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(54) Cover for a container

(57) A cover, and an assembly of a holder (E) and a cover (D), the cover comprising a closing wall (8) having a downward edge which lies so closely against a holder flange (4) extending perpendicularly to the casing wall (2) of the holder, or is so screened by a wall portion (5) connected with the holder flange and extending substantially parallel to the casing wall, that engagement of this downward edge is not possible, whilst at an engage-

ment position an engagement lip (9) is connected with the downward edge of the closing wall, which engagement lip extends from the downward edge, so as to be engageable, and wherein the material from which the cover is manufactured is a different material than the material from which at least the engagement lip is manufactured, so that at least the engagement lip has a different appearance than the rest of the cover.

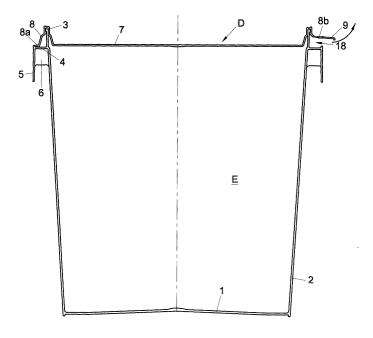


Fig. 4

Description

[0001] This invention relates to a cover intended for a holder, which holder comprises a bottom and a casing wall, and an upper edge intended for engagement of the cover, the casing wall having connected thereto, adjacent the upper edge, a holder flange extending substantially perpendicularly to the casing wall, the cover comprising a cover wall which is provided at a circumferential edge with a closing wall which extends in a downward direction and which through a side proximal to the cover wall engages the upper edge, the closing wall being provided with a downward edge which, in a condition of the cover when placed on the holder, lies so closely against the holder flange extending perpendicularly to the casing wall, or is so screened by the casing wall or a wall portion extending substantially parallel to the casing wall, that engagement of this downward edge is not possible.

[0002] Such a cover, together with a holder designed as a bucket, is described, for instance, in applicant's European patent application EP-A-0 855 347. For the purpose of opening the cover of this known assembly, the holder of the assembly is provided with a sealing lip which can be broken away, so that the user can grip the downward edge of the closing wall of the cover for the purpose of opening the cover. Although in the known bucket, breaking away the sealing hardly causes any weakening of the holder, this danger is nonetheless still present. The invention contemplates a cover of the type described in the preamble, intended for a holder, whereby taking the cover off the holder does not require breaking away any parts of the holder, so that the holder retains its original stiffness while yet a sealing can be provided, and whereby the sealing is provided in a clearly recognizable manner, so that it is immediately clear to the user where the sealing is situated.

[0003] To that end, according to the invention, the cover of the type described in the preamble is characterized in that at an engagement position, engagement of the downward edge is not possible, while at the engagement position an engagement lip is connected with the closing wall, which engagement lip is readily engageable and which upon engagement extends from the closing wall such that in a natural manner the detachment of the cover from the holder is efficiently effected, while the material from which the cover is manufactured is a different material than the material from which at least the engagement lip is manufactured, so that at least the engagement lip has a different appearance than the rest of the cover. 'Different material' should be understood to include the same material having a different color.

[0004] Because the downward edge of the closing wall is not engageable at any point, the user, for the purpose of opening the cover, will have to pull the engagement lip, so that the closing wall adjacent the engagement lip is rendered clear of the upper edge of the holder, whereafter the cover can be pulled loose from the

holder. The holder flange, and the wall portion possibly connected with the holder flange, can extend throughout the entire circumference of the holder without an interruption or any change in profile needing to be provided therein for the purpose of forming a sealing lip. The holder will therefore have substantially the same stiffness throughout its circumference. Due to the engagement lip being manufactured from a different material than the other parts of the cover, this engagement lip can be made clearly recognizable, for instance in that it has a different color. Thus, the cover lip could be designed to be, for instance, red, while the rest of the cover is blue. The user's attention is then immediately attracted by the engagement lip which stands out clearly from the rest of the cover. To further provide the assembly with a seal, it is particularly favorable, according to a further elaboration of the invention, when the closing wall, at least on either side of the engagement lip, is provided with a weakening provision, while the design and positioning of the engagement lip impose, upon engagement of the engagement lip for opening the cover, a pulling direction which is such that at least a closing wall portion bounded by the weakening provisions is partly or wholly pulled loose from the remaining closing wall by breaking the weakening provisions. In these operations, the weakening provisions mentioned will be broken, which breakage becomes visible, so that it is clear that the cover has been taken off the holder before. The weakening provisions therefore have the sealing function that is of such great importance in view of any improper opening of the assembly according to the invention. Moreover, by breaking the weakening provisions, the closing wall is broken, so that the force to be applied for taking the cover off the upper edge is considerably reduced. Preferably, the boundary of the two kinds of material lies adjacent the weakening provision mentioned.

[0005] It is noted that it is known per se from DE-U-8906937.4 to provide weakening provisions in the closing wall of a cover to simplify the opening of the cover. In the case of the cover described in this publication, however, the cover can be taken off the holder without the weakening provision being broken, as the lower edge is engageable at the engagement area. When the pulling force is exerted upwardly in the direction of the closing wall, the weakening provisions will not break and the cover can be opened without this leaving any traces. Moreover, the cover known from the Utility model mentioned is not provided with a engagement lip, let alone an engagement lip which upon engagement extends from the closing wall such that in a natural way the detachment of the cover from the holder is efficiently effected. Nor is it known from this publication to design the engagement area in a different kind of material than the rest of the cover, so that the engagement area can have, for instance, a different color than the rest of the cover.

[0006] According to an alternative elaboration, instead of or supplemental to the weakening provisions

provided on either side of the engagement lip, the cover can be provided with a sealing bridge at the engagement position, which sealing bridge is connected with the closing wall and optionally with the engagement lip, so that upon engagement of the engagement lip at least one of the connections of the sealing bridge with the closing wall or with the engagement lip is broken. When a user sees that such a connection is broken, he can assume that the cover has already been taken from the holder once, at least that an attempt to that effect has been made.

[0007] The invention further relates to an assembly of a cover according to the invention and a holder. According to a further elaboration of the invention, the holder can then be designed as a bucket, which is made, for instance, from plastic, or as a can which is made from metal and which is provided with a double upper edge at the top. The closing wall of the cover then falls between the casing wall and a wall portion connected with the holder flange, extending parallel to the casing wall.

