(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 041 008 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
04.10.2000 Bulletin 2000/40

(51) Int Cl.[7]: **B65D 19/18**, B65D 19/00

(21) Application number: **99500086.6**

(22) Date of filing: **27.05.1999**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **18.03.1999 ES 9900707**

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(54) Dismantled container

(57) Dismantled container consisting of a load ledge (1), a foldable wall (2) and a lid (3), the load ledge and the lid being provided with facing peripheral channel (4), sized to allow the foldable wall (2) to be mounted, having supporting feet (11) available for the load ledge (1) fixed with an enlargement (12) of less height and the lid (3) being provided with ribs (5) which are perpendicular to the channel (4).

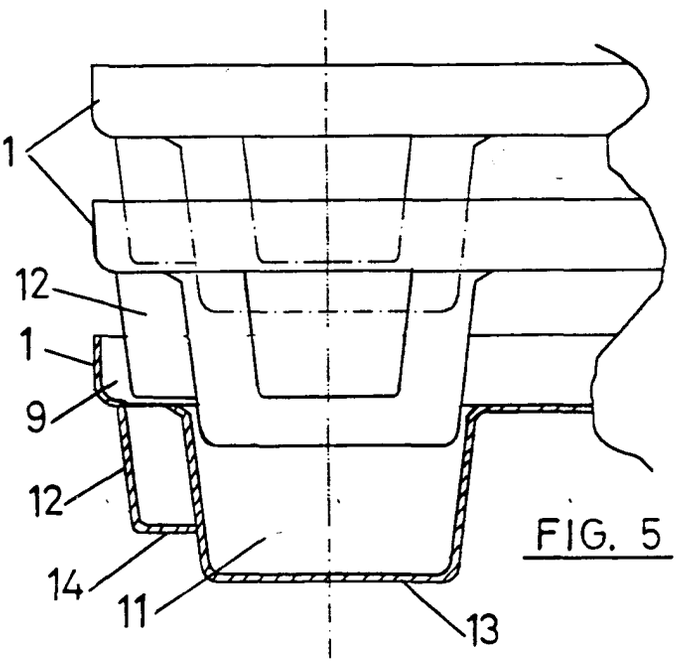

FIG. 5

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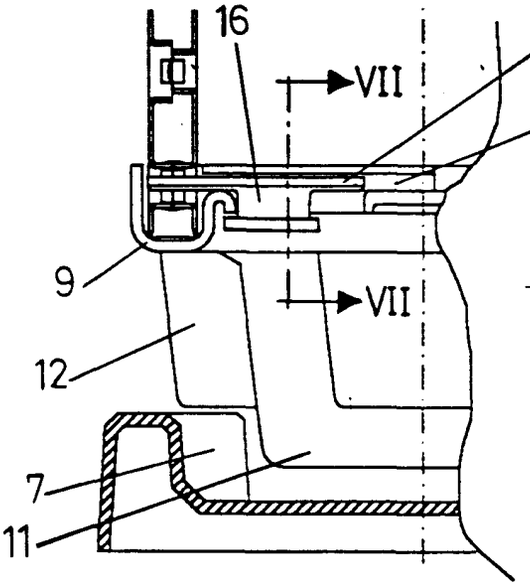


FIG. 6

Description

[0001] The present invention refers to a dismantled container, formed by three independent dismantled components, a loading ledge, a foldable body, and a closure lid which can be assembled or dismantled in a quick and easy manner that can be left dismantled position allowing for easy transport and storage.

[0002] This type of indicated containers are now well known, where the loading ledge and the lid have peripheral facing channels dimensionated to receive the upper and lower edges of the wall, which conforms, to the foldable body. The container has security closures that prevent the wall leaving the channels. In addition the wall, which adapts the body, has folding lines available between its inner and outer edges, likewise for reinforced items placed next to the edges and placed to coincide with the closure lid and ledge items.

[0003] These type of displayed containers present problems during the piling up stage, due to the lack of resistance of the closure lid that will receive the weight of the containers situated on top of it, in addition to the security of the position of the pile.

[0004] The present invention has the object for this displayed container to present a way in which the loading ledge and the closure lid secure the position of the pile, either by the resistance they offer, as well as in securing the position of the pile.

[0005] Another object of this invention is to allow the body, in its folding position, to be allocated inside another container body, reducing the volume during storage and transport stage.

[0006] Both the ledge and the closure lid are independently piled up between each other when the container is dismantled, and measures are taken or made available which limits the coupling the items to others when piled up, by way of making separation easier at the moment of reinforcement or build of the container.

[0007] These and other advantages the invention obtains with the container are because of the special constitution of its components.

[0008] The loading ledge has supportable legs available, which are fitted on the side of the upper surface at least with an enlargement of less height than the feet. The enlargement remains finished on his lower part on a supporting surface situated on top of the bottom of the foot.

