

Description

This invention relates in general to new and useful improvements in glass containers of the jar and bottle type, and more particularly to neck finishes suitable for resealing wherein the neck finishes are particularly configured to function with well known PT closures, i.e. press-on-twist-off closures.

Conventional PT closures include a shell having therein a liner which is conventionally formed of a plastisol and wherein such lining includes an annular portion which is carried by an end panel of the closure and abuts in sealing engagement with an end of the neck finish in a generally cylindrical portion which lines the skirt of the closure. The closure, in use, is pressed onto the neck finish and the cylindrical liner portion flows around plural lead threads of the neck finish tightly to hold the closure on the glass container in sealing relation. When the closure is to be opened, the closure is rotated or twisted with the threads leading the closure off of the container.

Resealing a PT cap has always presented difficulties and is the major objection to the use of such a cap or closure. The typical fine lead glass finishes have made it difficult for one to hand reapply the closure using a twist-the-closure-on approach. The thread impressions formed in the sealing compound (plastisol) do not easily find their way onto the threads of the glass neck finish, and in the process of trying to reclose the cap one side of the cap will engage the threads and the other will not. In this incorrect start of reapplication, and if the product is one that requires shaking before use, the cap will generally fly off and product spillage will be encountered.

Also, a poorly reapplied closure poses the threat of the bottle and its contents falling away if the container is lifted by grasping only the closure.

AU-B-461,196 discloses a glass container of the jar and bottle type, said glass container comprising a neck finish having a surface configuration means particularly configured for use with a closure of the push-on-twist-off type having a skirt with a generally cylindrical liner of deformable plastic material, said neck finish having plural lead threads which form complementary threads in said liner when said closure is applied. AU-B-461,196 also discloses such a glass container in combination with such a closure. The specification particularly concerns a closure cap with a gasket lining which is to be deformed by virtue of a particular glass container neck finish, the exterior upper portion of the neck finish having a stepped configuration. However, AU-B-461,196 does not address or provide a solution to the technical problem of resealing a PT cap onto the container.

GB-A-1,115,824 also provides for a closure having a deformable gasket lining and is concerned primarily with the method of applying a closure cap to a container. GB-A-1,115,824 also does not address or provide a solution to the

technical problem of resealing a PT cap onto the container.

In accordance with this invention, there is provided a glass container of the jar and bottle type, said glass container comprising a neck finish having a surface configuration means particularly configured for use with a closure of the push-on-twist-off type having a skirt with a generally cylindrical liner of deformable plastic material, said neck finish having plural lead threads which form complementary threads in said liner when said closure is applied, characterized by resealing means for facilitating the re-engagement of said neck finish threads with said complementary threads in said liner, said resealing means including said neck finish threads increasing in width from lead ends thereof to terminal ends thereof in a smooth transition free of steps whereby a complementary thread which will be molded in a deformable plastic skirt liner will have a wide entrance portion for receiving a relatively narrow end of a neck finish thread.

The present invention further provides a glass container of the jar and bottle type and a closure in combination, said closure being of the push-on-twist-off type having a skirt with a generally cylindrical liner of deformable plastic material, the glass container comprising a neck finish having surface configuration means particularly configured for use with said closure, said neck finish having plural lead threads which form complementary threads in said liner, characterized by resealing means for facilitating the re-engagement of said neck finish threads with said complementary threads in said liner, said resealing means including said neck finish threads increasing in width from lead ends thereof to terminal ends thereof in a smooth transition free of steps whereby a complementary thread molded in said skirt liner has a wide entrance portion for receiving a relatively narrow end of a neck finish thread.

Preferably, said resealing means includes radially outer surfaces of said neck finish threads flaring axially downwardly and radially outwardly.

In an alternative preferred arrangement, said resealing means includes both a thread base diameter and radially outer surfaces of said neck finish threads flaring axially downwardly and radially outwardly.

Advantageously, said threads are of a flattened generally rectangular cross section.

Optionally, said threads are of a flattened generally rectangular cross section and have a flat central peripheral surface.

With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims, and the several views illustrated in the accompanying drawings.

In the drawings

Figure 1 is an exploded fragmentary elevational view of the upper portion of a glass container having a neck finish in accordance with this invention and having illustrated in cross section a conventional PT closure to be secured thereto.

Figure 2 is a plan view of the neck finish of the container of Figure 1, taken generally along the line 2—2 of Figure 1.

