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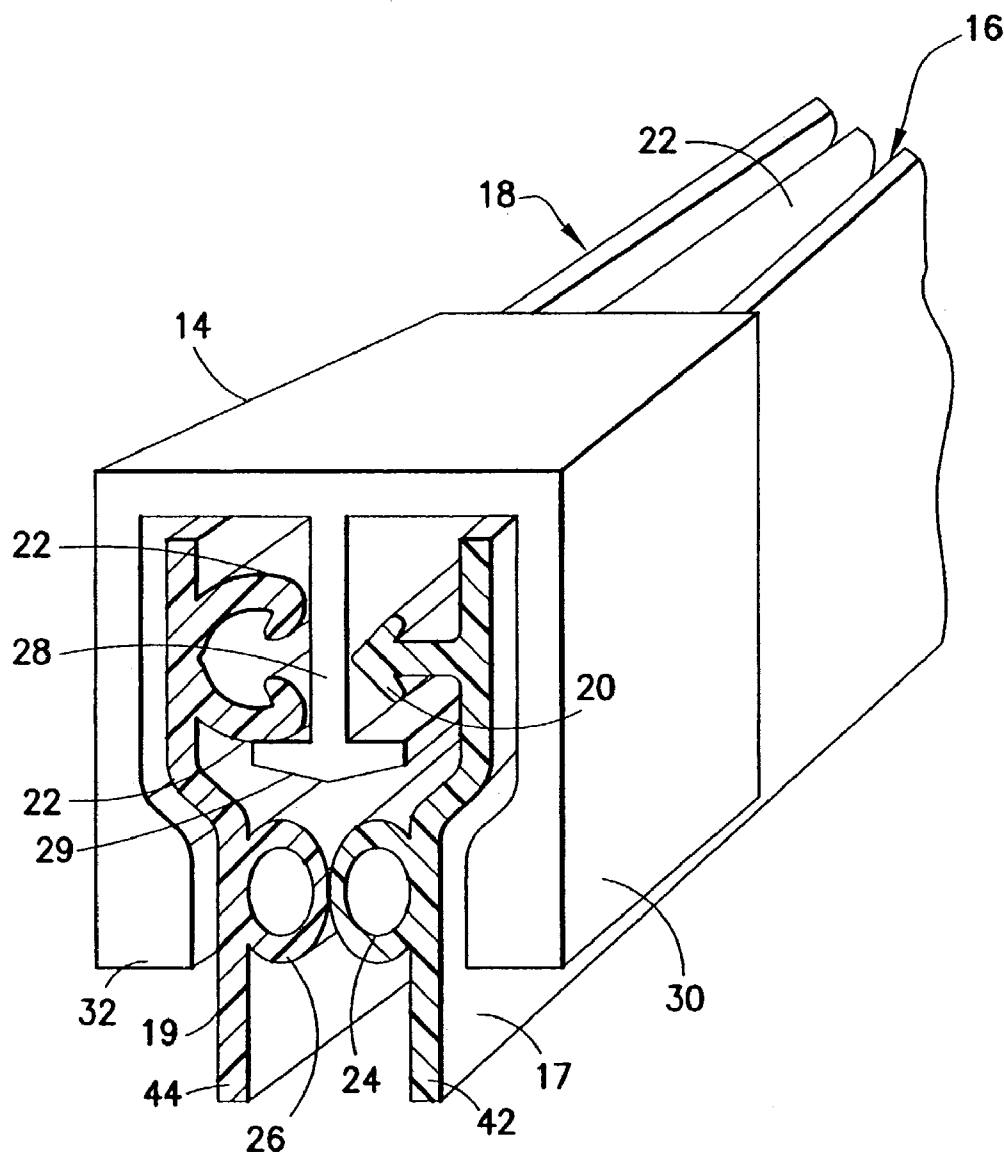
Ausnit et al.

(10) **Pub. No.: US 2004/0136618 A1**(43) **Pub. Date: Jul. 15, 2004**(54) **WATERTIGHT SLIDER-ZIPPER ASSEMBLY
FOR RECLOSABLE PACKAGING****Publication Classification**(51) **Int. Cl.⁷** B65D 33/16(52) **U.S. Cl.** 383/64(76) **Inventors: Steven Ausnit, New York, NY (US);
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**OSTRAGER CHONG & FLAHERTY LLP
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NEW YORK, NY 10022-7519 (US)**(57) **ABSTRACT**

A slider-zipper construction that provides a watertight seal below the interlocked zipper profiles on the product side of the zipper. The seal comprises at least one seal part that is compressible or at least partially collapsible. The slider is designed to compress or at least partially collapse that seal part in the area below the plow of the slider, where the zipper profiles cannot be interlocked due to the interference of the plow.

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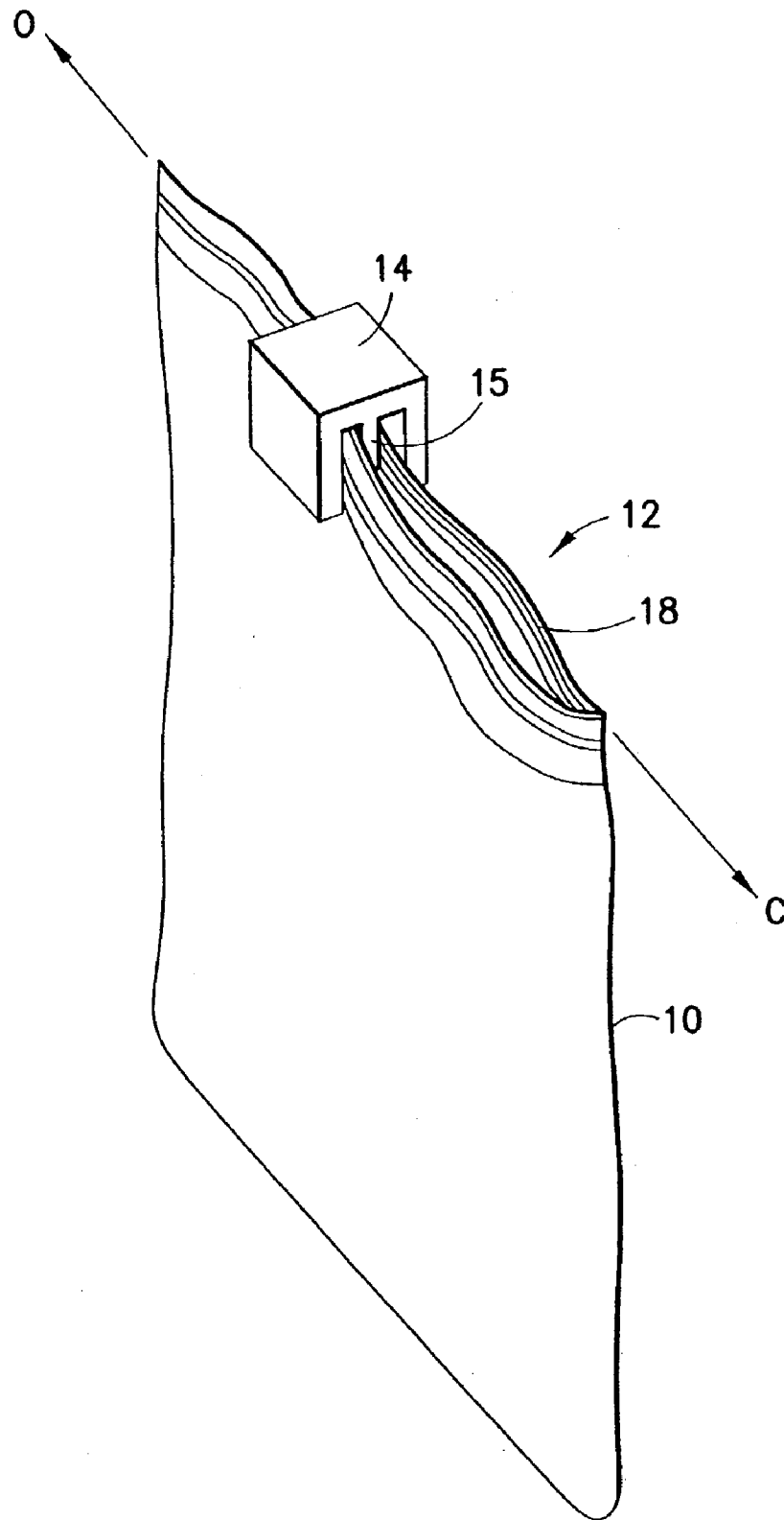