[0009] With regards to the closure lid, this is exteriorly drawn back with respect to the outer surface at the bottom of the peripheral channel, and in consequence remains crossed on this surface because of two series of ribs that are perpendicular to the channels. The ribs slightly protrude at the back and present a transversal rounded section. In addition, the lid has an outer surface available inside the peripheral channel and in a position that coincides with the area taken up by the enlargements of the feet of the load ledge, with protrudes that stay on level over the outer surface of the peripheral channel and give support to what will rest on the widths of the feet of the load ledge, superimposing or heaping up two or more containers between each other.

[0010] With the enlargements of the feet of the ledge and with the protrudes of the closure lid, means of support are found that assures the position of the pile of the containers. On the other hand, the existence of the ribs of the lid and their configurations, guarantee the flat surface structure of the lid, avoiding any type of warping. Moreover, the items mentioned make piling independently easier both for the ledge and the lid, without producing excessive fittings.

[0011] To account for the folding of the wall defining the container body, this is achieved by means of folding lines that flow between the edges of the upper and lower edges of the wall, and that coincide with the vertical edge of the body and the mean vertical lines of bigger walls. With this structuring, the body or the wall is folded towards the inside, reducing the contour and allowing it to reside in the body of another container.

[0012] All the characteristics shown, likewise similar with other particular items of this invention, can be better understood through the following description, made with reference to adjoining drawings which show an example of this procedure without restrictions.

[0013] In the drawings:

[0014] Figure 1 is the side view of a container established in accordance with the invention.

[0015] Figure 2 is an upper plan of the closure lid of the container of fig. 1.

[0016] Figure 3 is a transversal section of two piled up lids, taken in accordance with the dashed line III-III in figure 2 on a bigger scale.

[0017] Figure 4 is an upper plan of the loading ledge.

[0018] Figure 5 is a partial side view of the underside of three-piled load ledges, with the inside chosen in accordance with the dashed line V-V in Figure 4.

[0019] Figure 6 is a partial vertical section of the container, taken in accordance with the dashed line VI-VI of figure 4, piled over a lid of another container situated immediately underneath.

[0020] Figure 7 is a plan view of the body of the container, with the wall in a loaded position.

[0021] Figure 8 is a similar view of figure 7, with the body wall in a folded position.

[0022] Figure 9 corresponds to the development of one of the reinforced items assembled over the wall of the foldable body.

[0023] Figure 10 is a longitudinal section of the reinforced item, taken in accordance with the dashed line X-X in figure 9.

[0024] Figure 11 is a diametrical section by means of subjection of the reinforced item, taken in accordance with the dashed line XI-XI in figure 9.

[0025] Figure 12 is the upper plan of the lock flat of the enclosure items.

[0026] Figure 13 is a longitudinal section of the lock flat, with a retaining element, taken in accordance with

the dashed line XIII-XIII in figure 12.

[0027] Figure 1 shows the container established in accordance with the invention, composed of a ledge lower load 1, based on plastic material, a side of the foldable wall 2, composed of cardboard, and an upper closure lid 3, established also on the basis of plastic material. These three components are independently easily dismantled and assembled.

[0028] Closure lid 3, as it appears in figures 2 and 3 is composed of a fitted tray of a series of shapes that delimits the upside down peripheral channel 4, and intermediate reinforced channels 5, that flow following perpendicular directions to the edges of the tray and have a rounded section.

[0029] To be able to appreciate Figure 3 better, the intermediate reinforced channels protrude outwards with respect to the back of the channel (4), and remain slightly drawn back with respect to the outer wall (6) of the channel, protruding also the edge of the wall with respect to the inner surface of the tray 3. This arrangement allows, in accordance with what is shown in figure 3, the piling of lids over others, achieving a stable and a self-supporting position.

[0030] The lid 3 presents on its outer surface and starting with the peripheral channel 4 , and protrudes 7, and in order to appreciate figure 3 better, stay on level over the outer surface of the channel 4.

[0031] In addition, the lid 3 is a security closures bearing 8 for fixing it to the container wall 2, in accordance with what will be shown ahead.

[0032] The container ledge 1, can be appreciated in accordance with figures 4 to 6 which is composed of a resistant tray or layer, also of plastic material, fitted shape that delimits a peripheral channel 9, with the same dimensions as the channel 4, of the lid 3, faced with at the same time, such as reinforced intermediate ribs or channels 10. In addition the ledge 1 has hollow support legs available 11, and a decreasing part that goes towards the back, that allows the piling of the ledges over others. These legs show on one of its side's surface, has at least an enlargement 12 that has less height than the feet 11 and remains lower drawn back with respect to its back 13. These enlargements 11 are less limited because of a supporting surface 14 that serves as a restrictive joint between ledges 1, figure 5, making two or more piles available.

[0033] Moreover, this enlargement 12 co-operates in piling containers, in accordance with what is shown in figure 6.

[0034] The protrudes 7 of the lid and the enlargements 12 of the ledge, figures 2 and 4, occupy positions that coincide, in the way that a container is superimposed above another, as appears in figure 6. The protrudes 12,of the ledge of the upper container give much better support over the protrudes 7, of the lid of the lower container, the lower portion of the leg 11 remaining inside the vertical protrudes' surface, preventing sliding.

