable header 125 and include tear lines. Reclosure 121 typically wraps completely around the inner circumference of the package 101 and can fold back and mate, or join, to itself. Optionally, a line of weakness 123 (such as, but not limited to, a perforated line) may be formed upwardly adjacent from reclosure 121 and an optional removable header 125 is formed above the line of weakness 123. If the line of weakness 123 and removable header 125 are included, then the first and second joining elements 130 and 132 may be formed within the removable header 125, upwardly adjacent from line of weakness 123, and do not need to be releasable. Rather, tearing along the line of weakness 123 allows for removal of the removable header 125, along with the first and second joining elements 130 and 132. In the absence of such a line of weakness 123 and
removable header 125, first and second joining elements 130, 132 are typically releasable and formed below the reclosure 121.

[0020] Similarly, in FIG. 4, first front and rear gusset walls 120, 122 of first gusset 102 have been joined to front wall 106 and rear wall 108 of the gusseted package 101 by first front and rear joining elements 130 and 130', respectively, while second front and rear gusset walls 124, 126 of second gusset 104 have been joined to front wall 106 and rear wall 108 of the gusseted package 101 by second front and rear joining elements 132' and 132", respectively. As above, the various joining elements may include, but are not limited to, pins, adhesive, heat sealing, clips and tape, as well as various similar methods or devices. This results in a neat appearance. Further, in some instances, such as a standard bag top opening transverse direction package, it may be preferable to pin back or join only the first and second rear gusset walls 122, 126 to the rear wall 108 of the pouch or package 101.

[0021] FIGS. 5 and 6 illustrate the gusseted package 101 after the various joining elements have been released or the pinned or otherwise joined portion of the gussets have been removed. Furthermore, FIG. 5 illustrates how the top of the package 101 would look once the top of the package 101 with the header 125 and the pinned portion of the gussets have been removed and reclosure 121 wraps around the interior of the opening of the package 101. The header 125 can be removed by providing score lines or perforations to aid in removal, or the header 125 can be cut off. In FIG. 5, the gussets 102, 104 are open and a wide mouth opening pouch is achieved, which is similar to the Greco and Ausnit application cited above. Similarly, as shown in FIG. 6, after the release or removal of the various joining elements (typically by removal of the portion of the header above the reclosure), a pour spout arrangement is achieved which is similar to the Yenger reference cited above. In this style package, the reclosure wraps from a portion of the interior of front wall 106, across first gusset 102 (but not second gusset 104), and onto a portion of the interior of the rear wall 108. The reclosure 121 extends across the front and rear walls only far enough to create a pour spout.

[0022] The use of the joining elements is applicable to any number of gusseted package styles, with or without reclosures. In the resulting package, the gusset flaps are controlled at the top of the package, rather than allowing the flaps to assume various angles. Moreover, these embodiments result in improved appearance of the package.

[0023] Thus the several aforementioned objects are most effectively attained. Although preferred embodiments of the invention have been disclosed and described in detail herein, it should be understood that this invention is in no sense limited thereby and its scope is to be determined by that of the appended claims.

What is claimed is:
1. A gusseted package, including:
   front and rear walls;
   a first gusset formed between the front and rear walls;
   the first gusset including a first front gusset wall and a first rear gusset wall;
   and a first joining device for connecting the first front gusset wall to the first rear gusset wall.

2. The gusseted package of claim 1 further including a second gusset formed between the front and rear walls, the second gusset including a second gusset front wall and a second gusset rear wall, and a second joining device for connecting the second front gusset wall to the second rear gusset wall.

3. The gusseted package of claim 1 wherein the joining device forms a releasable connection.

4. The gusseted package of claim 3 wherein the first joining device is chosen from the group consisting of pins, adhesive, heat sealing, clips and tape.

5. The gusseted package of claim 1 further including a line of weakness in the front and rear walls thereby forming a removable header, further including a reclosure extending around an interior of the front and rear walls, and wherein the first joining device is formed in the removable header above the line of weakness.

6. The gusseted package of claim 1 further including a reclosure extending around an interior of the front and rear walls wherein the first joining device is formed below the line of weakness.

7. The gusseted package of claim 1 including a closure which extends around the first gusset thereby forming a pour spout.

8. The gusseted package of claim 1 wherein the first joining element is formed downwardly adjacent from the mouth.

9. The gusseted package of claim 1 wherein the front and rear walls and the first gusset includes a line of weakness below the first joining element thereby allowing the first joining elements to be removed from the package.

10. The gusseted package of claim 9 wherein the line of weakness is a perforated line.

11. A gusseted package, including:
    front and rear walls;
    a first gusset formed between the front and rear walls;
    the first gusset including a first front gusset wall and a first rear gusset wall;
    a first front joining device for connecting the first front gusset wall to the front wall; and
    a first rear joining device for connecting the first front gusset wall to the rear wall.

12. The gusseted package of claim 11 further including a second gusset formed between the front and rear walls, the second gusset including a second gusset front wall and a second gusset rear wall, a second front joining device for connecting the second front gusset wall to the front wall; and a second rear joining device for connecting the second rear gusset wall to the rear wall.

13. The gusseted package of claim 11 wherein the first front joining device and first rear joining device form releasable connections.

14. The gusseted package of claim 13 wherein the first front joining device and the first rear joining device are chosen from the group consisting of pins, adhesive, heat sealing, clips and tape.

15. The gusseted package of claim 11 further including a line of weakness in the front and rear walls thereby forming a removable header, further including a reclosure extending around an interior of the front and rear walls, and wherein the first joining device and the first rear joining device are formed in the removable header above the line of weakness.

16. The gusseted package of claim 11 further including a reclosure extending around an interior of the front and rear walls wherein the first joining device and the first rear joining device are formed below the line of weakness.
17. The gusseted package of claim 11 including a reclosure which extends around the first gusset, thereby forming a pour spout.

18. The gusseted package of claim 11 wherein the first front joining device and the first rear joining device are formed downwardly adjacent from the mouth.

19. The gusseted package of claim 11 wherein the front and rear walls and the first gusset include a line of weakness below the first front joining device and first rear joining device thereby allowing the first front joining devices and first rear joining device to be removed from the package.

20. The gusseted package of claim 19 wherein the line of weakness is a perforated line.