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A package as well as a slide and a housing suitable for such a package.

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A package comprises a housing and a slide. The package is slidably accommodated in the housing in a sliding direction. The slide comprises a bottom wall, sidewalls connected to the bottom wall as well as at least one flange-shaped upper edge spaced from the bottom wall. The upper edge is connected to the sidewalls. The flange-shaped upper edge comprises two parts that extend parallel to the sliding direction. Each part is provided with at least one hook-shaped element. The housing comprises at least a first and a second sidewall. Each sidewall is provided with at least one recess. In the recess at least one hook-shaped element connected to the slide can be positioned for at least locking the slide in position in the housing. The hook-shaped elements of the flange-shaped upper edge can be moved out of the recesses against the spring force of the flange-shaped upper edge. The slide can then be moved in the sliding direction at least partially out of the housing through a front side thereof. The housing is provided with at least one hole spaced apart from the at least two recesses in the housing, through which hole a pushing force in the sliding direction can be exerted on the slide.

A package as well as a slide and a housing suitable for such a package

FIELD OF THE INVENTION

5 The invention relates to a package comprising a housing and a slide which is slidably accommodated in the housing in a sliding direction, which slide comprises a bottom wall), sidewalls connected to the bottom wall as well as at least one flange-shaped upper edge spaced from the bottom wall, which is connected to the sidewalls, which flange-shaped upper edge
10 comprises two parts that extend parallel to the sliding direction wherein each part is provided with at least one hook-shaped element, whilst the housing comprises at least a first and a second sidewall, wherein each sidewall is provided with at least one recess, in which recess at least one hook-shaped element connected to the slide can be positioned for at least
15 locking the slide in position in the housing, wherein the hook-shaped elements of the flange-shaped upper edge can be moved out of the recesses against the spring force of the flange-shaped upper edge, after which the slide can be moved in the sliding direction at least partially out of the housing through a front side thereof.

20 The invention also relates to a slide and to a housing suitable for such a package.

BACKGROUND OF THE INVENTION

25 Such a package, which is known from WO2015000896, is suitable for use as a childproof, senior-friendly package. Such a slide is relatively easy to produce. The hook-shaped elements can be moved into engagement with the recesses located in the sidewalls of the housing under the spring force of the flange-shaped upper edge of the slide. Said recesses can be formed in the
30 housing in a simple manner, for example by punching. To open the package,

a user must move the hook-shaped elements out of the recesses in the two sidewalls against spring force by pressing on the hook-shaped elements. Once the hook-shaped elements have been moved out of the recesses against spring force, the slide can be moved in the sliding direction by a pulling force, with the hook-shaped elements simply sliding along the inner side of the housing.

The provision of hook-shaped elements that are positioned in a recess on either side of the package makes it difficult for a child to open the package, because both hook-shaped elements must be removed from the respective recesses simultaneously before the slide can be pulled in the sliding direction.

Such combined movements are virtually impossible to carry out for a relatively young child, so that the child is prevented from gaining access to products present in the slide, such as medicines, for example. For an older user, on the other hand, said movements are relatively easy to carry out, so that the older user can move the slide out of the housing in order to gain access to products present in the slide.

When the slide is pulled at, without the hook-shaped elements being pressed out of the recesses, the hook-shaped elements will prevent the slide from being moved out of the housing.

An older user will use a first hand to push with for example his thumb and index finger on the two hook-shaped elements, whilst he will use two fingers of his second hand to pull on the slide.

To be able to use the fingers of only one hand to push on both the hook-shaped elements, the distance between the two hook-shaped elements is limited by the size of the hand of the user to for example 10-15 centimetres.

SUMMARY OF THE INVENTION

One of the objects of the invention is to provide a package which is childproof and senior-friendly and which can easily be opened independent of the distance between the two hook-shaped elements.

5 This object is achieved with the package according to the invention in that the housing is provided with at least one hole spaced apart from the at least two recesses in the housing, through which hole a pushing force in the sliding direction can be exerted on the slide.