Figure 3 is a developed view of the neck finish.

Figure 4 is an enlarged fragmentary sectional view taken generally along the line 4—4 of Figure 2, and shows the specific cross section of the neck finish.

Figure 5 is a fragmentary sectional view similar to Figure 4, with a PT closure or cap applied.

Figure 6 is a fragmentary developed view of another form of neck finish.

Figure 7 is an enlarged fragmentary sectional view through the neck finish of Figure 6, taken along the line 7—7 of Figure 6.

Figure 8 is a fragmentary developed view of another form of neck finish.

Figure 9 is an enlarged fragmentary vertical sectional view taken through the neck finish of Figure 8 along the line 9—9.

Figure 10 is a developed view of yet another neck finish.

Figure 11 is an enlarged fragmentary sectional view taken through the neck finish of Figure 10 along the line 11—11.

Figure 12 is a developed view of a further form of neck finish.

Figure 13 is an enlarged fragmentary sectional view of the neck finish of Figure 12, taken generally along the line 13—13.

Referring now to the drawings in detail, reference is first made to Figure 1 wherein there is illustrated a conventional PT closure generally identified by the numeral 20. The closure 20 includes a metal shell 22 which includes an end panel 24 and a skirt 26, with the skirt terminating in a curl 28. The shell 22, in the illustrated embodiment, is formed of metal and is provided with a liner generally identified by the numeral 30 formed of a suitable deformable compound such as plastisol. The liner 30 includes an upper annular section 32 which seats against the underside of an outer part of the end panel 24. The liner 30 also includes a generally cylindrical part 34 which is applied interiorly of the skirt 26.

As previously described, this conventional PT closure will be pressed onto the glass neck finish of a glass container and threads of the neck finish will mold complementary threads into the cylindrical liner portion 34 to facilitate removal of the closure from the neck finish by a twisting action.

In Figures 1—5 there is illustrated a glass container generally identified by the numeral 36 and having a neck finish in accordance with this invention, the neck finish being identified by the numeral 38 and being thickly configurated to facilitate the resealing of the container 36 by the closure 20.

As is best shown in Figure 4, the neck finish 38 has an extreme end 40 for engaging the liner part 32 and forming a seal with the closure 20. The neck finish 38, immediately below the end 40, is stepped radially inwardly and is tapered in an upwardly axial and radially inward direction to define a tapered endmost portion 42 of the neck finish 38. Below the resultant step 44, the neck finish is of a constant diameter to define a thread base 46. The thread base 46 terminates in an annular rib 48. If desired, there may be a bead such as the bead 49 spaced axially below and projecting radially outwardly to a greater extent than the rib. The thread base 46 has projecting radially outwardly therefrom a plurality of threads 50, each having its own separate lead-in 52. It is to be noted from Figure 3 that each of the plural threads 50 terminates in the rib 48 and it will be apparent from Figure 2 that there is a plurality of such threads 50 which are spaced circumferentially about the neck finish. These threads preferably overlap one another as shown in Figure 3.

A particular feature of each thread 50 is that in addition to having a generally rounded lead-in 52, each thread tapers in width from its lead-in to its base connection with the rib 48.

Referring now to Figure 5, it will be seen that although the liner part 34 was initially generally cylindrical, after the PT closure 20 has been applied the threads 50 mold complementary threads into the compound of the liner portion 34. Thus, the applied PT closure may be readily removed in a twisting off action.

The difficulty is not in the initial application of the PT closure or the sealing thereof to the container. The difficulty, as set forth above, is resealing the container with the closure. It must be appreciated that the compound of the liner 30 is quite soft and moldable, and therefore, unless the closure is properly positioned relative to the neck finish, the threads 50 will not all re-enter the threads formed in the liner. It has been found, however, that by tapering the uppermost section of the neck finish and offsetting the same radially inwardly to form the surface 42, a generally straightening effect is had on the closure. This taper, which is identified by the angle A, may be on the order of $4^{\circ} \pm 1^{\circ}$. In addition, the tapered width of the threads 50 each present at the lower edge of the cylindrical liner part 34 a wide thread groove into which the tapered end 52 of a thread may readily enter.

The above-discussed combination of features of the neck finish 38 permits resealing of a container provided with this neck finish wherein the closure is a PT cap.