FIG. 1

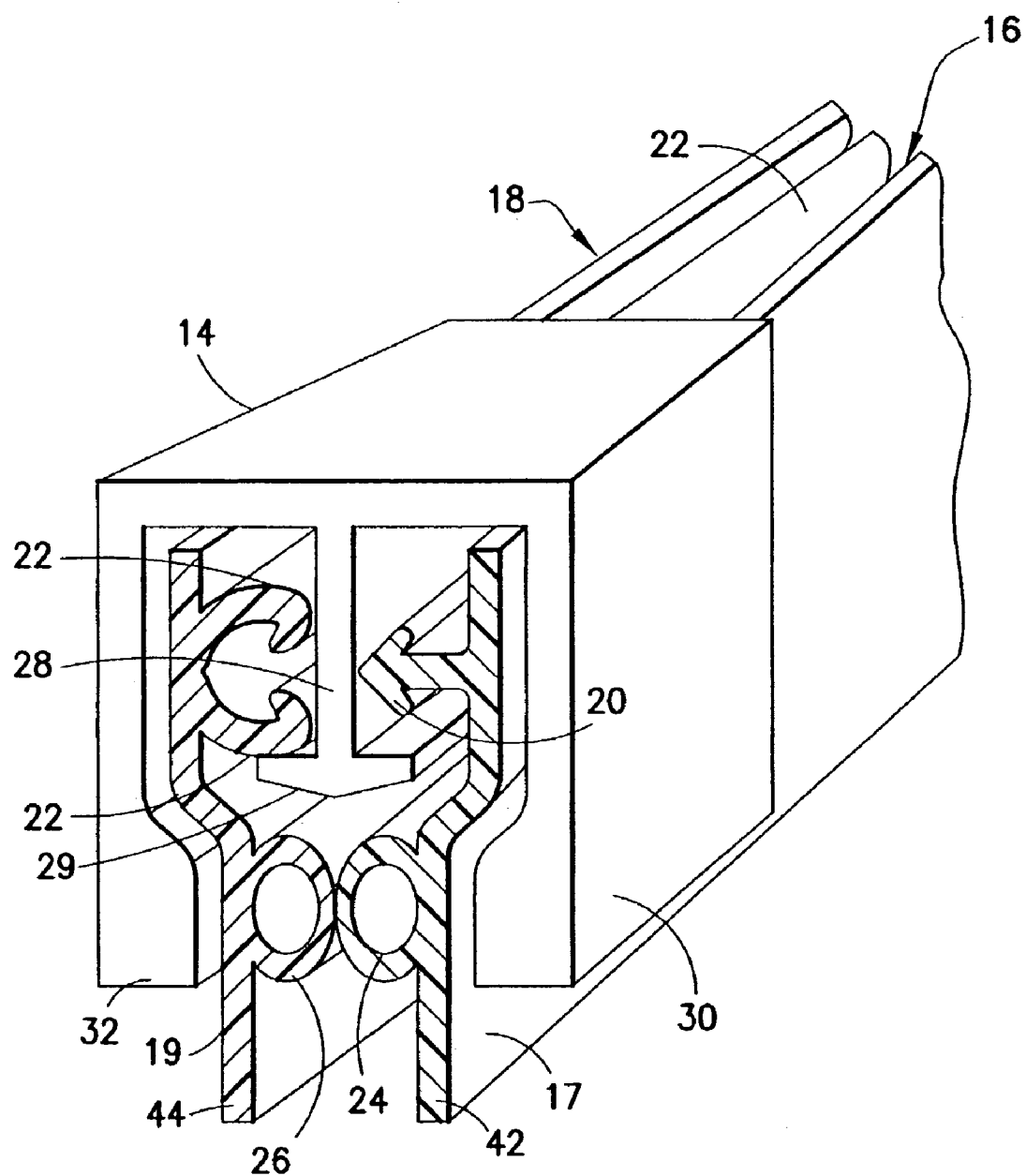


FIG.2

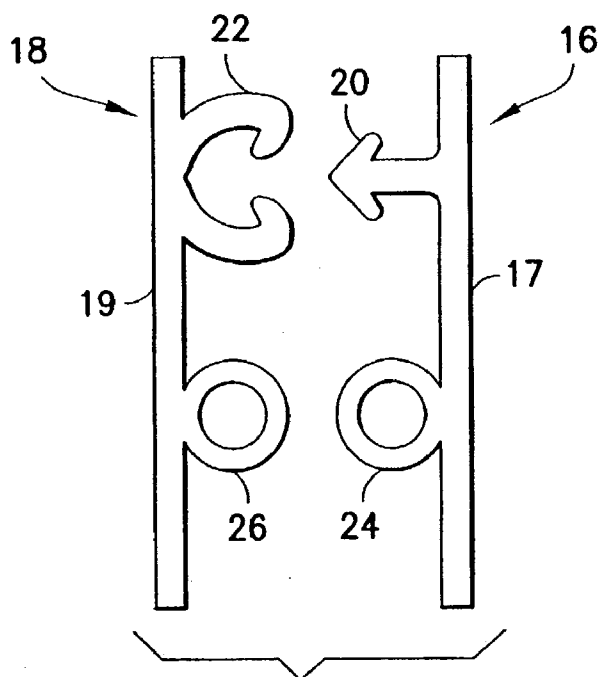


FIG. 3

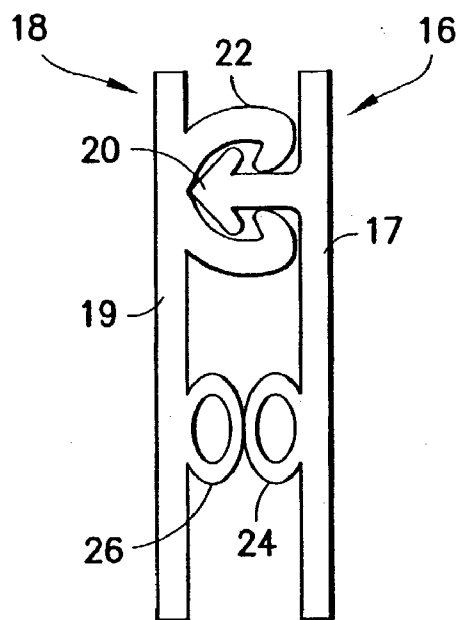


FIG. 4

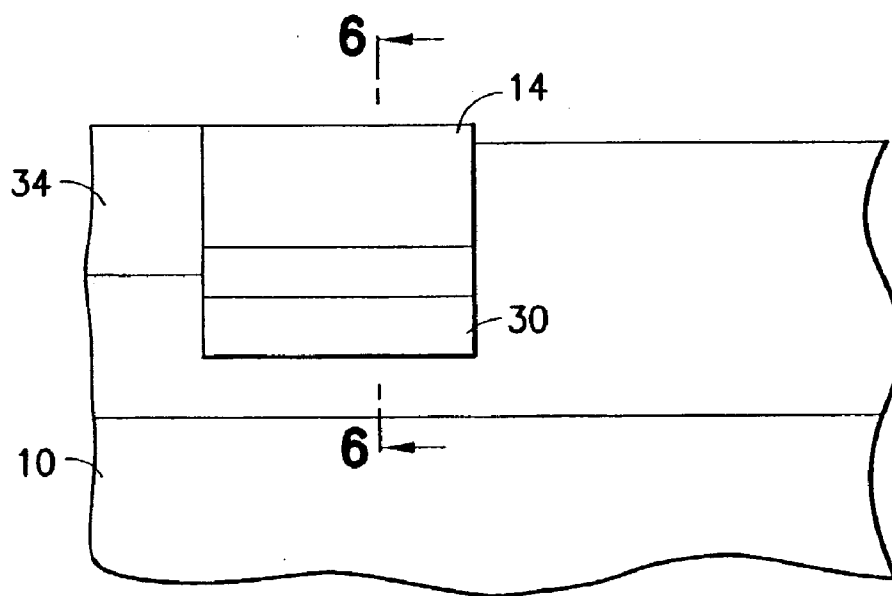


FIG. 5

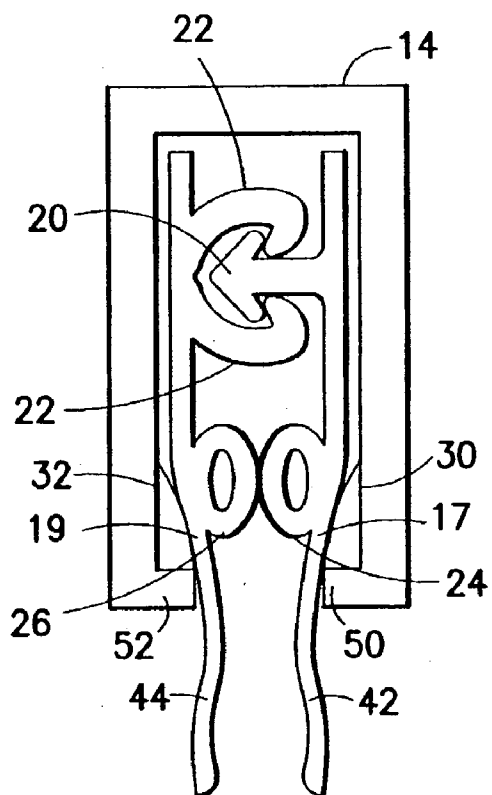


FIG. 6

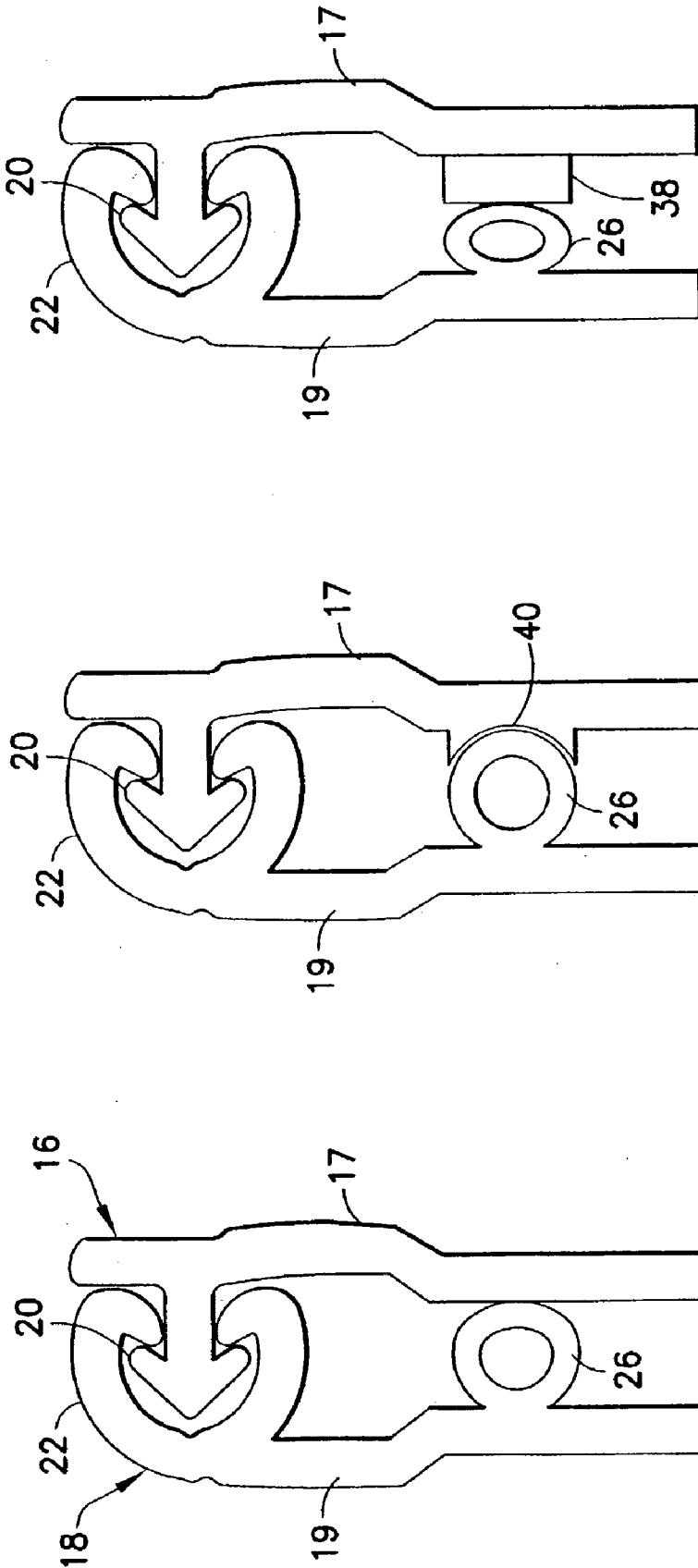