[0035] The load ledge 1 carries security closures 15 that have the same characteristics as the closure 8 of the lid 3.

[0036] The closures 8, and 15 of the lid 3, and the ledge 1, are established with a lock 16, referring to figure 6, established which can be better appreciated in figures 12 and 13 through an contour plate 17 sensibly made rectangular with a passing collar 18, fitted inside ringed grooves 19. This lock is assembled in shapes carried out in the load ledge 1, and lid 3, that delimits parallel and facing channels 20, figures 6 and 7, perpendicular to the channel 9 of the ledge, and of the channel 4 of the lid. The plate 17, which establishes the lock, is available in a way that the collar 18 remains directed towards the outside of the container. The lock 16 is understood, in addition to, as a retaining item 21, in the way of a stopper 22, inserted by adjusting in the collar 18 and fitting the peripheral ribs 23 that penetrate using pressure until reaching the grooves 19, where they house. The stopper 22 remains finished in a head 24 that will serve as a way of stopping the lock 16, from leaving or escaping.

[0037] With this arrangement displayed, the lock or plate 17 can slide in a perpendicular direction between a blocked position, shown in figure 6, in which the lock or plate crosses the channel, and in an open position, in which the lock or plate remains drawn back, moved towards the inside of the ledge or lid, and outside the channel 9 of the ledge or of the lid 4.

[0038] The wall of the container 2 is composed of, which can be better appreciated in figures 8 and 9, a cardboard item that delimits folding lines 25 of a fitted closed shape, that flow between the walls upper and lower edges coinciding with the vertical edges and a mean vertical line on the larger walls that allow their foldability, when not forming part of the container.

[0039] In figure 8, details the joining of the free edges 26 of the cardboard item in order to form the closed shape shown in figures 8 and 9.

[0040] The cardboard wall 2 has available, near its upper and lower edges, coinciding with which, has reinforcement items 27, figure 1, in which each one of them are composed of two plates placed near to and fixed in a coinciding position one on the inside surface, and the other on the outside surface of the wall.

[0041] Reinforcement plates, as is shown in figures 10a and 12, can be composed of a plastic material 28, fixed to two faint transversal lines 29, which will define the folding lines. With this arrangement, the plate 28 can adopt a U shape in order to join over the cardboard wall 2, straddling from its upper and lower edges. The plate 28 has dimensional and positioned holes 30 available to coincide with the holes in the cardboard wall 2. In addition the plate 28 establishes female tubular rivets 31, and male rivets 32, fixed by small inner notches 33, and external notches 34 for a mounted joint to be established introducing tubular male rivets 32 across tubular female rivets 31. The holes 30 can be fixed to peripheral connectable and fixed walls 35 likewise for the tubular rivets

31 and 32 of the inner and outer mountings.

[0042] The holes 30, and tubular rivets 31, and 32, of the plate 28 are left positioned in a way while assembling the build of these straddling plates over the edges of the wall 2, that they coincide with the holes and openings of the cardboard wall 2. In this way a perfect joint and fastening of the plate over the cardboard wall is obtained.

[0043] With this mentioned arrangement, in order to proceed to assemble the container, the ledge 1 is positioned over a horizontal surface, supported by its legs 11. Proceeding and with the locks 17 in a drawn back position, the lower edge of the cardboard wall 2 is put into the channel 9, sliding the locks 17 towards the closed position shown in figure 6, which can be operated from the inside of the container thanks to a passing collar 18 of the plates 17 that make up the locks 16. The lock 16, figures 6 and 7, will pass through the facing gaps 30 of the reinforcement plate 28, of the wall. Once the container is filled up the lid can be prepared, with its peripheral channel 4 in an upside down position joined over the upper edge of the wall 2. As in the pervious case over the locks of the closure items of the lid the same arrangement stated could be carried out and represented by with reference to figure 6.

[0044] As it can be seen, the container is designed in a way that its three components are independently piled, can include making available each of the walls 2 in a folded position between the ledge 1 and the lid 3 of the same container.

[0045] Thanks to the existence of the security closures 8, included in the load ledge and lid, a secure fixing of the container is achieved.

[0046] However, it can be understood that the shape and dimensions of the contour in addition to the height of the container will vary in order to adapt the container to the necessities of the addressee.

[0047] The arrangement of the container reports considerable advantages because of all of its fixed or unfixed components are able to be easily recycled and occupy an unfixed position in highly reduced space.

[0048] The channels 20 can be left out, due to the establishment of the lock 16, by the plate 17 and the retaining element 21, figures 13 and 14. For this it will be sufficient that on the ledge 1 and lid 3, oblong holes are made through which will pass the collar 18, of the plate 17, that remained retained by means of a stopper 21.