[0008] Further elaborations of the invention are described in the subclaims and will be further clarified on the basis of a number of exemplary embodiments, with reference to the drawings.

Fig. 1 shows a top plan view of a cover of an exemplary embodiment of an assembly according to the invention;

Fig. 2 shows a cross-sectional view of the cover along line II-II of Fig. 1;

Fig. 3 shows a similar cross-sectional view to that represented in Fig. 2, with the engagement lip represented both in the closed and in an opened position;

Fig. 4 shows a cross-sectional view along line II-II of Fig. 1, while further the holder of the assembly is represented and the engagement lip is represented in the opened position;

Fig. 5 shows in more detail the portion of the cover and the holder adjacent the engagement lip in cross section along line II-II of Fig. 1;

Fig. 6 shows a top plan view of the engagement lip in the condition represented in Fig. 2;

Fig. 7 shows a side elevation of the engagement lip in the condition represented in Fig. 2;

Fig. 8 shows a top plan view of the engagement lip represented in the condition in Fig. 4;

Fig. 9 shows a side elevation of the engagement lip disposed in the condition represented in Fig. 4;

Figs. 10-13 show similar views to those represented in Fig. 8 with engagement lips having an alternative design;

Fig. 14 shows a cross-sectional view along line XIV-XIV of Fig. 13;

Fig. 15 shows a perspective view of a part of the engagement lip as represented in Figs. 1-7;

Fig. 16 shows in perspective and partly in cross section the plastic film by means of which the closing

wall portion carrying the engagement lip is connected with the rest of the closing wall;

Fig. 17 shows an alternative embodiment of an engagement lip in perspective;

Fig. 18 shows another alternative embodiment of an engagement lip of an exemplary embodiment of an assembly according to the invention;

Fig. 19 shows a similar perspective view to that represented in Fig. 18 of an alternative embodiment of a sealing;

Fig. 20 shows a similar view to that represented in Fig. 19 of another alternative embodiment of the sealing;

Fig. 21 shows a cross-sectional view across the cover edge of the exemplary embodiment represented in Fig. 19 at the engagement position;

Fig. 22 shows a top plan view of a cover intended for cooperation with a can;

Fig. 23 shows a front view of the cover shown in Fig. 22:

Fig. 24 shows a cross-sectional view along line XX-IV-XXIV of Fig. 23;

Fig. 25 shows a similar cross-sectional view to that represented in Fig. 24, with the cover fitted on a can; Fig. 26 shows a front view of a number of stacked covers of the type shown in Figs. 22-25; and

Fig. 27 shows a cross-sectional view of the stack of covers shown in Fig. 26.

[0009] In the figures, parts having the same function will be designated by the same reference numerals. The holders shown in Figs. 4, 5, 14 are plastic buckets. The holder shown in part in Fig. 25 is a can. All covers D shown in the exemplary embodiments are manufactured by means of an injection molding process from plastic. Other materials for the manufacture of the holder and/or the cover, however, are also options. Fig. 4 shows in cross section a complete assembly of a holder E and a cover D. The holder E comprises a bottom 1 and a casing wall 2. Provided adjacent an upper edge 3 of the casing wall 2 is a holder flange 4 extending substantially perpendicularly to the casing wall 2. Connected with an edge 4a of the holder flange 4, remote from the casing wall 2, is a wall portion 5 extending substantially parallel to the casing wall 2. Extending between this wall portion 5 and the casing wall 2, in this example, are ribs 6 for enhancing the strength of the holder E. However, such ribs are not requisite. The cover D comprises a cover wall 7. At its circumference, the cover D is provided with a closing wall 8, which extends in a downward direction and, by way of a side thereof proximal to the cover wall 7, engages the upper edge 3 of the holder E, which upper edge 3 in this case is formed by the upper edge 3 of the casing wall 2. The closing wall 8 is provided with a downward edge 8a which, in a condition of the cover D when placed on the holder E, lies so closely against the bucket flange 4 extending perpendicularly to the casing wall 2, or is so screened by

the wall portion 5 extending substantially parallel to the casing wall 2, that engagement of this downward edge 8a is not possible. To enable taking the cover D off the holder E, the downward edge 8a of the closing wall 8 is connected, at an engagement position, with an engagement lip 9 which extends from the downward edge 8a so as to be engageable. In all exemplary embodiments represented, the material from which the cover D is manufactured is a different material than the material from which at least the engagement lip 9 is manufactured, so that at least the engagement lip 9 has a different appearance than the rest of the cover.

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[0010] Preferably, engagement occurs by the fingers, but 'engageable' is to be understood to include engageable with a tool, such as pliers or a screwdriver. In Fig. 5, this engagement lip 9 is indicated in dots.

Fig. 3 shows the engagement lip 9 in the original position and in an engaged position designated 9a. In Fig. 4 the cover D is represented while placed on the holder E, with the engagement lip 9 in the engaged position. Figs. 6 and 7 show the engagement lip 9 represented in Figs. 1-5 once again in top plan view and in side elevation in the as yet unengaged position. Figs. 8 and 9 show the engagement lip 9 in top plan view and side elevation, respectively, in the engaged position. In particular in Fig. 9 it is clearly visible that in the engaged position an opening 18 is formed in the closing wall 8, under which the fingers can be slipped to pull the cover D loose from the holder E.

[0011] Figs. 10-13 show a number of alternative designs of the engagement lip 9 in the same position and elevational view as represented in Fig. 8.

[0012] Fig. 14 shows the cross section along line XIV-XIV of Fig. 13. It clearly shows that in that exemplary embodiment the engagement lip 9 is held in the engagement position by way of a breakable connecting bar 19. [0013] The closing wall 8 is provided with a weakening provision 10-12, at least on either side of the engagement lip 9. This weakening provision 10-12 is clearly visibly represented in the various exemplary embodiments of Figs. 15-18 and designated there by the reference numerals 10, 11, and 12, respectively. The weakening provisions 10-12 are provided in such a way that when the engagement lip 9 is engaged and, for opening the cover D, is pulled sideways or upwards, at least a closing wall portion 8b that is bounded by the weakening provisions 10-12 is pulled loose from the remaining closing wall 8, and remains connected with the cover D only through a side remote from the downward edge 8a, such that the closing wall portion 8b pulled loose is engageable for the further opening of the cover D. In this condition, the opening 18, mentioned earlier, is created, which is indicated in Figs. 4 and 9 and under which the user can slip his fingers for further opening the cover D. In this exemplary embodiment, the boundary between the two material areas lies adjacent the weakening provisions 10, 11, 12, so that in addition to the engagement lip 9 also the closing wall portion 8b bounded by the

weakening provisions has a different appearance, such as, for instance, a different color, than the rest of the cover D.