Reference is now made to the neck finish of Figures 6 and 7 which is generally identified by the numeral 60. The neck finish 60 defines an end 62 and the outer surface of the neck finish immediately adjacent the end is tapered to define a generally conical surface 64 which is offset radially inwardly to define a step 66. The taper of the surface 64 is at an angle B which may be on

the order of 2° , $+1^\circ$, -2° . Below the step 66 is another tapered exterior surface 68 of the neck finish which is tapered at an angle C which is on the order of $7^\circ \pm 2^\circ$.

The surface 68 terminates in a cylindrical thread base 70 from which there projects a plurality of circumferentially spaced threads 72 which may be of a conventional cross section which terminate in a rib 74. Once again, there may be a bead 76 spaced axially below the rib 74.

It will be seen that the tapered surfaces 64, 68 together with the radially inward stepping of the surface 64 provides starter surfaces for aligning the cap squarely with the neck finish and thereby facilitate the starting of the threads into the thread grooves formed in the cylindrical liner portion 34.

In Figures 8 and 9 there is illustrated yet another neck finish generally identified by the numeral 80. The neck finish 80 defines an end 82 with which a seal is made by the liner of the PT cap. The outer surface of the neck finish is provided adjacent the end 82 with a tapered surface 84 which is stepped radially inwardly to define a step 86. Below the step 86 is a further tapered surface 88. The tapered surface 88 terminates in a cylindrical thread base 90. It is to be understood that the surfaces 84, 88 correspond to the surfaces 64, 68 of the neck finish 60. The thread base 90 terminates in a rib 92 and above the rib 92 the thread base 90 has projecting therefrom a plurality of threads 94 each having a tapered lead-in 96. The threads 94 terminate in the rib 92 and the space between base portions of the threads 94 and the rib 92 may be filled in as at 98.

It is to be particularly noted that the radially outer surfaces of the threads lie along a conical path which tapers radially inwardly and outwardly upwardly at an angle D which may be on the order of $2\frac{1}{2}^\circ +1^\circ$, -2° . The neck finish 90 is similar to the neck finish 60 except for the taper of the threads. The taper of the threads results in the thread grooves being of a larger diameter and they greatly increase in depth at the inner edge of the liner part 34 which, together with the centering action of the surfaces 84, 88, facilitates the re-engagement of the PT cap on the neck finish.

In Figures 10 and 11 there is illustrated yet another neck finish generally identified by the numeral 100. The neck finish 100 presents an end 102 for forming a seal with the liner part 32 of the PT closure. The upper outer surface of the neck finish 100 adjacent the end 102 is radially inwardly stepped to define a step 104 and is tapered to define a tapered surface 106 which tapers at an angle E which is on the order of $4^\circ \pm 1^\circ$. Below the step 104 is the thread base 108 which tapers axially downwardly and radially outwardly at an angle F on the order of $3^\circ \pm 1^\circ$.

Threads 110 project from the thread base 108 and have lead-ins 112. The threads 110 terminate in an annular rib 114. It is to be noted from

Figure 11 that the threads 110 are of a generally flattened rectangular cross section. Further, it will be apparent from Figure 10 that each of the lead-ins 112 may be generally bifurcated.

In view of the fact that the thread base 108 tapers, the threads 110 also taper at a like angle.

The tapered surfaces together with the tapered threads combine to provide an easy restarting of the threads into the thread grooves molded into the liner of the PT closure.

In Figures 12 and 13 there is illustrated a further neck finish generally identified by the numeral 120. The neck finish 120 is similar to the neck finish 100 and includes a sealing end 122. The axially outer part of the exterior of the neck finish 120 is in the form of a tapered surface 124 which is stepped radially inwardly to define a step 126. The taper of the surface 124 is at an angle F on the order of $4^\circ \pm 1^\circ$.

Below the step 126 the thread base 128 tapers downwardly and radially outwardly at an angle G on the order of $4^\circ \pm 1^\circ$. This surface terminates in a rib 130. Plural threads 132 project radially outwardly from the thread base 128 and have individual lead-ins 134 as is best shown in Figure 12. The threads 134 are generally flattened and have flat radially outer uniform diameter surfaces 136 as is best shown in Figure 13.

The neck finish 120 functions substantially the same as that of the neck finish 100 for re-engaging the threads 136 thereof into the thread grooves formed in the PT closure liner.