FIG. 7

FIG. 8

FIG. 9

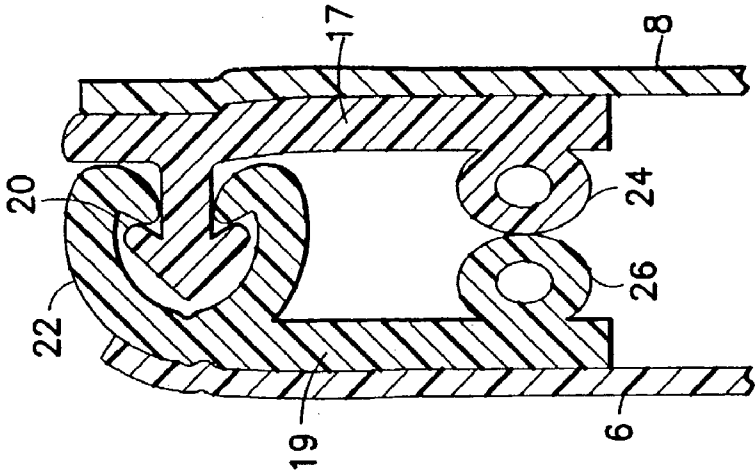


FIG. 10

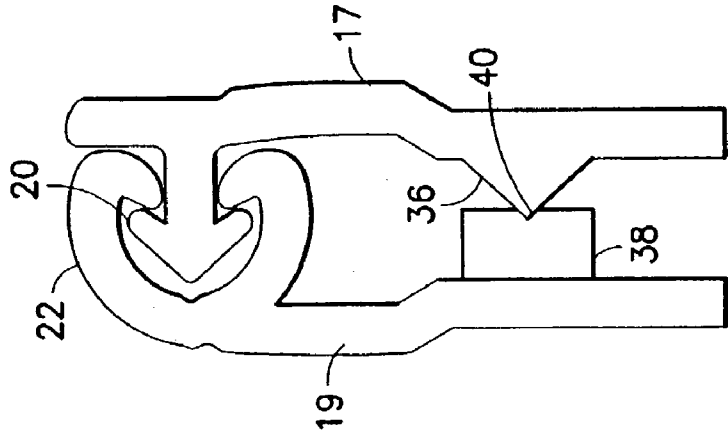


FIG. 11

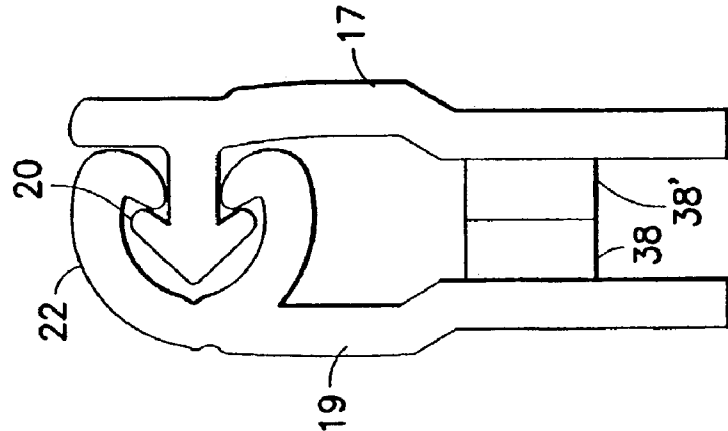


FIG. 12

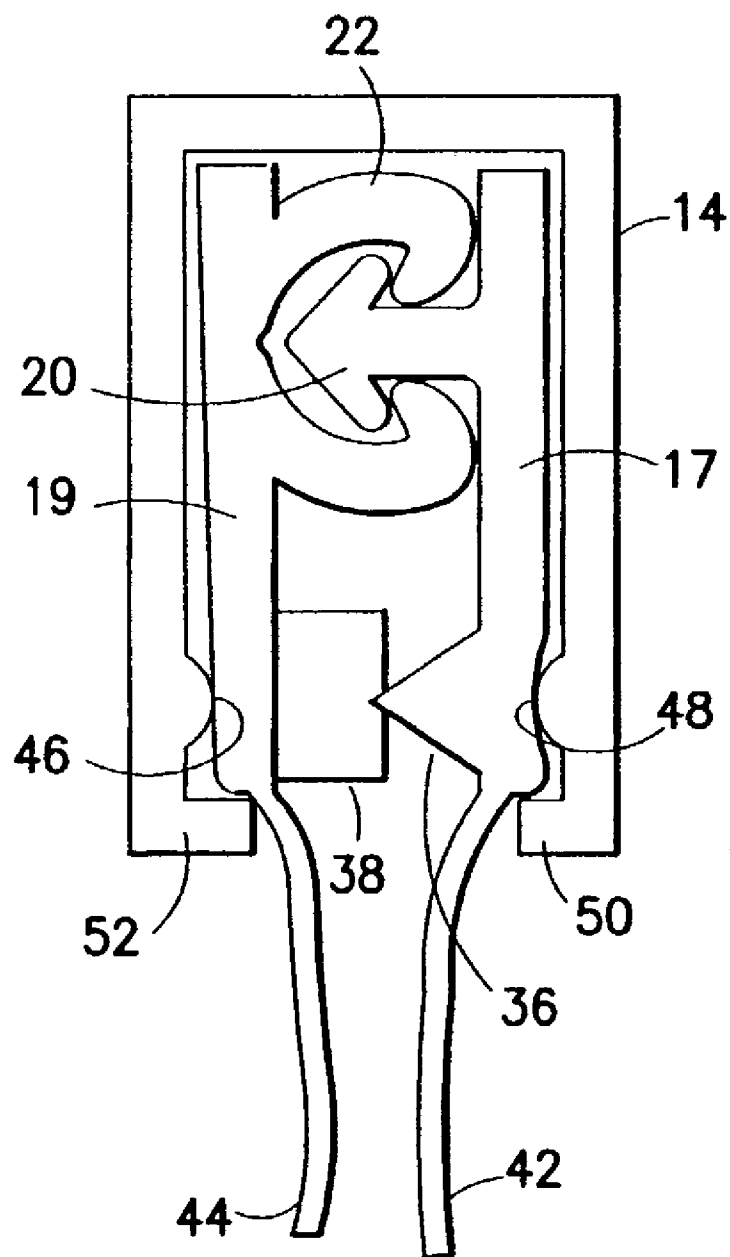


FIG. 13

WATERTIGHT SLIDER-ZIPPER ASSEMBLY FOR RECLOSABLE PACKAGING

BACKGROUND OF THE INVENTION

[0001] This invention generally relates to slider-operated zippers for use in reclosable packaging, such as bags or pouches. In particular, the invention relates to sliders of the type that have a separating finger or plow.