[0014] In all exemplary embodiments represented in Figs. 15-18, a flange 14, extending substantially parallel to the cover wall 7 is connected with the downward edge 8a of the closing wall 8. The weakening provisions 10-12 then extend also into this flange 14 on opposite sides of the engagement lip 9. In the exemplary embodiment of Fig. 15, the weakening provisions in the flange 14 are designed as recesses, whilst the weakening provisions in the closing wall 8 are designed as a thin-walled film. In Fig. 16, the thin-walled film is represented in perspective and partly in cross section. As the engagement lip 9 is pulled sideways and upwards, this film is broken, which makes it visible that at least an attempt has been made to take the cover D off the holder E. In Fig. 17 too it is clearly visible that the flange 14 is interrupted at the weakening provision 11 and that the closing wall 8 is of thin-walled design at the weakening provision 11.

[0015] In the exemplary embodiment represented in Fig. 18, the weakening provisions 12 in the closing wall 8 are designed as recesses, and in the flange 14 connecting to the closing wall 8 are designed as films 12a. It will be clear that other types of weakening provisions are also possible, such as perforations, breakable connecting elements and the like.

[0016] In order to effect easier folding up of the closing wall portion 8b, further a weakened line 15 may be provided in the closing wall 8, which weakened line 15 is represented in cross section in Fig. 5, and which extends between the weakening provisions 10-12 substantially parallel to the downward edge 8a of the closing wall 8. In the present exemplary embodiments, this weakened line 15 is likewise designed as a thin-walled film in the closing wall 8. For this weakened line 15, too, other embodiments are possible, such as, for instance, perforations or the like. The weakened line 15 can be made so weak that upon pulling the cover lip 9 the closing wall portion 8b which is bounded by the weakened line 15 and the two weakening provisions 10-12 provided in the closing wall on either side of the cover lip 9, are completely pulled loose from the closing wall 8 for forming a recess 18 in the closing wall 8. The recess 18 in the closing wall 8 has a shape such that engagement of the edge bounding this recess 18 for the purpose of opening the cover D is possible. As discussed hereinbefore, it is also possible that the closing wall portion 8b remains connected via the weakened line 15 with the rest of the closing wall 8 and therefore is pulled loose only partly from the closing wall 8. It is preferred that a boundary between the two material areas is also located adjacent the weakening line 15 mentioned, such that in addition to the engagement lip 9 also the closing wall portion 8b which is bounded by the weakened line 15 mentioned has a different appearance, such as, for instance, a different color, than the rest of the cover.

[0017] Although not requisitely so, in all the exemplary

embodiments shown in Figs. 1-21, the cover D is further provided with a connecting wall 17 which extends between a circumferential edge 16 of the cover wall 7 and the closing wall 8 in an upward direction with respect to the cover wall 7, while the upper edge 17a of the connecting wall 17 is connected with an upper edge 8c of the closing wall 8, such that the upper edge 3 of the casing wall 2, in a condition of the cover D when placed on the holder E, is confined between the connecting wall 17 and the closing wall 8. In that way, an airtight closure between the cover D and the holder E can be accomplished.

[0018] Figs. 19 and 20 show two embodiments of a cover edge adjacent the engagement position with an alternative solution for a sealing. In this alternative solution, adjacent the engagement position, a sealing bridge 20 is provided. The sealing bridge 20 is connected with the closing wall 8 and optionally with the engagement lip 9, such that upon engagement of the engagement lip 9 at least one of the connections of the sealing bridge 20 with the closing wall 8 or with the engagement lip 9 is broken. In the exemplary embodiment shown in Fig. 19, the sealing bridge 20 extends on the side of the engagement lip 9 remote from the closing wall 8. In the exemplary embodiment of Fig. 20, the sealing bridge 20 extends between the closing wall 8 and the engagement lip 9. In the present exemplary embodiments, the sealing bridge itself is provided with weakening provisions 23 which will be broken as the engagement lip 9 is pulled up, so that the sealing bridge 20 is pulled loose from the closing wall 8 of the cover. In the exemplary embodiment of Fig. 19, the sealing bridge 20 is connected via connections 22 with the engagement lip 9. When these connections 22 are of robust design, the sealing bridge 20 will be pulled up together with the engagement lip 9, and the breakable connections 23 will be broken. It is also possible, however, that the breakable connections 23 are not present and that the connections 22 are designed as breakable connections 22. The sealing bridge 20 then remains connected with the closing wall 8 of the cover, but upon pulling up the engagement lip 9 the breakable connections 22 are pulled loose, so that a user can tell that it has already been attempted once to open the cover.

[0019] It is noted in passing that both figures clearly show that the closing wall 8 is provided, on either side of the engagement lip 9, with interruptions 21 which bound a closing wall portion 8b, so that upon engagement of the engagement lip 9 this closing wall portion 8b is pulled up along with the engagement lip 9.

[0020] Fig. 21 clearly shows that the sealing bridge 20 can optionally be connected via breakable connections 24, 25 with the closing wall portion 8b or with the flange 14 connected with that closing wall portion 8b. For that matter, these connections 24, 25 can also be designed as non-breakable connections, so that upon pulling up the engagement lip 9 the sealing bridge 20 is pulled loose from the closing wall 8 by breaking the

weakening provisions 23 in the sealing bridge 20.

[0021] It will be clear that the holder E may be fitted with a handle, which may or may not be made of plastic, for forming a bucket. When the holder E is not provided with a handle, it is commonly designated in practice by the term 'pot'.