Claims

1. Dismantled container established by a load ledge (1), a foldable wall (2) and a closure lid (3), in which the ledge (1) and lid (3) have peripheral channels (4) available with facing dimensions to receive respectively, the inner and outer edges of the wall (2), and the security closures (8) in order to prevent the wall (2) from escaping from the channels, and in which the wall (2) conforms to a closed shape, to coincide with the limits of the peripheral channels of the ledge (1) and lid (3) and has available folding lines (25) that flow between the upper and outer edges, having available in addition to the wall (2), reinforced items (27) next to the edges stated, situated to coincide with the closure items (8, 15) of the ledge (1) and lid (3), in order to receive blocked elements (16) of these items, characterised in that the load ledge (1) which have support legs (11) available fixed to one of the sides surface, with at least with an enlargement (12) of less height than the legs (11), which remains lower drawn back on a support surface (14), situated on top of the back (13) of the feet (11); and in that the closure lid (3) is exteriorly resunk with respect to the outside surface at the back of the peripheral channel (4) and remains crossed by two series of ribs (5) perpendicular to the channel (4), that slightly protrude with respect to the back and present a transversal rounded section, which, in addition to, has available a closure lid (3) on its outer surface, inside the channel (4), and in a position to coincide with the position of the enlargements (12) of the feet (11) of the load ledge (1), of the protrudes (7) that remain above on level with the outside surface of the peripheral channel (4) and add support to whatever will rest on the enlargements (12) of the feet (11) of the load ledge (1) superimposing or piling of the containers.

2. The container according to claim 1, characterised in that the folding lines (25) flow to coincide with the vertical edges of the wall (2) and in accordance with the mean vertical line of bigger walls.

3. The container according to claim 1, characterised in that the blocking element of the closure items is established through a flat body form (17) and a retaining element (21), in which the flat body has available on one of its surfaces a passing collar (18); in which the retaining element (21) is configured in the shape of a tubular stopper (22), anchored inside the collar (18), of the lock (16) and fixed on a head or on a peripheral enlargement (24); the collar (18) being in order to go across an oblong groove of the load ledge (1), and lid (3), or along of which can slide or in which is retained by means of a head (24) of the stopper (22) of the flat body (17).