A user can use one hand to push with one finger on a first of the two the hook-shaped elements and with a finger of the other hand on the
10 second of the two hook-shaped elements. Simultaneously with another finger like his thumb of one of his two hands the user can push through the hole on the slide to push the slide in the sliding direction at least over a distance so that the hook-shaped elements are no longer located opposite the corresponding recess in the housing.

15 As soon as the slide is pushed into the sliding direction over such a distance so that the hook-shaped elements are no longer located opposite the corresponding recess and preferably, the slide extends beyond the front side of the housing, the user can pull on the slide to move it further in the sliding direction.

20 For a relatively young child the combined operation of pushing on two hook-shaped elements located in the recesses and simultaneously pushing on the slide through the hole will be too complicated so the child is prevented from gaining access to products present in the slide, such as medicines, for example.

25 Due to the hole through which a pushing force can be exerted on the slide, the distance between the recesses on opposite sidewalls of the housing is no longer limited by the size of a hand of the user and also housings with a relatively large distance between opposite sidewalls can easily be provided with recesses for cooperation with hook-shaped elements on the slide.

The provision of the hole in the housing, which hole is being used to enable a user to exert a pushing force on the slide in the sliding direction, cannot only be used on packages with a relatively large distance but also with a relatively small distance between the recesses on opposite sidewalls
5 to facilitate the movement of the slide in the sliding direction, whereby a user only needs three fingers to perform this operation.

According to European and US legislation, a package may be called childproof if it meets the EN/ISO 8317 standard and the US 16 CFR 1700.20 standard, respectively. Both standards prescribe extensive testing both with
10 seniors (50-70 years old) and with children aged about 4 years. The tests are carried out by certified (ISO 17025) test agencies. It has been found that the package according to the invention is able to meet the prevailing standards.

Another embodiment of the package according to the invention is characterised in that the hole is located on a side of a virtual plane through
15 the recesses avert of the front side of the housing.

In this way a user can easily put his index fingers or middle fingers of his two hands on the two hook-shaped elements to push the hook-shaped elements out of the recesses, whilst with his thumb he can exert through the hole a pushing force on the slide to push the slide into the sliding direction.
20 Of course the user may use other fingers to push on the hook-shaped elements or push through the hole on the slide.

Another embodiment of the package according to the invention is characterised in that the housing is provided at a rear side seen in the sliding direction with a rear wall, which rear wall is provided with the at
25 least one hole.

The rear wall of the package prevents the slide to be slit out through the rear side. Such a rear wall can easily be provided with a hole, large enough for a finger to be able to push through the hole on the slide.

Another embodiment of the package according to the invention is characterised in that the hole is located at the same distance from the recess in the first sidewall and the recess in the second sidewall.

5 In this manner a user can choose with which hand he will push on hook-shaped element located in the recess and push in the sliding direction through the hole on the slide, for example depending on being left-handed or right-handed.

Another embodiment of the package according to the invention is characterised in that the at least one hole is located in at least one of the
10 sidewalls.

In this manner the rear wall can be fully closed.

Another embodiment of the package according to the invention is characterised in that the hole is partially located in an upper wall of the housing.

15 By providing the hole partially in the sidewall or rear wall as well as partially in the upper wall, the slide is easy accessible.

Another embodiment of the package according to the invention is characterised in that the recess in the first sidewall and the hook-shaped element to be located therein are staggered, seen in the sliding direction,
20 relative to the recess in the second sidewall and the hook-shaped element to be located therein.

Because the hook-shaped elements are staggered, it will be virtually impossible for a young child of about 4 years old to place its fingers so that both staggered hook-shaped elements are removed simultaneously, against
25 spring force, from the likewise staggered recesses.

Another embodiment of the package according to the invention is characterised in that a virtual diagonal line between the staggered recesses in the two sidewalls includes an angle of at most 60 degrees with the sidewall.