Once again, it is emphasized here that each and every one of the neck finishes specifically described hereinabove is specifically configured for use with PT closures of the type wherein there is a liner formed of a suitable compound such as plastisol and wherein the closure is pressed onto the neck finish and the threads of the neck finish mold threads into the cylindrical liner portion. The neck finishes specifically disclosed and claimed herein are not intended for use with closures of the type which are initially provided with threads and are twisted onto the container or closures which are placed on the containers and then have the threads rolled in the skirts thereof.

Although only several preferred embodiments of the invention have been specifically illustrated and described herein, it is to be understood that minor variations may be made in the neck finishes without departing from the spirit and scope of the invention as defined by the appended claims.

Claims

1. A glass container (36) of the jar and bottle type, said glass container (36) comprising a neck finish (38) having a surface configuration means particularly configured for use with a closure (20) of the push-on-twist-off type having a skirt (26) with a generally cylindrical liner (34) of deformable plastic material, said neck finish (38) having plural lead threads (50) which form com-

the order of 2° , $+1^\circ$, -2° . Below the step 66 is another tapered exterior surface 68 of the neck finish which is tapered at an angle C which is on the order of $7^\circ \pm 2^\circ$.

The surface 68 terminates in a cylindrical thread base 70 from which there projects a plurality of circumferentially spaced threads 72 which may be of a conventional cross section which terminate in a rib 74. Once again, there may be a bead 76 spaced axially below the rib 74.

It will be seen that the tapered surfaces 64, 68 together with the radially inward stepping of the surface 64 provides starter surfaces for aligning the cap squarely with the neck finish and thereby facilitate the starting of the threads into the thread grooves formed in the cylindrical liner portion 34.

In Figures 8 and 9 there is illustrated yet another neck finish generally identified by the numeral 80. The neck finish 80 defines an end 82 with which a seal is made by the liner of the PT cap. The outer surface of the neck finish is provided adjacent the end 82 with a tapered surface 84 which is stepped radially inwardly to define a step 86. Below the step 86 is a further tapered surface 88. The tapered surface 88 terminates in a cylindrical thread base 90. It is to be understood that the surfaces 84, 88 correspond to the surfaces 64, 68 of the neck finish 60. The thread base 90 terminates in a rib 92 and above the rib 92 the thread base 90 has projecting therefrom a plurality of threads 94 each having a tapered lead-in 96. The threads 94 terminate in the rib 92 and the space between base portions of the threads 94 and the rib 92 may be filled in as at 98.

It is to be particularly noted that the radially outer surfaces of the threads lie along a conical path which tapers radially inwardly and outwardly upwardly at an angle D which may be on the order of $2\frac{1}{2}^\circ +1^\circ$, -2° . The neck finish 90 is similar to the neck finish 60 except for the taper of the threads. The taper of the threads results in the thread grooves being of a larger diameter and they greatly increase in depth at the inner edge of the liner part 34 which, together with the centering action of the surfaces 84, 88, facilitates the re-engagement of the PT cap on the neck finish.

In Figures 10 and 11 there is illustrated yet another neck finish generally identified by the numeral 100. The neck finish 100 presents an end 102 for forming a seal with the liner part 32 of the PT closure. The upper outer surface of the neck finish 100 adjacent the end 102 is radially inwardly stepped to define a step 104 and is tapered to define a tapered surface 106 which tapers at an angle E which is on the order of $4^\circ \pm 1^\circ$. Below the step 104 is the thread base 108 which tapers axially downwardly and radially outwardly at an angle F on the order of $3^\circ \pm 1^\circ$.

Threads 110 project from the thread base 108 and have lead-ins 112. The threads 110 terminate in an annular rib 114. It is to be noted from

Figure 11 that the threads 110 are of a generally flattened rectangular cross section. Further, it will be apparent from Figure 10 that each of the lead-ins 112 may be generally bifurcated.

In view of the fact that the thread base 108 tapers, the threads 110 also taper at a like angle.

The tapered surfaces together with the tapered threads combine to provide an easy restarting of the threads into the thread grooves molded into the liner of the PT closure.

In Figures 12 and 13 there is illustrated a further neck finish generally identified by the numeral 120. The neck finish 120 is similar to the neck finish 100 and includes a sealing end 122. The axially outer part of the exterior of the neck finish 120 is in the form of a tapered surface 124 which is stepped radially inwardly to define a step 126. The taper of the surface 124 is at an angle F on the order of $4^\circ \pm 1^\circ$.