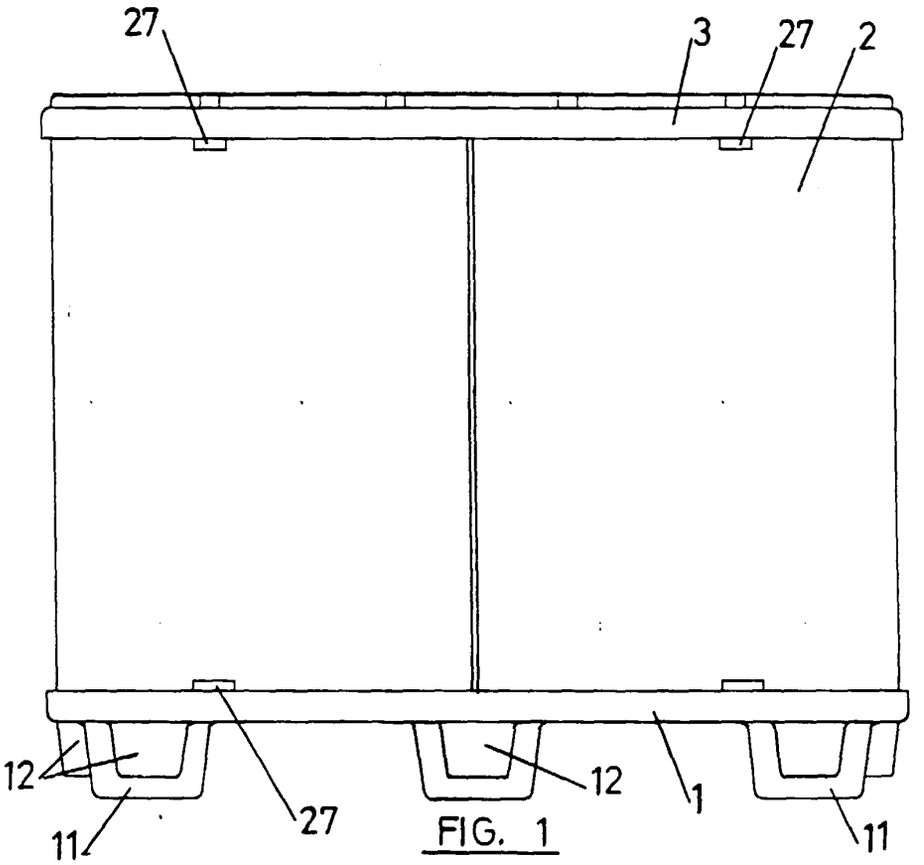


FIG. 1

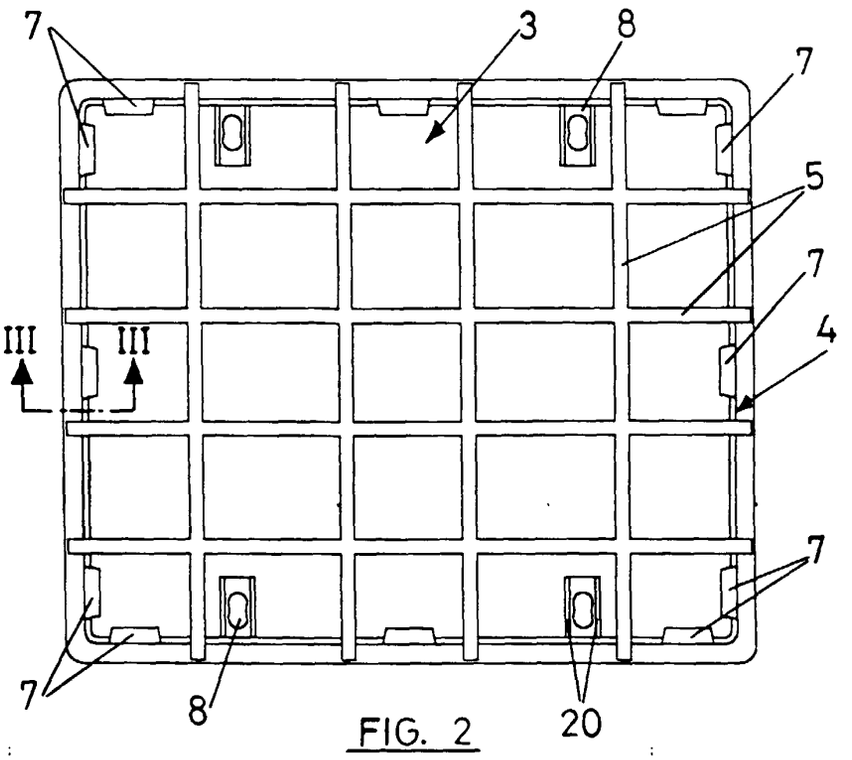


FIG. 2

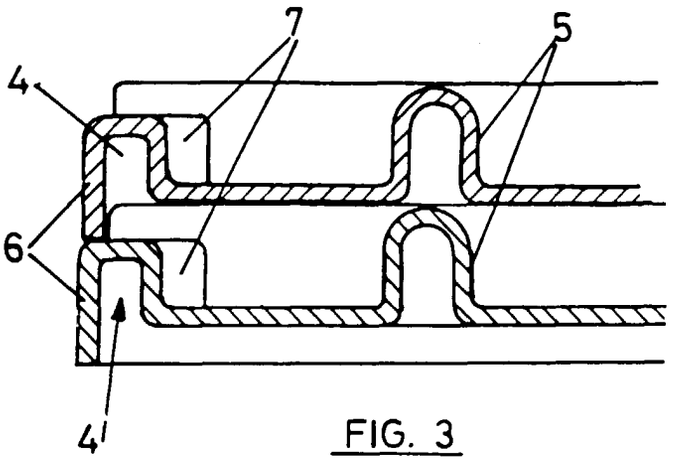


FIG. 3