The smaller the angle between the virtual diagonal line and the sidewalls provided with the recesses, the larger the distance between the recesses, the more difficult for a child to understand a relationship between the two recesses and the hook-shaped elements located therein. However, 5 when the angle is too small, the package might start to rotate about an axis extending perpendicular to the upper wall of the housing pushing with fingers of two hands on the hook-shaped elements located in the recesses. Consequently, the angle is preferably larger than 20 degrees.

Another embodiment of the package according to the invention is 10 characterised in that the two sidewalls are spaced apart over a distance of at least 90-300 millimeters apart.

With such a distance it is not or nearly not possible to push with fingers of one single hand against both hook-shaped elements located in the recesses. With such a distance a hole is needed to be able to push the slide 15 in the sliding direction, whilst unlocking the hook-shaped elements with two hands.

Another embodiment of the package according to the invention is characterised in that the package comprises as at least one blister pack stacked inside the slide, which slide is provided with a pen, whilst said at 20 least one blister pack is provided with an passage, wherein the pen of the slide extends through the passage of said at least one blister pack stacked inside the slide.

As long as the slide is located inside the housing, the pen extending through the passage of the blister pack prevents that a blister pack can be 25 pulled on and slide out of the housing. The package may contain one blister pack or a number of blister packs stacked onto each other, whereby the pen extends through the passages of all the blister packs.

Another embodiment of the package according to the invention is characterised in that the slide is made of plastic material, using a 30 thermoforming process.

This is a relatively inexpensive manner of producing the slide. When a thermoforming process is used, the flange-shaped upper edge must be punched to the desired dimensions after the forming of the slide. During this usual punching operation, the hook-shaped element is simultaneously
5 formed on the flange-shaped upper edge by means of a punching operation.

As a result, additional operations for providing the slide with the hook-shaped elements are not needed.

Another embodiment of the package according to the invention is characterised in that the housing is made of cardboard.

10 Such a cardboard housing is usually punched from a blank. During this usual punching operation, the recess in the sidewall, and possibly the upper wall, is simultaneously formed by punching. As a result, additional operations for providing the housing with the recess are not needed.

15 BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be explained in more detail with reference to the drawings, in which:

Figure 1 is an exploded perspective view of a first embodiment of a
20 package according to the invention;

Figure 2A and 2B are a top view and perspective view of the package shown in figure 1;

Figure 3A and 3B are a top view and perspective view of a second embodiment of a package according to the invention;

25 Figure 4A and 4B are a top view and perspective view of a third embodiment of a package according to the invention;

Figure 5 is a perspective view of a fourth embodiment of a package according to the invention.

Like parts are indicated by the same numerals in the figures.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Figures 1, 2A and 2B show various views of a first embodiment of a package 1 according to the invention. The package 1 comprises a cardboard housing 2 and a slide 3 of plastic material, which is slidably accommodated, in a sliding direction indicated by arrow P1, in the housing 2. The housing 2 comprises a bottom wall 4, sidewalls 5, 6 extending transversely to the bottom wall 4, a rear wall 7 extending transversely to the bottom wall 4 and the sidewalls 5, 6, an upper wall 8 extending parallel to the bottom wall 4, and a flap 10 which is pivotally connected about a pivot line 9 to the bottom wall 4. The flap 10 is provided with a flap portion 12 which is pivotable about a pivot line 11, which flap portion 12 can be positioned to abut against the upper wall 8 on an inner side. Such a rectangular housing 2 is known per se and will not be discussed in more detail herein, therefore.

On a side remote from the rear wall 7, the upper wall 8 of the housing 2 is provided with a semicircular opening 13.