Below the step 126 the thread base 128 tapers downwardly and radially outwardly at an angle G on the order of $4^\circ \pm 1^\circ$. This surface terminates in a rib 130. Plural threads 132 project radially outwardly from the thread base 128 and have individual lead-ins 134 as is best shown in Figure 12. The threads 134 are generally flattened and have flat radially outer uniform diameter surfaces 136 as is best shown in Figure 13.

The neck finish 120 functions substantially the same as that of the neck finish 100 for re-engaging the threads 136 thereof into the thread grooves formed in the PT closure liner.

Once again, it is emphasized here that each and every one of the neck finishes specifically described hereinabove is specifically configured for use with PT closures of the type wherein there is a liner formed of a suitable compound such as plastisol and wherein the closure is pressed onto the neck finish and the threads of the neck finish mold threads into the cylindrical liner portion. The neck finishes specifically disclosed and claimed herein are not intended for use with closures of the type which are initially provided with threads and are twisted onto the container or closures which are placed on the containers and then have the threads rolled in the skirts thereof.

Although only several preferred embodiments of the invention have been specifically illustrated and described herein, it is to be understood that minor variations may be made in the neck finishes without departing from the spirit and scope of the invention as defined by the appended claims.

Claims

1. A glass container (36) of the jar and bottle type, said glass container (36) comprising a neck finish (38) having a surface configuration means particularly configured for use with a closure (20) of the push-on-twist-off type having a skirt (26) with a generally cylindrical liner (34) of deformable plastic material, said neck finish (38) having plural lead threads (50) which form com-



plementary threads in said liner (34) when said closure (20) is applied, characterized by resealing means for facilitating the re-engagement of said neck finish threads (50) with said complementary threads in said liner (34), said resealing means including said neck finish threads (50) increasing in width from lead ends (52) thereof to terminal ends thereof in a smooth transition free of steps whereby a complementary thread which will be molded in a deformable plastic skirt liner (34) will have a wide entrance portion for receiving a relatively narrow end of a neck finish thread (50).

2. A glass container according to claim 1, characterized in that said resealing means includes radially outer surfaces of said neck finish threads (50) flaring axially downwardly and radially outwardly.

3. A glass container according to claim 1, characterized in that said resealing means includes both a thread base diameter and radially outer surfaces of said neck finish threads (50) flaring axially downwardly and radially outwardly.

4. A glass container in accordance with claim 3, characterized in that said threads (50) are of a flattened generally rectangular cross section.

5. A glass container according to claim 1, characterized in that said threads (50) are of a flattened generally rectangular cross section and have a flat central peripheral surface.

6. A glass container (36) of the jar and bottle type and a closure (20) in combination, said closure (20) being of the push-on-twist-off type having a skirt (26) with a generally cylindrical liner (34) of deformable plastic material, the glass container (36) comprising a neck finish (38) having surface configuration means particularly configured for use with said closure, said neck finish (38) having plural lead threads (50) which form complementary threads in said liner (34), characterized by resealing means for facilitating the re-engagement of said neck finish threads (50) with said complementary threads in said liner (34), said resealing means including said neck finish threads (50) increasing in width from lead ends (52) thereof to terminal ends thereof in a smooth transition free of steps whereby a complementary thread molded in said skirt liner (34) has a wide entrance portion for receiving a relatively narrow end of a neck finish thread (50).

7. A glass container and closure combination according to claim 6, characterized in that said resealing means includes radially outer surfaces of said neck finish threads (50) flaring axially downwardly and radially outwardly.

8. A glass container and closure combination according to claim 6, characterized in that said resealing means includes both a thread base diameter and radially outer surfaces of said neck finish threads (50) flaring axially downwardly and radially outwardly.

9. A glass container and closure combination according to claim 6, characterized in that said threads (50) are of a flattened generally rectangular cross section.

10. A glass container and closure combination according to claim 9, characterized in that said threads (50) have a flat central peripheral surface.