[0022] Figs. 22-27 show an exemplary embodiment of a cover intended to be placed on a can. As is clearly represented in Fig. 25, the can has an upper edge 33. The upper edge 33 forms part of a wall portion 35 which extends substantially parallel to the casing wall 32 and which is connected with the casing wall 32 of the can by way of a can flange 34. The cover D engages the upper edge 33 of the can by way of the closing wall 38. The downward edge 38a of the closing wall 38 of the cover is not engageable because it is disposed between the casing wall 32 and the wall portion 35. To enable the cover to be nonetheless taken off the can, an engagement lip 39 is connected with the closing wall 38. The engagement lip 39 is connected with a closing wall portion 38b bounded by weakening provisions 40 which are to be broken when removing the cover D from the can. The engagement lip 39 is designed in a different material than the rest of the cover, so that this engagement lip 39, for instance, has a different color. The engagement lip 39 is accommodated in a storage condition in a chamber 41. The chamber is formed by a lowered cover wall portion 37a in the cover wall 37. The lowered cover wall portion 37a is connected with the cover wall 37 by way of chamber walls 42 extending substantially perpendicularly to the cover wall 37. Optionally, also the lowered cover wall portion 37a can be designed in a different material than the rest of the cover wall 37, so that that portion too can have a different color. To keep the engagement lip 39 in the storage condition, in the present exemplary embodiment two chamber walls 42 are provided with a snap edge 43 behind which the engagement lip 39 is snapped in the storage condition. For taking the cover D off the can, the engagement lip 39 is engaged and brought from the storage condition into an upwardly swiveled position, which requires the lip to be moved out of the chamber 41 by pulling it away from under the snap edges 43. When subsequently the engagement lip 39 brought into the upwardly swiveled position is pulled, the weakening provisions 40 are broken, so that the closing wall 38 is broken, the closing tension is removed and the cover D can be pulled further from the can while exerting a low force. Because the engagement lip 39 in the storage condition is disposed in the chamber 41, the covers are stackable with little loss of space, which is clearly represented in Figs. 26 and 27. The top plan view of Fig. 22 shows the engagement lip 39 in an unfolded position, i.e., moved out of the chamber 41. In Figs. 23-27 the engagement lip 39 is disposed in the chamber 41, under the snap edges 43.

[0023] It will be clear that the invention is not limited to the exemplary embodiment described but that various modifications are possible within the framework of the

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invention. Thus the holder and the cover can consist in one part in that they are connected to each other with a hinge or a connecting part. The injection mold for the purpose of manufacturing the cover according to the invention preferably has two plastic supply channels. One plastic supply channel terminates in a first cavity in which the cover D, with the exception of the engagement lip 9, 39 and optionally the closing wall portion 8b or the lowered cover wall portion 37a, is molded. The second plastic supply channel terminates in a second cavity in which the engagement lip 9, 39 and optionally the closing wall portion 8b or the lowered cover wall portion 37a is molded. The first and the second cavities can be temporarily separated from each other during the molding process by means of a movable barrier in the mold. After filling one of the cavities and after some degree of curing of the plastic therein, the barrier can thereupon be pulled away and the other cavity can be filled with the other plastic material. The second plastic material will then still adhere to the first plastic material injected earlier.

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[0024] It is also possible, however, that the two cavities are connected with each other by very narrow channels in which the weakening provisions 10-12, 15 and 40 are molded. The supply of the plastic should then be controlled such that the two plastics meet in the respective narrow channels which connect the two cavities with each other. In the latter case, it is possible that the two cavities are filled simultaneously with plastic. It is selfevident that the two plastic supply channels are each connected to their own respective plastic supply source, which plastic supply sources contain different plastics, for instance plastics that have mutually different colors.

Claims

1. A cover intended for a holder (E), which holder (E) comprises a bottom (1) and a casing wall (2; 32), and an upper edge (3; 33) intended for engagement of the cover (D), the casing wall (2; 32) having connected thereto, adjacent said upper edge (3; 33), a holder flange (4; 34) extending substantially perpendicularly to the casing wall (2; 32), the cover (D) comprising a cover wall (7; 37), the cover wall (7; 37) being provided at a circumferential edge with a closing wall (8; 38) which extends in a downward direction and which engages the upper edge (3; 33) by way of a side proximal to the cover wall (7; 38), the closing wall (8; 38) being provided with a downward edge (8a; 38a) which, in a condition of the cover (D) when placed on the holder (E), lies so closely against the holder flange (4; 34) extending perpendicularly to the casing wall (2; 32), or is so screened by the casing wall (32) or a wall portion (5) extending substantially parallel to the casing wall (2), that engagement of this downward edge (8a; 38a) is not possible, characterized in that also at an engagement position, engagement of the downward edge

(8a; 38a) is not possible, whilst at the engagement position an engagement lip (9; 39) is connected with the closing wall (8; 38), which lip (9; 39) is readily engageable and upon engagement extends from the closing wall (8; 38), such that in a natural manner the detachment of the cover (D) from the holder (E) is efficiently effected, while the material from which the cover (D) is manufactured is a different material than the material from which at least the engagement lip (9; 39) is manufactured, so that at least the engagement lip has a different appearance than the rest of the cover.

- 2. A cover according to claim 1, characterized in that the closing wall (8; 38), at least on opposite sides of the engagement lip (9; 39), is provided with a weakening provision (10, 11, 12), while the design and positioning of the engagement lip (9; 39) impose, upon engagement of the engagement lip (9; 39) for opening the cover (D), a pulling direction which is such that at least a closing wall portion (8b; 38) bounded by the weakening provisions is partly or wholly pulled loose from the remaining closing wall (8; 38) by breaking the weakening provisions (10, 11, 12; 40), while the boundary between the two material areas lies adjacent said weakening provisions (10, 11, 12; 40), so that in addition to the engagement lip also the closing wall portion (8b; 38) bounded by the weakening provisions has a different appearance than the rest of the cover.
- 3. A cover according to claim 2 or 3, characterized in that after the weakening provisions (10, 11, 12) have been broken, the closing wall portion (8b) bounded by the weakening provisions remains connected to the cover (D) only through a side remote from the downward edge (8a), such that the closing wall portion (8b) pulled loose is engageable for further opening the cover (D).
- 4. A cover according to any one of claims 1-3, characterized in that the engagement lip (9; 39) is connected with the closing wall (8; 38).
- **5.** A cover according to claim 4, **characterized in** that the engagement lip (9) is connected with the downward edge (8a) of the closing wall (8).
- 6. A cover according to at least claim 2 or 3, characterized in that the downward edge (8a) of the closing wall (8) has connected thereto a flange (14) extending substantially parallel to the cover wall (7), while the weakening provisions (10, 11, 12) provided on opposite sides of the engagement lip (9) also extend into this flange (14).
- 7. A cover according to claim 2 or 3, characterized in that the weakening provisions (10-12) at least

comprise a thin-walled film or like breakable element which forms an integral part of the cover (D).