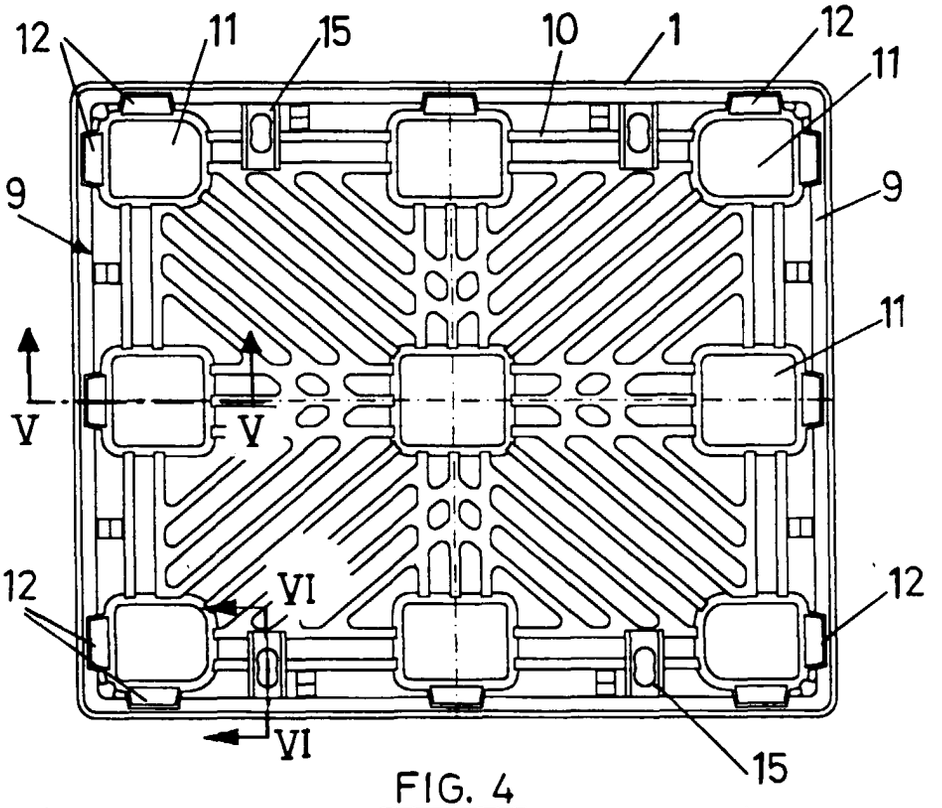


FIG. 4

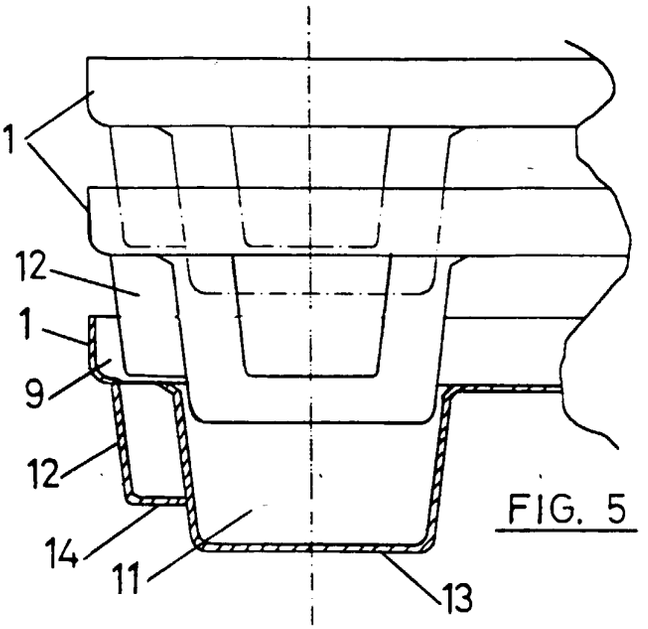


FIG. 5

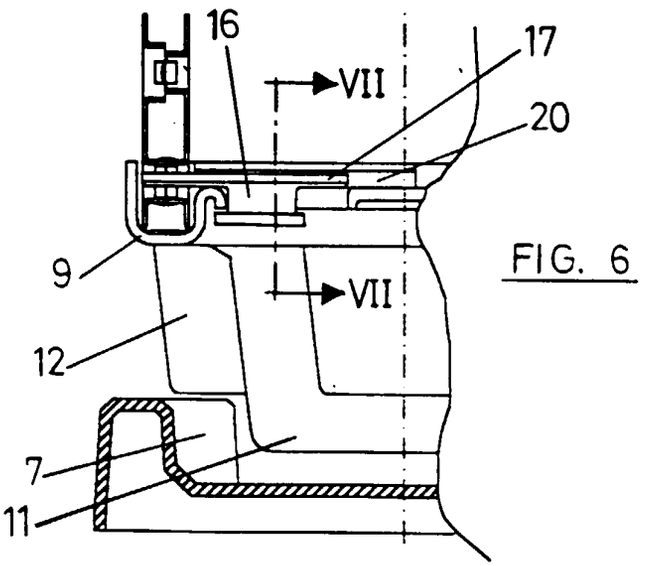