5 Patentansprüche

1. Glasbehälter (36) in Form eines Kruges oder einer Flasche, wobei der Glasbehälter (36) einen Halsabschluß (38) mit einer insbesondere für die Verwendung mit einem Verschuß (20) zum Zudrücken und Aufdrehen geeigneten Oberflächengestaltung aufweist, wobei der Verschuß einen Rand (26) mit einer allgemein zylindrischen Auskleidung (34) aus verformbarem Kunststoff aufweist, und wobei der Halsabschluß (38) mehrere Führungsgewindegänge (50) aufweist, die komplementäre Gewindegänge in der Auskleidung (34) bilden, wenn der Verschuß (20) aufgesetzt ist, gekennzeichnet durch eine Wiederverschlußeinrichtung zur Erleichterung des Wiedereingreifens der Halsabschluß-Gewindegänge (50) in die komplementären Gewindegänge in der Auskleidung (34), wobei die Wiederverschlußeinrichtung eine Verbreiterung der Halsabschluß-Gewindegänge (50) von ihren vorderen Enden (52) zu ihren hinteren Enden hin in einem stufenfreien glatten Übergang umfaßt, wodurch ein komplementärer Gewindegang, der in einer Randauskleidung (34) aus verformbarem Kunststoff gebildet wird, einen weiten Eintrittsteil zur Aufnahme eines verhältnismäßig schmalen Endes eines Halsabschluß-Gewindeganges (50) aufweist.

2. Glasbehälter nach Anspruch 1, dadurch gekennzeichnet, daß die Wiederverschlußeinrichtung radial äußere Flächen der Halsabschluß-Gewindegänge (50) umfaßt, die sich axial nach unten und radial nach außen erweitern.

3. Glasbehälter nach Anspruch 1, dadurch gekennzeichnet, daß die Wiederverschlußeinrichtung sowohl einen Gewindegang-Basisdurchmesser als auch radial äußere Flächen der Halsabschluß-Gewindegänge (50) umfaßt, die sich axial nach unten und radial nach außen erweitern.

4. Glasbehälter nach Anspruch 3, dadurch gekennzeichnet, daß die Gewindegänge (50) einen abgeflachten, allgemein rechteckigen Querschnitt besitzen.

5. Glasbehälter nach Anspruch 1, dadurch gekennzeichnet, daß die Gewindegänge (50) einen abgeflachten, allgemein rechteckigen Querschnitt sowie eine flache mittlere Umfangsfläche besitzen.

6. Glasbehälter (36) in Form eines Kruges oder einer Flasche und damit kombinierter Verschuß (20), wobei der Verschuß (20) zum Zudrücken und Aufschrauben geeignet ist, und einen Rand (26) mit einer allgemein zylindrischen Auskleidung (34) aus verformbarem Kunststoff aufweist, der Glasbehälter (36) einen Halsabschluß (38) mit einer insbesondere zur Verwendung mit dem genannten Verschuß geeigneten Oberflächengestaltung aufweist, und wobei der Halsabschluß (38) mehrere Führungsgewindegänge (50) aufweist, die komplementäre Gewindegänge in der



Auskleidung bilden, gekennzeichnet durch eine Wiederverschlußeinrichtung zur Erleichterung des Wiedereingreifens der Halsabschluß-Gewindgänge (50) in die komplementären Gewindgänge in der Auskleidung (34), wobei die Wiederverschlußeinrichtung Halsabschluß-Gewindgänge (50) aufweist, deren Breite von ihren vorderen Enden (52) zu ihren hinteren Enden in einem stufenfreien glatten Übergang ansteigt, wodurch ein komplementärer Gewindgang, der in der Randauskleidung (34) gebildet wird, einen weiten Eingangsteil zur Aufnahme eines verhältnismäßig schmalen Endes eines Halsabschluß-Gewindgangs (50) aufweist.

7. Glasbehälter-Verschluß-Kombination nach Anspruch 6, dadurch gekennzeichnet, daß die Wiederverschlußeinrichtung radial äußere Flächen der Halsabschluß-Gewindgänge (50) aufweist, die sich axial nach unten und radial nach außen erweitern.

8. Glasbehälter-Verschluß-Kombination nach Anspruch 6, dadurch gekennzeichnet, daß die Wiederverschlußeinrichtung sowohl einen Gewindgang-Basisdurchmesser als auch radial äußere Flächen der Halsabschluß-Gewindgänge (50) aufweist, die sich axial nach unten und radial nach außen erweitern.

9. Glasbehälter-Verschluß-Kombination nach Anspruch 6, dadurch gekennzeichnet, daß die Gewindgänge (50) einen abgeflachten, allgemein rechteckigen Querschnitt besitzen.