- **8.** A cover according to claim 6, **characterized in that** said weakening provisions in the closing wall (8) are designed as recesses (12), and in the flange (14) connected with the closing wall (8) are designed as films (12a) or like breakable element.
- **9.** A cover according to claim 6, **characterized in that** the weakening provisions (10, 11) in the closing wall (8) are designed as films or like breakable elements, and in the flange (14) connected with the closing wall (8) are designed as interruptions.
- 10. A cover according to any one of the preceding claims, **characterized in that** in the closing wall (8) further a weakened line (15) is provided which extends between the weakening provisions (10-12) substantially parallel to the downward edge (8a) of the closing wall (8), while a boundary between the two materials is also located adjacent said weakened line (15), such that in addition to the engagement lip (9) also the closing wall portion (8b) which is bounded by said weakened line (15) has a different appearance than the rest of the cover.
- 11. A cover according to claim 10, **characterized** in that said weakened line (15) is so weak that when pulling the cover lip (9) the closing wall portion (8b) bounded by said weakened line (15) and the two weakening provisions (10-12) provided in the closing wall (8) on opposite sides of the cover lip (9) are pulled completely loose from the closing wall (8), for forming a recess (18) in the closing wall (8), the recess (18) in the closing wall (8) having a shape such that engagement of the edge bounding this recess (18) is possible for the purpose of opening the cover (D).
- 12. A cover according to any one of the preceding claims, **characterized in that** between a circumferential edge (16) of the cover wall (7) and the closing wall (8), a connecting wall (17) is present, extending in upward direction with respect to the cover wall (7), said connecting wall (17) having its upper edge (17a) connected with an upper edge (8c) of the closing wall (8), such that the upper edge (3) of the holder (E), in a condition of the cover (D) when placed on the holder (E), is locked between the connecting wall (17) and the closing wall (8).
- 13. A cover according to any one of the preceding claims, **characterized in that** adjacent the engagement position a sealing bridge (20) is provided, which sealing bridge (20) is connected with the closing wall (8) and optionally with the engagement lip (9), so that upon engagement of the engagement

- lip (9) at least one of the connections of the sealing bridge (20) with the closing wall (8) or with the engagement lip (9) is broken.
- **14.** A cover according to claim 13, **characterized in that** the sealing bridge (20) extends on the side of the engagement lip (9) remote from the closing wall (8).
- **15.** A cover according to claim 13, **characterized in that** the sealing bridge (20) extends between the closing wall (8) and the engagement lip (9).
- **16.** A cover according to any one of claims 13-15, **characterized in that** the closing wall (8), at least on opposite sides of the engagement lip (9), is provided with interruptions (21) which bound a closing wall portion (8b), so that upon engagement of the engagement lip (9), this closing wall portion (8b) is pulled up along with the engagement lip (9).
- 17. A cover according to any one of the preceding claims, **characterized in that** in the closing wall (37) adjacent the engagement lip (39) a lowered cover wall portion (37a) is provided for forming a chamber (41), which chamber (41) is bounded by chamber walls (42) extending substantially perpendicularly to the cover wall (37) and which connect the cover wall portion (37a) with the cover wall (37), the engagement lip (39) in a storage condition being disposed in the chamber (41).
- **18.** A cover according to claim 17, **characterized in that** adjacent an upper side of at least one of the chamber walls (42) a snap edge (43) is provided, behind which the engagement lip (39) is snapped in the storage condition.
- 19. A cover according to claim 17 or 18, characterized in that in addition to the engagement lip (39), also the lowered cover wall portion (37a) is designed in a different material than the rest of the cover (D), so that also this lowered cover wall portion clearly has a different appearance than the rest of the cover.
- 20. An assembly comprising a cover (D) according to any one of the preceding claims and a holder (E) comprising a bottom (1), a casing wall (2), an upper edge (3) engaged by the cover (D), and a holder flange (4; 34) extending substantially perpendicularly to the casing wall (2), the closing wall (8; 38) being provided with a downward edge (8a; 38a) which, in a condition of the cover (D) when placed on the holder (E), lies so closely against the holder flange (4; 34) extending perpendicularly to the casing wall (2; 32), or is so screened by the casing wall (32) or a wall portion (5) extending substantially par-

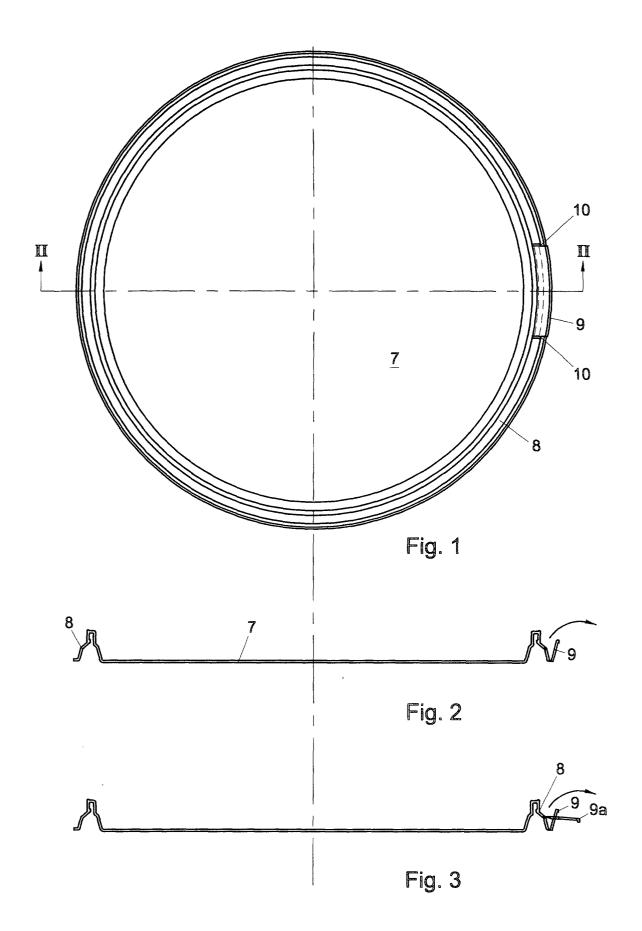
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allel to the casing wall (2), that engagement of this downward edge (8a; 38a) is not possible.