FIG. 6

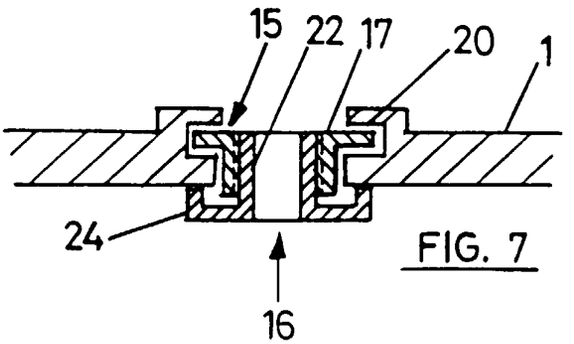


FIG. 7

FIG. 8

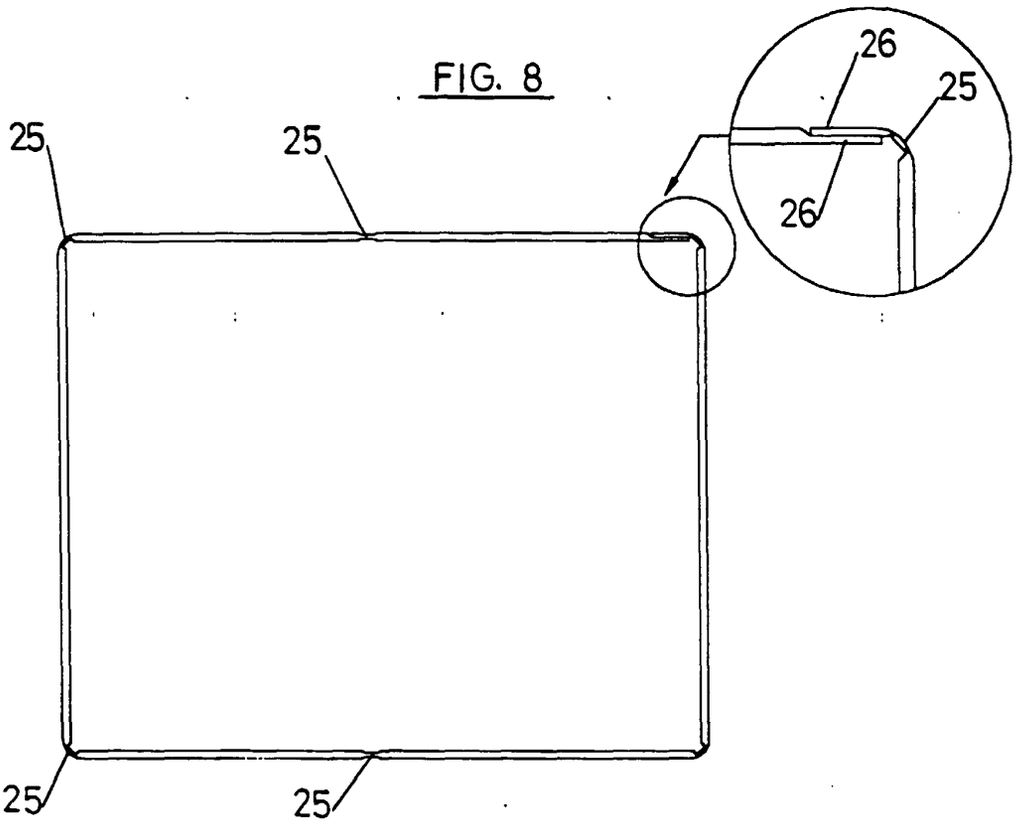
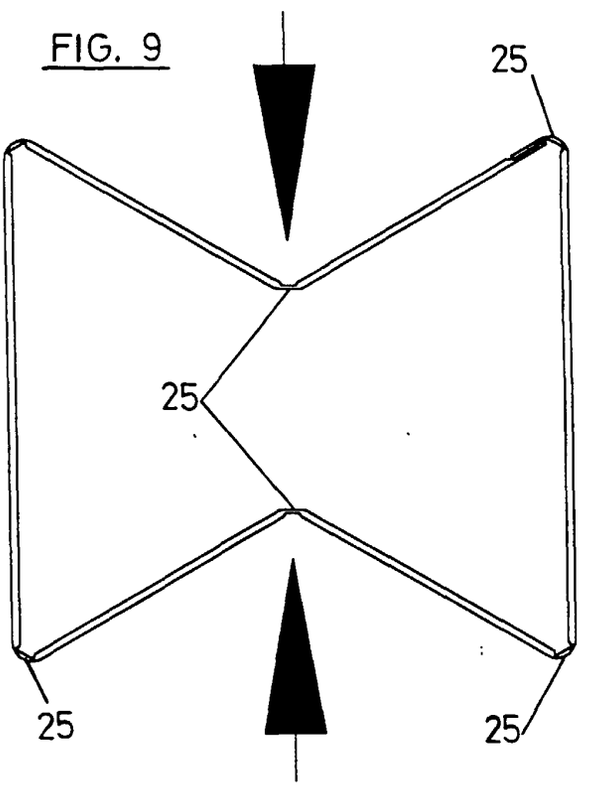