The housing 2 is provided with two recesses 14, 15, which extend through the side of the sidewalls 4, 5 that faces the upper wall 8 and the sides of the upper wall 8 that face the sidewalls 4, 5. The part of the recesses 14, 15 that is provided in the sidewalls 4, 5 is rectangular in shape. The part of the recesses 14, 15 that is provided in the upper wall 8 is arcuate in shape. The recess 14 is located closer to the rear wall 7 than the recess 15, so that the recess 14 of the first sidewall 5 is staggered relative to the recess 15 of the second sidewall 6 in the sliding direction indicated by the arrow P1.

The slide 3 comprises a bottom wall 17 and sidewalls 18, 19, 20, 21 extending along the circumference of the bottom wall 17, which each include a draft angle slightly greater than 90 degrees with the bottom wall 17. The slide 3 further comprises a flange-shaped upper edge 22, spaced from the bottom wall 17, which is connected to at least the sidewalls 18, 20. The upper edge 22 comprises two parts 23, 24 extending parallel to the sliding

direction indicated by the arrow P1. The parts 23, 24 each comprise a hook-shaped element 27, spaced from the rear sidewall 19. The hook-shaped elements 27 are staggered in the sliding direction indicated by the arrow P1, similarly to the recesses 14, 15 of the housing 2. In a direction transversely to the bottom wall 17, the hook-shaped element 27 has the same thickness as the upper edge 22.

The hook-shaped element 27 comprises a wall portion 28 extending under a sharp angle to the respective part 23, 24 and a curved wall portion 29 connected thereto. The curved wall portion 29 is located at a side of the wall portion 28 directed towards the rear sidewall 19. The barb-like configuration of the hook-shaped element 27 makes it impossible to depress the hook-shaped element 27 whilst the slide 3 is being pulled at. This also makes it impossible to pull at the slide 3 and subsequently depress the hook-shaped elements 27 one by one and remove them from the recesses 14, 15. The barb-like configuration forces the user to depress both hook-shaped elements simultaneously before the slide 3 can be moved.

The hook-shaped element 27 and the recesses 14, 15 are dimensioned so that the hook-shaped element 27 fits in the recesses 14, 15, with the wall portion 28 abutting against an edge 30 of the sidewall 4, 5 that bounds the recess 14, 15.

Such a hook-shaped element 27 is easy to form in the flange-shaped upper edge 22, for example by punching. The hook-shaped element 27 will in that case have the same relatively small thickness as the flange-shaped upper edge 22. In this way the recess 14, 15 present in the housing 2 can likewise have a relatively small dimension in the thickness direction of the hook-shaped element 27. As a result, the strength of the housing 2 will remain practically unchanged in spite of the presence of the recesses 14, 15 therein.

The draft angle of more than 90 degrees between the bottom wall 17 and the sidewalls 18-20 that is required for, for example, thermoforming of

the slide 3 has the advantage in this regard that the sidewalls 18, 20 are spaced further apart near the upper edge 22 than near the bottom wall 17. As a result, the sidewalls 18, 20 can be slightly moved toward each other near the upper side upon elastic deformation of the upper edge 22, without
 5 making contact with products present in the slide 3.

The rear wall 7 is provided with a rectangular hole 16 located closer to the sidewall 5 than to the sidewall 6.

As can be seen in figure 2A, the recesses 14, 15 are staggered in the sliding direction indicated by arrow P1 over a distance L1. Based on the
 10 distance L1 and the width W of the housing 2, the length L2 of a virtual diagonal line V2 between the recesses 14, 15 in the two sidewalls 5, 6 can be determined. The diagonal line V2 between the staggered recesses 14, 15 includes an angle A of at most 60 degrees with the sidewall 4, 5. A virtual diagonal line V3 between the hole 16 and the closest recess 14 has a length
 15 L3. The width W1 is between 90 and 300 millimetres, for example. The length L3 is between 90 and 150 millimetres, for example. The hole 16 is large enough to allow the entrance of a finger and has for example a width between 25 and 60 millimetres, for example.

The bottom wall 17 of the slide 3 is provided near the rear sidewall 19
 20 with a conical pen 31. The pen 31 is provided at a side avert of the bottom wall 17 with an opening 32.