[0002] Reclosable bags are finding ever-growing acceptance as primary packaging, particularly as packaging for foodstuffs such as cereal, fresh vegetables, snacks and the like. Such bags provide the consumer with the ability to readily store, in a closed, if not sealed, package any unused portion of the packaged product even after the package is initially opened. To gain acceptance as a primary package for foodstuffs, it is virtually mandatory that the package exhibit some form of tamper evidence to protect the consumer and maintain the wholesomeness of the contained product. In addition, in many cases it is necessary that food product be hermetically packaged.

[0003] Reclosable fastener assemblies are useful for sealing thermoplastic pouches or bags. Such fastener assemblies often include a plastic zipper and a slider. Typically, the plastic zippers include a pair of interlockable profiled members that form a closure. As the slider moves across the profiles, the profiles are opened or closed. The profiles in plastic zippers can take on various configurations, e.g. interlocking rib and groove elements having so-called male and female profiles, interlocking alternating hook-shaped closure members, etc. Reclosable bags having slider-operated zippers are generally more desirable to consumers than bags having zippers without sliders because the slider eliminates the need for the consumer to align the interlockable zipper profiles before causing those profiles to engage.

[0004] In one type of slider-operated zipper assembly, the slider straddles the zipper and has a plow at one end that is inserted between the profiles to force them apart as the slider is moved along the zipper in an opening direction. The other end of the slider is sufficiently narrow to force the profiles into engagement and close the zipper when the slider is moved along the zipper in a closing direction.

[0005] Reclosable bags having sliders with zipper-separating plows have the characteristic that they are not completely leakproof when the zipper is closed and the slider is in the zipper-closed park position. Leakage is due to the fact that the zipper remains open in the region in front of the slider plow, i.e., the zipper profiles remain separated in the region between the sealed end of the zipper and the slider plow, even though the rest of the zipper is closed. However, watertightness of the reclosable package is required in numerous applications, for example, in reclosable bags used to store frozen foods.

[0006] There is a need for improvements in the design of slider-zipper assemblies for reclosable packaging that ensure a watertight receptacle, especially in the area directly beneath the plow of the slider when the latter is in the zipper-closed park position.

BRIEF DESCRIPTION OF THE INVENTION

[0007] The invention is directed to a slider-zipper construction that provides a watertight seal below the inter-

locked zipper profiles on the product side of the zipper. The seal comprises at least one seal part that is compressible or at least partially collapsible. The slider is designed to compress or at least partially collapse that seal part in the area below the plow of the slider, where the zipper profiles cannot be interlocked due to the interference of the plow. The zipper may have either a flanged or flangeless (string) construction.

[0008] One aspect of the invention is a slider-zipper assembly comprising a zipper and a slider mounted to the zipper, wherein the zipper comprises first and second zipper parts and the slider comprises a plow for separating opposing sections of the first and second zipper parts to open the zipper, the first zipper part comprising a first base strip, a first profiled closure member supported by the first base strip and a first sealing structure supported by the first base strip, and the second zipper part comprising a second base strip, a second profiled closure member supported by the second base strip and a second sealing structure supported by the second base strip, wherein the first and second profiled closure members are mutually interlockable for closing sections of the zipper during slider movement, one or both of the first and second sealing structures is compressible or at least partially collapsible, and the first and second sealing structures contact each other in closed sections of the zipper and an open section of the zipper penetrated by the plow of the slider, the slider being designed to exert a pressure that compresses or at least partially collapses at least a portion of one or both of the first and second sealing structures that is disposed beneath the plow.

[0009] Another aspect of the invention is a slider-zipper assembly comprising a zipper and a slider mounted to the zipper, wherein the zipper comprises first and second zipper parts and the slider comprises a plow for separating opposing sections of the first and second zipper parts to open the zipper, the first zipper part comprising a first base strip, a first profiled closure member supported by the first base strip and a sealing structure supported by the first base strip, and the second zipper part comprising a second base strip and a second profiled closure member supported by the second base strip, wherein the first and second profiled closure members are mutually interlockable for closing sections of the zipper during slider movement, and the sealing structure is compressible or at least partially collapsible and contacts the second base strip along closed sections of the zipper and an open section of the zipper penetrated by the plow of the slider, the slider being designed to exert a pressure that compresses or at least partially collapses at least a portion of the sealing structure that is disposed beneath the plow.

[0010] Other aspects of the invention include reclosable packages comprising a receptacle and a slider-zipper assembly of one of the types described in the preceding two paragraphs, wherein the zipper is joined to or integrally formed with the receptacle.

[0011] A further aspect of the invention is a reclosable package comprising a receptacle and a slider-zipper assembly comprising a zipper joined to or integrally formed with the receptacle and a slider mounted to the zipper, wherein the zipper comprises first and second interlockable profiled closure members, and the slider comprises a plow for separating opposing sections of the first and second profiled closure members to open the zipper, further comprising a

substantially watertight seal extending the width of the package and disposed inside the receptacle on the product side of the profiled closure members, the seal comprising a seal part that is compressible or at least partially collapsible, wherein the slider is designed to exert a pressure that compresses or at least partially collapses at least a portion of the seal part that is disposed beneath the plow.

[0012] Other aspects of the invention are disclosed and claimed below.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. 1 is a drawing showing a sectional view of one type of reclosable bag having a slider-operated zipper.

[0014] FIG. 2 is a drawing showing an isometric partially sectioned view of a slider-zipper assembly in accordance with one embodiment of the invention.

[0015] FIGS. 3 and 4 are drawings respectively showing open and closed sections of the zipper of FIG. 2 in a region not being straddled by the slider.

[0016] FIG. 5 is a drawing showing a fragmentary view of a reclosable package having the slider-zipper assembly depicted in FIG. 2. The slider is shown in the zipper-closed park position.

[0017] FIG. 6 is a drawing showing a sectional view of the slider-zipper assembly depicted in FIG. 5, the section being taken along the line designated 6-6 in FIG. 5.

[0018] FIGS. 7-11 are drawings showing closed sections of respective zippers in accordance with other embodiments of the invention.

[0019] FIG. 12 is a drawing showing a closed section of a string zipper in accordance with yet another embodiment of the invention.

[0020] FIG. 13 is a drawing showing a closed section of a slider-operated zipper in accordance with another embodiment of the invention.

[0021] Reference will now be made to the drawings, in which similar elements in different drawings bear the same reference numerals.

DETAILED DESCRIPTION OF THE INVENTION

[0022] For the purpose of illustration, various embodiments of the invention will be described with reference to a reclosable package of the type depicted in FIG. 1. However, application of the leakproofing techniques of the present invention is not limited to reclosable bags of the type shown in FIG. 1. For example, the zipper can be integrally formed with the bag making film, instead of being joined to the bag making film. Further, the reclosable package may be provided with a header that encloses the slider-zipper assembly and acts as a tamper-evident feature. Alternatively, the bag could be formed with side gussets, with or without a bottom panel.