- **21.** An assembly according to claim 20, **characterized in that** the holder is a bucket (E).
- **22.** An assembly according to claim 21, **characterized in that** the bucket (E) is provided with a handle, which may or may not be made of plastic, for forming a bucket.
- 23. An assembly according to claim 21 or 22, characterized in that the bucket (E) is manufactured from plastic.
- **23.** An assembly according to claim 20, **characterized in that** the holder is a can.



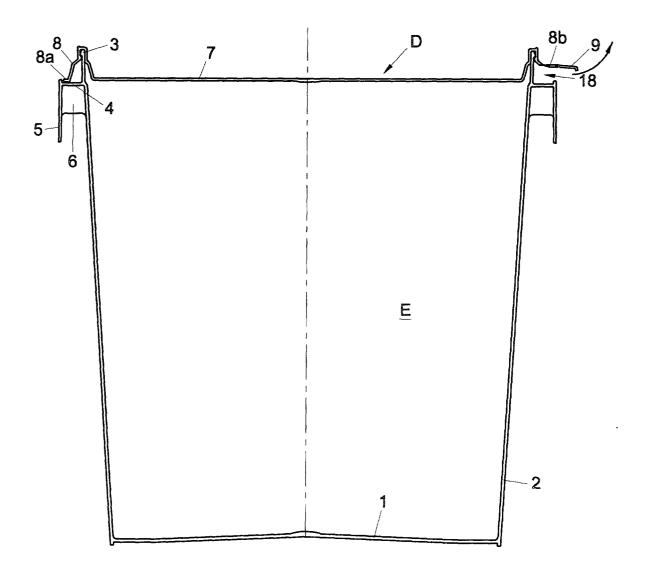
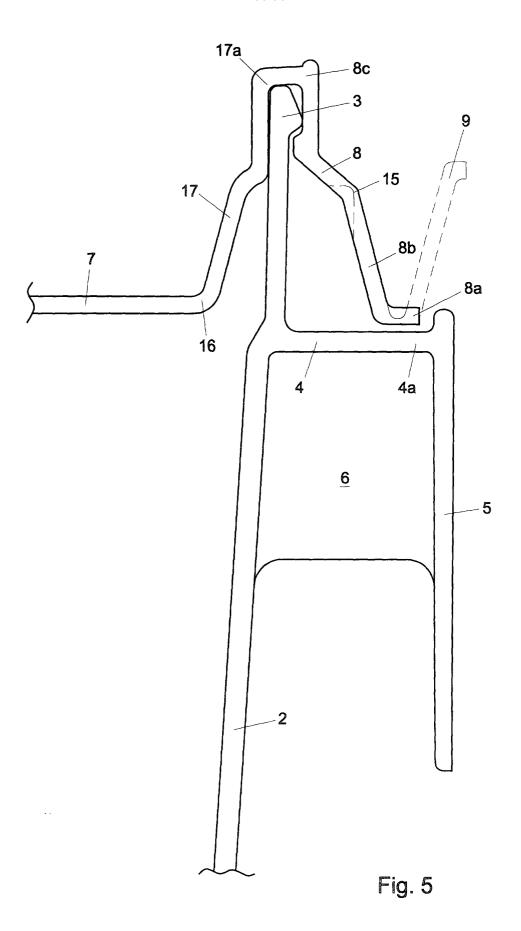