10. Glasbehälter-Verschluß-Kombination nach Anspruch 9, dadurch gekennzeichnet, daß die Gewindgänge (50) eine flache mittlere Umfangsfläche besitzen.

Revendications

1. Un récipient en verre (36) du type bocal et bouteille, ledit récipient en verre (36) comprenant un goulot (38) avec des moyens de configuration de surface spécialement conformés pour être utilisés avec une fermeture (20) du type de celles pouvant être engagées par pression et retirées par rotation, cette fermeture ayant une jupe (26) avec un rembourrage généralement cylindrique (34) en matériau plastique déformable, ledit goulot (38) ayant de nombreux filets de guidage (50) qui forment des filets complémentaires dans ledit rembourrage (34) quand on applique ladite fermeture (20), caractérisé par des moyens servant à resceller qui facilitent le ré-engagement desdits filets du goulot (50) avec lesdits filets complémentaires dans ledit rembourrage (34), lesdits moyens servant à resceller comprenant lesdits filets du goulot (50) dont la largeur augmente à partir des extrémités de guide (52) jusqu'aux extrémités terminales de façon progressive et sans palier, afin qu'un filet complémentaire qui sera moulé sur la jupe d'un rembourrage (34) en plastique déformable ait une partie d'entrée large pour recevoir une extrémité relativement étroite d'un filet du goulot (50).

2. Un récipient en verre selon la revendication 1, caractérisé en ce que lesdits moyens servant à

resceller comprennent des surfaces radialement externes desdits filets du goulot (50) qui s'évasent vers le bas de façon axiale et vers l'extérieur de façon radiale.

3. Un récipient en verre selon la revendication 1, caractérisé en ce que lesdits moyens servant à resceller comprennent à la fois un diamètre de filet à la base et des surfaces radialement externes desdits filets du goulot (50) qui s'évasent vers le bas de façon axiale et vers l'extérieur de façon radiale.

4. Un récipient en verre selon la revendication 3, caractérisé en ce que lesdits filets (50) ont une section transversale aplatie généralement rectangulaire.

5. Un récipient en verre selon la revendication 1, caractérisé en ce que lesdits filets (50) ont une section transversale aplatie généralement rectangulaire et une surface périphérique centrale plane.

6. Un récipient en verre (36) du type bocal et bouteille et une fermeture (20) qui lui est associée, ladite fermeture (20) étant du type de celles engagées par pression et retirées par rotation, cette fermeture ayant une jupe (26) avec un rembourrage généralement cylindrique (34) en matériau plastique déformable, ledit récipient en verre (36) comprenant un goulot (38) avec des moyens de configuration de surface spécialement conformés pour être utilisés avec ladite fermeture, ledit goulot (38) ayant de nombreux filets de guidage (50) qui forment des filets complémentaires dans ledit rembourrage (34), caractérisés par des moyens servant à resceller qui facilitent le ré-engagement desdits filets du goulot (50) avec lesdits filets complémentaires dans ledit rembourrage (34), lesdits moyens servant à resceller comprenant lesdits filets du goulot (50) dont la largeur augmente à partir des extrémités de guidage (52) jusqu'aux extrémités terminales de façon progressive et sans palier, afin qu'un filet complémentaire qui sera moulé dans la jupe d'un rembourrage (34) ait une partie d'entrée large pour recevoir une extrémité relativement étroite d'un filet du goulot (50).

7. Un récipient en verre et une fermeture qui lui est associée selon la revendication 6, caractérisés en ce que lesdits moyens servant à resceller comprennent des surfaces radialement externes desdits filets du goulot (50) qui s'évasent vers le bas de façon axiale et vers l'extérieur de façon radiale.

8. Un récipient en verre et une fermeture qui lui est associée selon la revendication 6, caractérisés en ce que lesdits moyens servant à resceller comprennent à la fois un diamètre de filets à la base et des surfaces radialement externes desdits filets du goulot (50) qui s'évasent vers le bas de façon axiale et vers l'extérieur de façon radiale.

9. Un récipient en verre et une fermeture qui lui est associée selon la revendication 6, caractérisés en ce que lesdits filets (50) ont une section transversale aplatie généralement rectangulaire.

10. Un récipient en verre et une fermeture qui lui est associée selon la revendication 9, caractérisés en ce que lesdits filets (50) ont une surface périphérique centrale plane.