[0023] A conventional reclosable bag 10 having a flexible plastic zipper 12 operated by manipulation of a slider 14 is shown in FIG. 1. The slider-zipper assemblies disclosed herein can be installed in a reclosable bag of the type shown in FIG. 1 or other types of reclosable packages having

different structures. The bag 10 may be made from any suitable sheet material or plastic film and comprises opposite wall panels, which may be secured together at opposite side edges of the bag by seams (not shown). The opposing bottoms of the wall panels may be joined, for example, by means of a heat seal made in conventional fashion, e.g., by application of heat and pressure or ultrasonic energy. Typically, however, the bottom of the package is formed by a fold in the original packaging film. Optionally, the bag may be provided with side gussets having respective junctures with the front and rear wall panels. In the latter case, the bag may also be provided with a bottom panel having respective junctures with the front and rear wall panels and with the side gussets.

[0024] At its top end, the bag 10 has an openable mouth, on the inside of which is an extruded plastic zipper 12. The zipper 12 comprises a pair of interlockable fastener strips or zipper halves. The profiles of the zipper halves may take any form. For example, the zipper may comprise interlocking rib and groove elements or alternating hook-shaped closure elements. The preferred zipper material is polyethylene.

[0025] The front and rear bag wall panels are respectively sealed to the zipper halves 16 and 18 by heat fusion or welding. Alternatively, the interlockable zipper halves can be attached to the wall panels by adhesive or bonding strips or the zipper profiles can be extruded integrally with the bag material. For the purpose of joinder, each zipper half may be provided with a respective extension flange, to which an upper portion of the respective bag wall panel is fused or welded. The walls of the bag may be formed of various types of thermoplastic material, such as low-density polyethylene, substantially linear copolymers of ethylene and a C3-C8 alpha-olefin, polypropylene, polyvinylidene chloride, mixtures of two or more of these polymers, or mixtures of one of these polymers with another thermoplastic polymer. The person skilled in the art will recognize that this list of suitable materials is not exhaustive.

[0026] In zippered bags with sliders, as the slider moves across the zipper, the zipper is opened or closed. As shown in FIG. 1, the slider 14 is slidable along the zipper in a closing direction "C", causing the zipper halves to become engaged, or in an opening direction "O", causing the zipper halves to become disengaged.

[0027] The slider 14 for opening or closing the reclosable zipper is generally shaped so that the slider straddles the zipper profiles. The ends of the slider are open to allow the zipper to pass through. The opening end of the slider has a separating finger or plow 15 that depends downward from the roof of the slider and pries open the zipper profiles as the slider is moved in the opening direction. Prior art sliders have been made in multiple parts and welded together or the parts have been constructed to be snapped together. Other known sliders have had a one-piece construction. The slider parts can be made using any desired method, such as injection molding. The slider can be molded from any suitable plastic, such as nylon, polypropylene, polystyrene, acetal, polyketone, polybutylene terephthalate, high-density polyethylene, polycarbonate, or ABS.

[0028] A bag incorporating a zipper and a slider preferably includes means, such as end stops (not shown in FIG. 1), for preventing the slider from sliding off the end of the zipper when the slider reaches the closed or fully opened position.

Such end stops perform dual functions, serving as stops to prevent the slider from going off the end of the zipper and also holding the two zipper profiles together to prevent the bag from opening in response to stresses applied to the profiles through normal use of the bag. The end stops may, for example, comprise stomped areas on the zipper profiles themselves, riveted end clamps, plastic end clips fused to the zipper, or any other suitable structure. The stomped end stops can be sections of the profiles that are fused together proximate to the open and closed slider positions such that the end stops are raised. Stomping can be carried out by, for example, applying heat and/or pressure or using ultrasonic methods.

[0029] The zipper halves **16** and **18** preferably comprise interlocking rib and groove elements, which are well known in the art. Many configurations of rib and groove elements may be employed to perform any one of a number of required functions. For instance, specific rib and groove elements may be employed to permit the package to be more easily opened from the outside than from the inside, so that the tension produced by the contents of the package will not accidentally open the rib and groove elements. Each zipper half may comprise a respective zipper flange extension or web to which the bag making film can be joined. Alternatively, each zipper half may comprise a base strip that supports the respective profiled closure member, the bag making film being attached to the backs of the base strips. The latter zipper is commonly referred to as a string zipper.

[0030] The invention relates to reclosable packages of the type having a slider-operated zipper wherein the zipper profiles are separated by a finger or plow carried by the slider. As previously mentioned, such slider-zipper assemblies do not provide a watertight seal in the zipper section penetrated by the slider plow when the zipper is maximally closed.

[0031] As will be described hereinafter with reference to FIGS. 2-13, this problem is solved in accordance with various embodiments of the invention by providing a substantially watertight seal extending the width of the reclosable bag and disposed inside the bag on the product side of the profiled closure members of the zipper. The seal comprises at least one part that is compressible or at least partially collapsible along the length of the zipper, while the slider is designed to exert additional pressure to compress or at least partially collapse at least a portion of the seal part disposed beneath the plow of the slider.

[0032] FIG. 2 shows a slider-zipper assembly comprising a zipper and a slider **14** mounted to the zipper. The zipper consists of two zipper parts **16** and **18**. The zipper part **16** comprises a base strip **17**, a closure member **20** having a male profile and supported by the base strip **17**, and a sealing member **24** supported by the base strip **17**. The base strip **17** includes a zipper flange extension **42** extending below the sealing member **24** for joinder of the bag making film (not shown) that forms one wall of the bag. The zipper part **18** comprises a base strip **19**, a closure member(s) **22** having a female profile and supported by the base strip **19**, and a sealing member **26** supported by the base strip **19**. [The closure member having a female profile may be formed by two hook-shaped members projecting from the base strip, as seen in FIG. 2, or by a U- or C-shaped member, also projecting from the base strip, that has its back integrally

formed with the base strip.] The base strip **19** includes a zipper flange extension **44** extending below the sealing member **26** for joinder of the bag making film that forms the other wall of the bag. The sealing members **24** and **26** have C-shaped profiles, with the ends of the C-shape integrally formed with the respective base strips, thereby forming opposing hollow tube structures. These tube structures may have a circular or elliptical profile and are designed to deform when pressed together.

[0033] The profiled closure members **20** and **22** are interlockable to close the zipper and disengageable to open the zipper. The state of the zipper is controlled by operation of the slider **14**, which can move in either an opening or a closing direction. The slider comprises a top wall and a pair of sidewalls projecting downward from opposing edges of the top wall. The slider **14** further comprises a plow **28** for separating opposing sections of the closure members **20** and **22** to open the zipper during movement of the slider in the opening direction (into the page in FIG. 2). The plow projects vertically downward from the top wall and is disposed generally midway between the sidewalls. The distal end of the plow has retaining ledges **29** projecting in opposite directions to maintain the slider on the zipper and prevent it from being pulled off the zipper. The slider further comprises an opening end (visible in FIG. 2), where plow **28** is disposed, and a closing end (visible in FIG. 6). The gap separating those sections of the slider sidewalls that are in line with the zipper profiles **20** and **22** decreases from the opening end to the closing end of the slider. As a result, the slider sidewalls at the closing end press the adjacent sections of the zipper profiles **20** and **22** into engagement as the slider travels in the closing direction (out of the page in FIG. 2).