Fig. 4



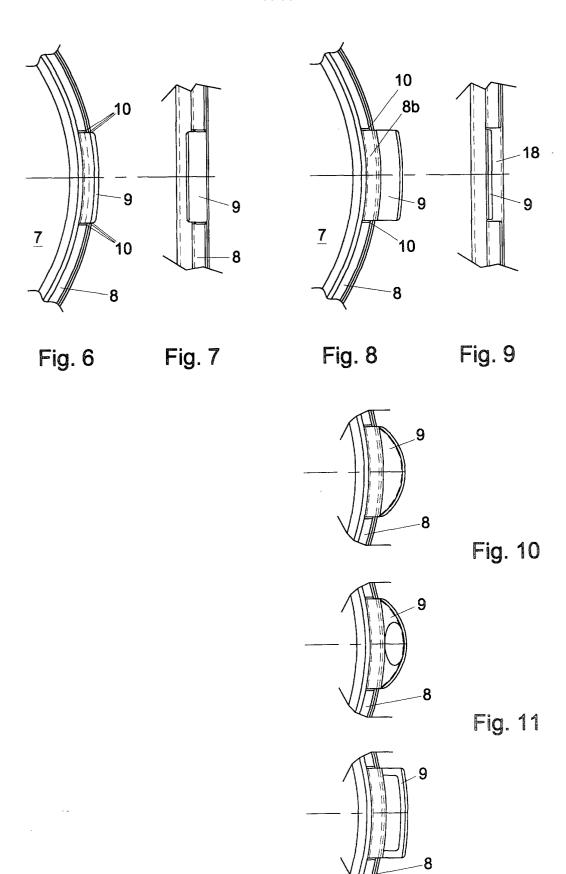


Fig. 12

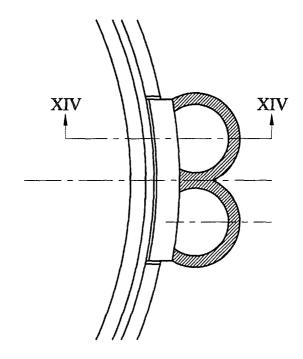
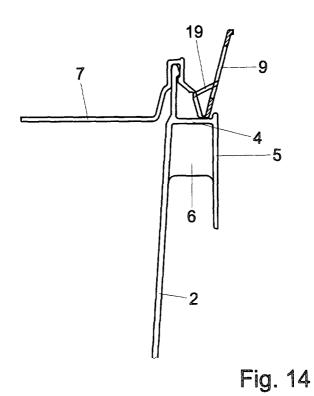
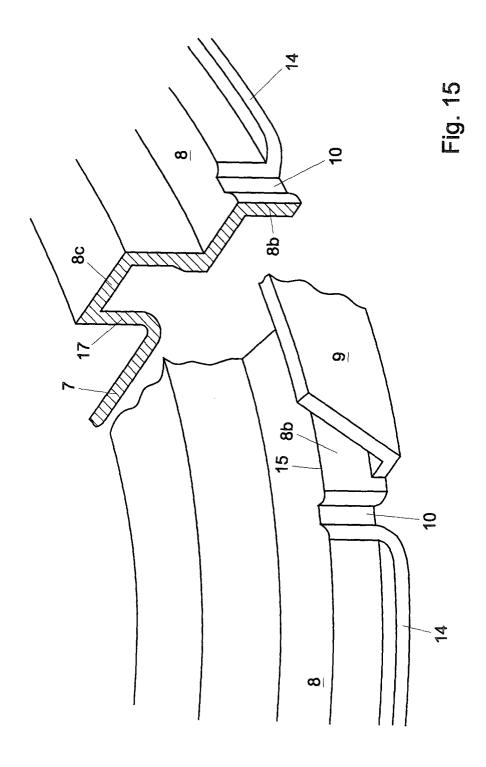
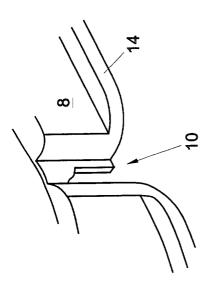