FIG. 9



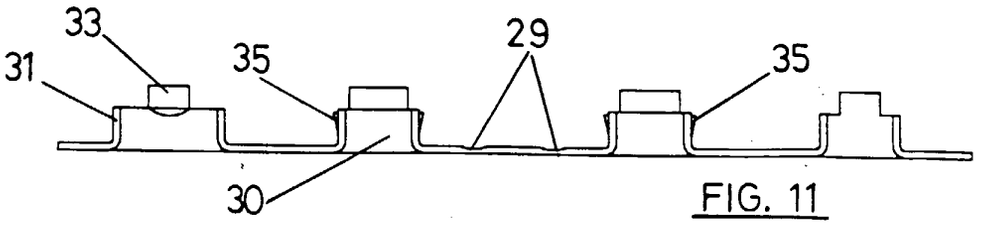


FIG. 11

FIG. 10

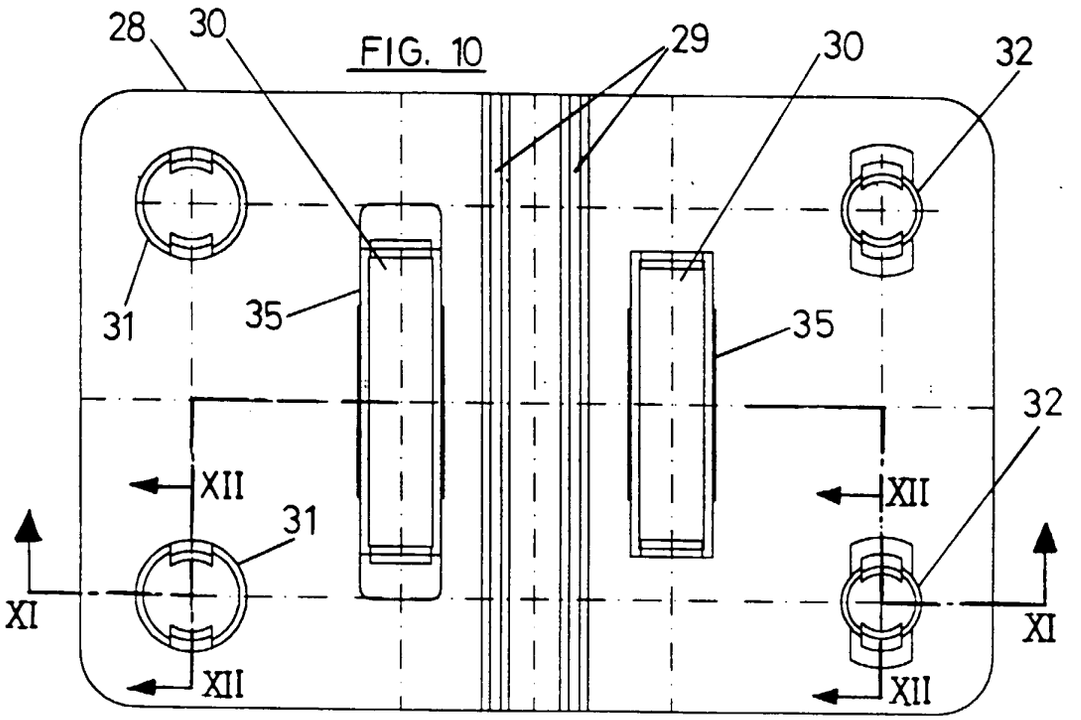
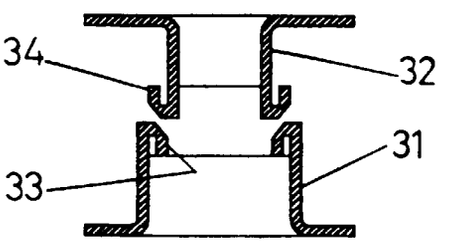


FIG. 12



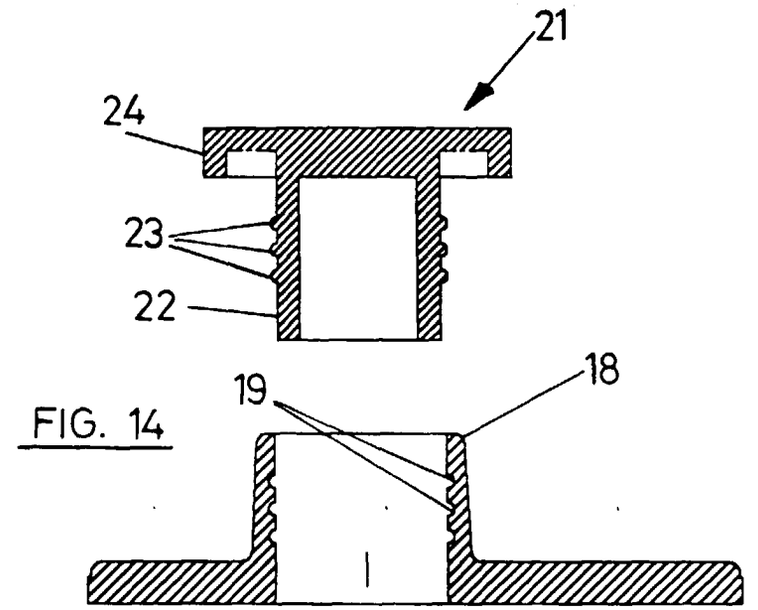
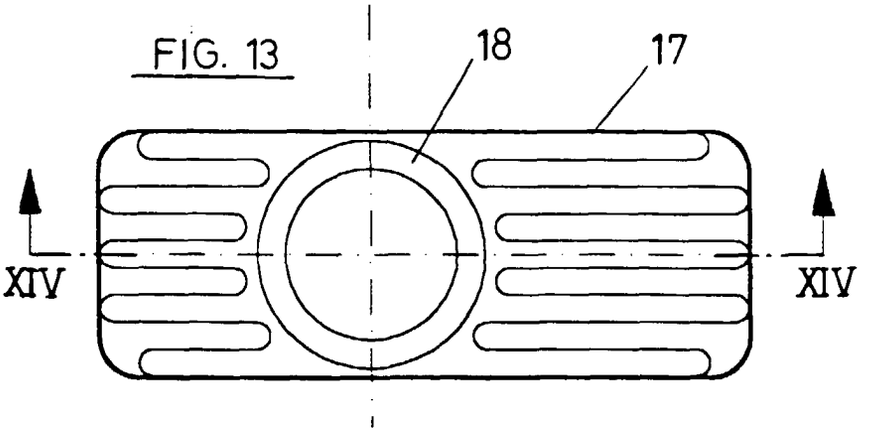


FIG. 14

FIG. 13



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EUROPEAN SEARCH REPORT

Application Number
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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A	DE 195 19 982 A (TSCHIBO FRISCH-RÖST-KAFFEE) 28 November 1996 (1996-11-28) * column 5, line 56 - column 6, line 4; figure 5G *	1	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	30 June 2000	Vollering, J

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