[0034] In addition, as seen in FIGS. 2 and 6, the sidewalls of the slider terminate in distal portions **30** and **32** that have offset inwardly facing surfaces separated by a gap less than the width of the zipper at the elevation of the sealing members **24** and **26** when the sealing members are touching without compression. These offset inwardly facing surfaces press sealing members **24** and **26** together, causing them to compress or at least partially collapse. The gap separating the distal portions **30** and **32** is preferably substantially constant from the opening end to the closing end of the slider. Thus, as seen in FIGS. 2 and 6, inside the slider the distal portions **30** and **32** press together the sealing members **24** and **26**, causing an increase in the area of contact at the interface of the sealing members as the latter compress or partially collapse. This zone of increased mutual abutment forms a watertight seal beneath the plow **28**, which intervenes between the zipper profiles. In both of FIGS. 2 and 6, the slider and zipper are depicted with gaps therebetween, but it should be understood that there are no gaps between the distal portions **30** and **32** of the slider and adjacent portions of the zipper.

[0035] While the distal portions **30** and **32** of the slider operate to compress the sealing members **24** and **26** together, the portions of the slider side walls at the elevations of the profiled closure members have inwardly directed surfaces that converge in a well-known manner for camming the zipper profiles into engagement during movement of the slider in the closing direction (out of the page in FIG. 2). The bottom edges of the slider side walls may be provided with retaining ledges **50** and **52** at the closing end of the slider for further increasing the slider pull-off resistance.

[0036] The sealing members **24** and **26**, shown in **FIGS. 2 and 6**, extend the full width of the zipper, so that the internal volume of the bag can be sealed at an elevation below the zipper. **FIG. 3** shows an open section of the zipper wherein the zipper profiles **20** and **22** are mutually disengaged and the sealing members **24** and **26** are also mutually disengaged. **FIG. 4** shows a closed section of the zipper after the slider has passed. In this situation, the zipper profiles **20** and **22** are interlocked with each other, while the sealing members **24** and **26** are pressed into contact with each other. The base strips **17** and **19** can, if necessary, be co-extruded of a stiffer material so that a certain amount of pressure can be exerted on the compressible sealing members **24** and **26** when the zipper profiles **20** and **22** are interlocked. More specifically, the base strip can be made of a first material having a first modulus of elasticity, while the sealing structure is made of a second material having a second modulus of elasticity less than the first modulus of elasticity.

[0037] The end result is that the internal volume of the bag can be sealed even though the zipper is partly open in the area of the slider plow when the slider **14** is in the zipper-closed park position shown in **FIG. 5**. In **FIG. 5** the bag to which the zipper is attached is indicated by reference numeral **10**, while a slider end stop is indicated by reference numeral **34**. The end stop **34** may be formed by stomping the ends of the zipper profiles together in a well-known manner. Optionally, the end of the sealing members may also be stomped together during end stop formation.

[0038] In the embodiment depicted in **FIG. 2**, a watertight seal was formed using two sealing members, each sealing member being joined to or integrally formed with a respective zipper part. Alternatively, only one sealing member could be used. **FIG. 7** shows such an embodiment. In this case, the zipper part **16** comprises a base strip **17** and a closure member **20** having a male profile, while the zipper part **18** comprises a base strip **19**, a closure member **22** having a female profile, and a solitary sealing member **26** in the form of a hollow tube integrally formed with the base strip **19**. The hollow tube must have a lateral dimension sufficient that the outer periphery of the sealing member **26** bears against the opposing base strip **17** when the zipper is closed, as shown in **FIG. 7**. It should also be pointed out that the base strips may be designed so that the overall width of the zipper decreases at a point below the elevation of the zipper profiles. The shoulders of the base strips above the zipper narrowing will help resist pull off of the slider.

[0039] In a variation of the embodiment depicted in **FIG. 7**, **FIG. 8** shows that a seat **40** may be integrally formed with the base strip **17**. The seat **40** (which is not compressible or partially collapsible in the sense those terms are used herein) can be provided with a surface having a concave profile designed to interface with the outer periphery of the hollow sealing member **26**. The result is that the area of contact between the sealing member and the opposing zipper part can be thereby increased to enhance the sealing effect.

[0040] Although the hollow sealing members **24** and **26** may be made of the same material used to make the zipper profiles **20** and **22**, alternatively the hollow sealing members may be made by coextruding a material having greater elasticity, e.g., a soft plastomer. Plastomers have properties that are generally intermediate those of thermoplastic mate-

rials and elastomeric materials. A typical plastomer is an elastomeric polymer made of polypropylene and ethylene-propylene diene rubber.

[0041] In accordance with another embodiment of the invention, a hollow sealing member **26** may interface with a second compressible or partially collapsible sealing member **38** that is not a hollow member. The second sealing member **38** may be made by coextruding a soft plastomer having a solid profile instead of a hollow profile. Alternatively, the second sealing member **38** may comprise a soft closed-cell foam. A foam sealing element could be applied in a secondary process.

[0042] Taking the idea of using a compressible/collapsible sealing member that is not a hollow member one step further, both sealing members could comprise such structures, i.e., plastomeric solid bodies or closed-cell foam structures. **FIG. 10** shows an embodiment with two such sealing members **38** and **38'**. The plastomer or foam elements will compress or at least partially collapse when pressed together by the distal portions or panels **30** and **32** (see **FIG. 2**) of the slider side walls, thus forming a watertight seal.

[0043] In accordance with a further alternative shown in **FIG. 11**, the zipper may be fabricated with a plastomeric or foam sealing member **38** on one side and a rib **36**, made, e.g., of the same material as the zipper profiles, on the other side of the zipper. Although a rib **36** having a V-shaped profile is shown in **FIG. 11**, the rib may be truncated or curved at its apex. The rib **36** is situated in line with and directly opposite to the sealing member **38** and is designed to form an indentation **40** in the plastomeric or foam material when the rib **36** and sealing member **38** are pressed together by the slider. The watertight seal is formed by the interface of the apex of the rib **36** with the indentation **40** in the sealing member **38**.

[0044] In accordance with other embodiments of the invention, the various watertight seals described above can also be used with a slider-operated string zipper. A string zipper typically does not have zipper flange extensions for attaching the bag making film. Instead the bag making film is joined to the outsides of the zipper base strips at the elevation of the zipper profiles. **FIG. 12** shows the example of a string zipper joined, e.g., by conduction heat seals, to the top portions of respective walls **6** and **8** of the bag. The slider is not shown. The respective zipper parts have the same construction and functionality as the embodiment shown in **FIG. 6** except that the zipper does not have flange extensions extending below the sealing members **24** and **26**.