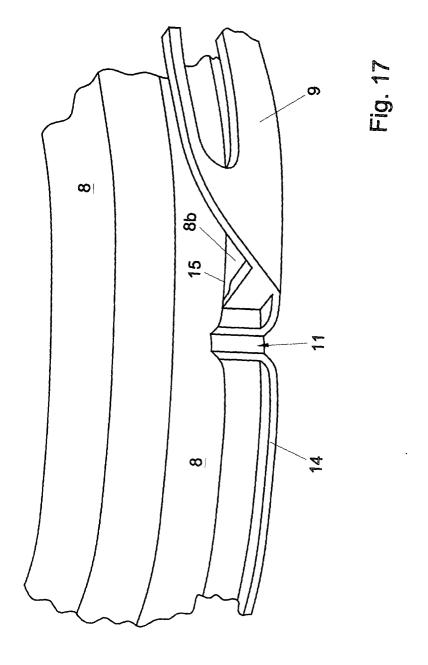
Fig. 13

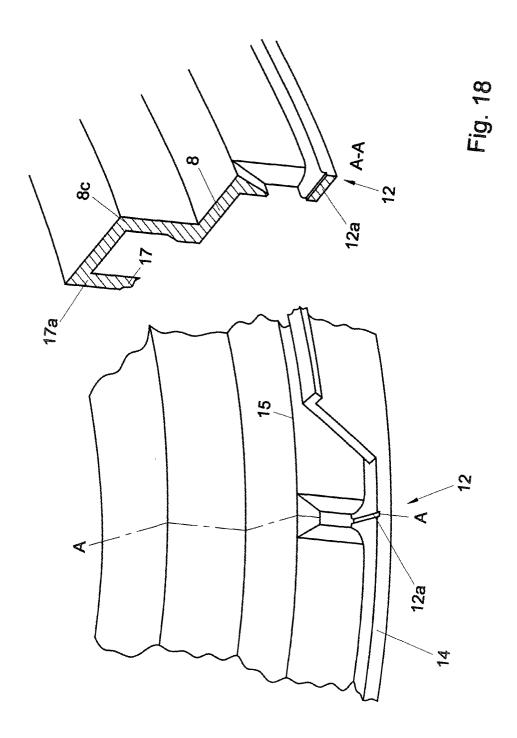


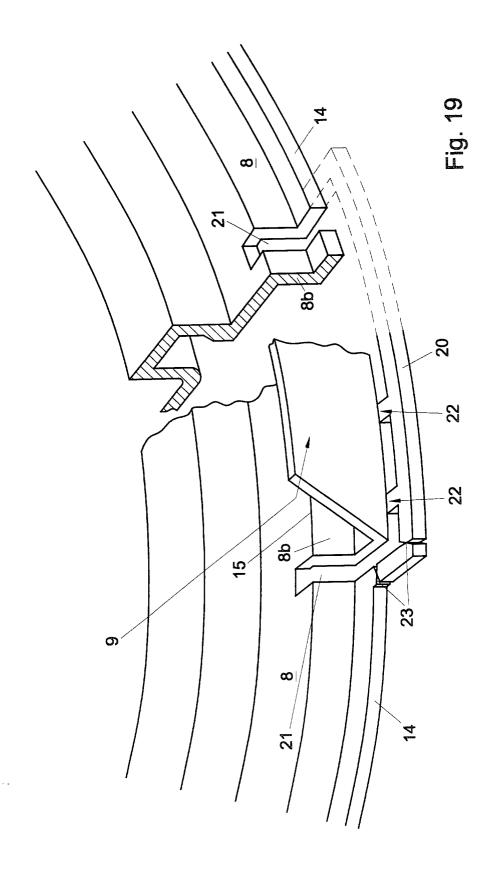


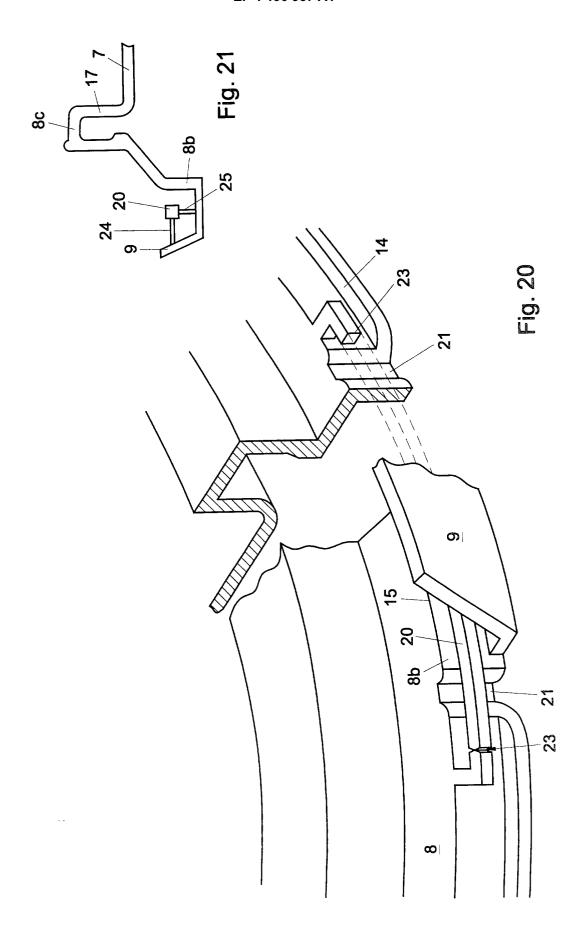


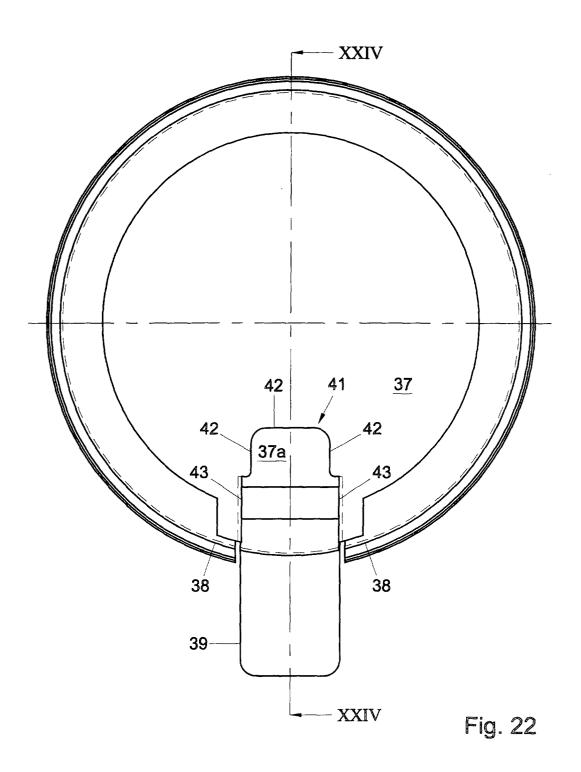


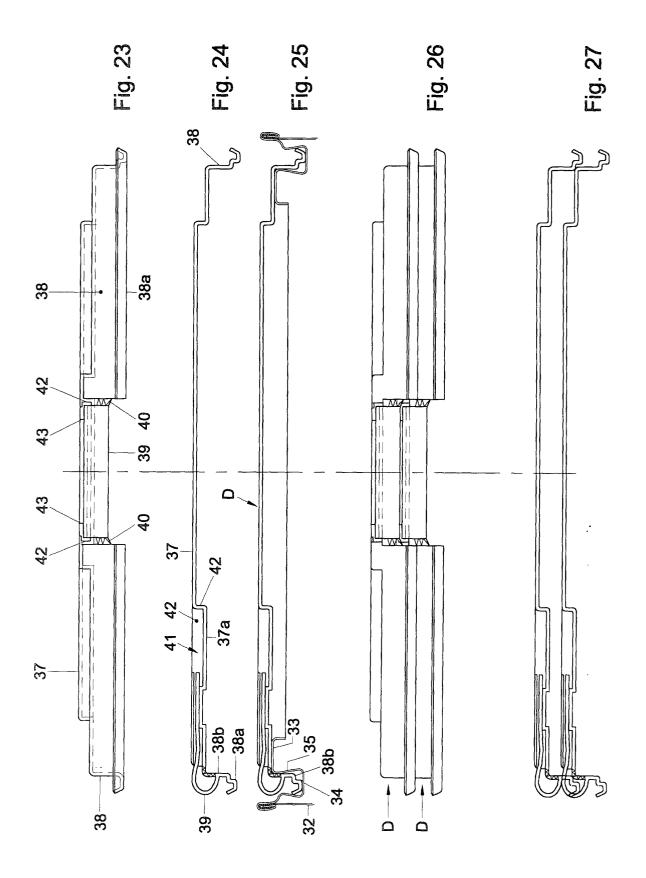














EUROPEAN SEARCH REPORT

Application Number EP 01 20 3575

	DOCUMENTS CONSIDI				
Category	Citation of document with in of relevant pass	dication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
Y,D	DE 89 06 937 U (JOK) 10 August 1989 (1989 * the whole document	1-24	B65D43/02		
Y,D	EP 0 855 347 A (DEN 29 July 1998 (1998- * the whole documen	1-24			
Υ	US 5 931 332 A (CHE) 3 August 1999 (1999 * the whole documen		AL) 17-19		
Υ	DE 83 36 794 U (JOK KG) 2 February 1984 * the whole documen	21-24			
X,P	WO 00 58171 A (DEN); DEN BRINK B V VAN 5 5 October 2000 (2000 * the whole document				
X,P	NL 1 011 678 C (DEN 27 September 2000 (* the whole documen	2000-09-27)	1-16, 20-24	TECHNICAL FIELDS SEARCHED (Int.CI.7) B65D	
	The present search report has b	peen drawn up for all claims			
	Place of search	Date of completion of the searc	zh de	Examiner	
	THE HAGUE	28 November 20	001 Pe	rnice, C	
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another and the same category enclogical background inwritten disclosure rinediate document	E : earlier pale after the filli ner D : document o L : document o	inciple underlying the nt document, but put	e invention blished on, or on is	

EPO FORM 1503 03.92 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 01 20 3575

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-11-2001

	Patent documer cited in search rep		Publication date		Patent family member(s)	Publication date
DE	8906937	U	10-08-1989	DE	8906937 U1	10-08-1989
EP	0855347	A	29-07-1998	NL AU CA EP TR	1005099 C2 5273698 A 2224903 A1 0855347 A1 9800135 A2	29-07-1998 30-07-1998 27-07-1998 29-07-1998 21-08-1998
US	5931332	Α	03-08-1999	NONE	n man sidah dilib agar ugar man sida sidah dilib iligar ugar ugar ugar ugar ugar sara	Min with with affil fills diff, upp ones and sale some file and
DE	8336794	U	02-02-1984	DE	8336794 U1	02-02-1984
WO	0058171	A	05-10-2000	NL NL AU WO	1011678 C2 1012909 C1 3577000 A 0058171 A1	27-09-2000 27-09-2000 16-10-2000 05-10-2000
NL	1011678	С	27-09-2000	NL AU WO NL	1011678 C2 3577000 A 0058171 A1 1012909 C1	27-09-2000 16-10-2000 05-10-2000 27-09-2000

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82