[0045] An alternative slider/string zipper assembly is shown in **FIG. 13**. In this case, the slider **14** is provided with a pair of ribs **46** and **48** that press the sealing members **36** and **38** together. Again the bottom edges of the slider side walls may be provided with retaining ledges **50** and **52** at the closing end of the slider for further increasing the slider pull-off resistance.

[0046] While the invention has been described with reference to various embodiments, it will be understood by those skilled in the art that various changes may be made and equivalents may be substituted for elements thereof without departing from the scope of the invention. In addition, many modifications may be made to adapt a particular situation to

the teachings of the invention without departing from the essential scope thereof. Therefore it is intended that the invention not be limited to the particular embodiment disclosed as the best mode contemplated for carrying out this invention, but that the invention will include all embodiments falling within the scope of the appended claims.

[0047] As used in the claims, the verb “joined” means fused, bonded, sealed, adhered, fastened, whether by application of heat and/or pressure, application of ultrasonic energy, application of a layer of adhesive material or bonding agent, interposition of an adhesive or bonding strip, insertion of a rivet, or other substantially equivalent means.

1. A slider-zipper assembly comprising a zipper and a slider mounted to said zipper, wherein said zipper comprises first and second zipper parts and said slider comprises a plow for separating opposing sections of said first and second zipper parts to open said zipper, said first zipper part comprising a first base strip, a first profiled closure member supported by said first base strip and a first sealing structure supported by said first base strip, and said second zipper part comprising a second base strip, a second profiled closure member supported by said second base strip and a second sealing structure supported by said second base strip, wherein said first and second profiled closure members are mutually interlockable for closing sections of said zipper during slider movement, said first sealing structure is compressible or at least partially collapsible, and said first and second sealing structures contact each other in closed sections of said zipper and an open section of said zipper penetrated by said plow of said slider.

2. The assembly as recited in claim 1, wherein said slider is designed to exert a pressure that compresses or at least partially collapses at least a portion of said first sealing structure that is disposed beneath said plow.

3. The assembly as recited in claim 1, wherein said second sealing structure is compressible or at least partially collapsible.

4. The assembly as recited in claim 1, wherein said first sealing structure is made of different material than said first base strip.

5. The assembly as recited in claim 1, wherein said first sealing structure is hollow.

6. The assembly as recited in claim 5, wherein said first sealing structure is a hollow tube joined along a peripheral zone to said first base strip.

7. The assembly as recited in claim 5, wherein said first sealing structure is C- or U-shaped and is joined to or integrally formed with said first base strip.

8. The assembly as recited in claim 5, wherein said second sealing structure is hollow.

9. The assembly as recited in claim 5, wherein said second sealing structure is foamed material.

10. The assembly as recited in claim 5, wherein said second sealing structure is a body of elastomeric material.

11. The assembly as recited in claim 5, wherein said first sealing structure and said first base strip are made of the same material.

12. The assembly as recited in claim 1, wherein said first sealing structure is foamed material.

13. The assembly as recited in claim 12, wherein said second sealing structure is foamed material.

14. The assembly as recited in claim 1, wherein said first sealing structure is a body of elastomeric material.

15. The assembly as recited in claim 14, wherein said second sealing structure is a body of elastomeric material.

16. The assembly as recited in claim 1, wherein said first base strip is made of a first material having a first modulus of elasticity, and said first sealing structure is made of a second material having a second modulus of elasticity less than said first modulus of elasticity.

17. A reclosable package comprising a receptacle and an assembly as recited in claim 1, wherein said zipper of said assembly is joined to or integrally formed with said receptacle.

18. A slider-zipper assembly comprising a zipper and a slider mounted to said zipper, wherein said zipper comprises first and second zipper parts and said slider comprises a plow for separating opposing sections of said first and second zipper parts to open said zipper, said first zipper part comprising a first base strip, a first profiled closure member supported by said first base strip and a sealing structure supported by said first base strip, and said second zipper part comprising a second base strip and a second profiled closure member supported by said second base strip, wherein said first and second profiled closure members are mutually interlockable for closing sections of said zipper during slider movement, and said sealing structure is compressible or at least partially collapsible and contacts said second base strip along closed sections of said zipper and an open section of said zipper penetrated by said plow of said slider.

19. The assembly as recited in claim 18, wherein said slider is designed to exert a pressure that compresses or at least partially collapses at least a portion of said sealing structure that is disposed beneath said plow.

20. The assembly as recited in claim 19, wherein said sealing structure is hollow.

21. The assembly as recited in claim 20, wherein said sealing structure is a hollow tube joined along a peripheral zone to said first base strip.

22. The assembly as recited in claim 20, wherein said sealing structure is C- or U-shaped and is joined to or integrally formed with said first base strip.

23. The assembly as recited in claim 20, wherein said sealing structure and said first base strip are made of the same material.

24. The assembly as recited in claim 19, wherein said sealing structure is foamed material.

25. The assembly as recited in claim 19, wherein said sealing structure is a body of elastomeric material.

26. The assembly as recited in claim 19, wherein said first base strip is made of a first material having a first modulus of elasticity, and said sealing structure is made of a second material having a second modulus of elasticity less than said first modulus of elasticity.

27. A reclosable package comprising a receptacle and an assembly as recited in claim 18, wherein said zipper of said assembly is joined to or integrally formed with said receptacle.

28. A reclosable package comprising a receptacle and a slider-zipper assembly comprising a zipper joined to or integrally formed with said receptacle and a slider mounted to said zipper, wherein said zipper comprises first and second interlockable profiled closure members, and said slider comprises a plow for separating opposing sections of said first and second profiled closure members to open said zipper, further comprising a substantially watertight seal extending the width of said package and disposed inside said

receptacle on the product side of said profiled closure members, said seal comprising a first seal part that is compressible or at least partially collapsible, wherein said slider is designed to exert a pressure that compresses or at least partially collapses at least a portion of said first seal part that is disposed beneath said plow.

29. The package as recited in claim 28, wherein said zipper comprises first and second flanges joined to said receptacle.

30. The package as recited in claim 28, wherein said zipper comprises first and second base strips respectively supporting said first and second profiled closure members and joined to said receptacle in areas behind said closure members.

31. The package as recited in claim 28, wherein said first seal part comprises a hollow structure.

32. The package as recited in claim 28, wherein said first seal part comprises foamed material.

33. The package as recited in claim 28, wherein said first seal part comprises elastomeric material.

34. The package as recited in claim 28, wherein said seal further comprises a second seal part that contacts said first seal part along its entire length when said zipper is closed.

35. The package as recited in claim 34, wherein one or both of said first and second seal parts comprises a hollow structure.

36. The package as recited in claim 34, wherein one or both of said first and second seal parts comprises foamed material.

37. The package as recited in claim 34, wherein one or both of said first and second seal parts comprises elastomeric material.

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