The rear sidewall 19 of the slide 3 is provided with a flap 33 which is pivotally connected about a pivot line 34 to the rear sidewall 19. The flap 33 is provided with two pens 35, 36 positioned in line with the sliding direction
 25 indicated by arrow P1. The front pen 35 can be positioned inside the opening 32 in the conical pen 31, whilst the rear pen 36 can be positioned between the conical pen 31 and the rear sidewall 19.

The housing 2 can be provided with a flap (not shown) being pivotably connected to an edge 37 of the upper wall 8 at a front side of the
 30 housing 2. When the slide 3 is located inside the housing 2, the flap 33 will

be moved into the space between the flap connected to the edge 37 and the upper wall 8, thereby preventing the slide 3 to fully slide out of the housing 2.

The slide 3 is preferably made of a plastic material, such as PVC, ABS, PE, PET, PS and PP, to be deformed by means of a thermoforming process. After thermoforming of the slide 3 has taken place, the hook-shaped elements 27 are punched into the upper edge 22, with the desired dimensions of the parts 23, 24 being obtained by said the punching operation. The bottom wall 17, the sidewalls 18, 19, 20, 21 and the upper edge 22 are relatively thin, so that the parts 23, 24 of the upper edge 22 that are provided with the hook-shaped elements 27 can be moved toward each other against the spring force of the material of the slide 3.

The dimensions of the cardboard housing 2 can vary between, for example, a width of 90 and 300 millimetres, a height of 10 and 200 millimetres and a length of 150 and 400 millimetres. The wall thickness of the housing 2 can vary from 400 to 1000 micron, for example.

The dimensions of the slide 3 can vary according to the size of the corresponding housing 2. The wall thickness of the slide 3 can vary from 200 to 1000 micron, for example.

The package 1 can be used for or is provided with blister packs 41. Each blister pack 41 comprises a base plate 42 with a number of closed pockets 43. In each pocket 43 a product, for example a medical pill is located. To the base plate 42 a ring-shaped element 44 is connected, for example by glue. The ring-shaped element 44 has a passage 45 with a diameter being slightly larger than the diameter of the conical pen 31 at a position near the bottom wall 17. Instead of the ring-shaped element 44, the blister pack 41 may also comprises a passage extending through the base plate 42.

By positioning the ring-shaped element 44 over the conical pen 31, the blister pack 41 is connected to the slide 3. After positioning the blister packs

41 inside the slide 3, the flap 33 will be pivoted towards the bottom wall 17 of the slide 3 until the pen 35 is located inside the opening 32 of the conical pen 31. When the slide 3 is located inside the housing 2 the flap 33 cannot be moved upwards, the ring-shaped element 44 cannot be removed from the conical pen 31, so that the blister pack 41 cannot be removed from the slide 3.

The blister packs 41 present in the slide 3 preferably have dimensions smaller than those of the bottom wall 17 of the slide 3.

The operation of the package 1 is as follows.

10 In a closed position of the package 1, the slide 3 is fully enclosed within the housing 2, and the flap 10 is in the closed position. The flap 10 makes it extra difficult to gain access to the slide 3. The flap 10 must first be opened before the slide 3 can be moved out of the housing 2. In the closed position of the flap 10, the flap 10 protects the slide 3 and the products present therein from the ingress of dust and the like. The slide 3 is hidden from view and access to the products present therein, such as loose medicines or tablet blister packs, is not possible. In the closed position, the hook-shaped elements 27 of the slide 3 are positioned in the recesses 14, 15 of the housing 2.

20 When a user wishes to take products from the slide 3, the flap 10 is first pivoted about the pivot line 9. Then the user presses on the hook-shaped element 27 positioned in the recess 14 in the directions indicated by arrow P2 with his index finger F2 of his left hand HL and presses on the hook-shaped element 27 positioned in the recess 15 in the directions indicated by arrow P3 with his index finger F2 of his right hand HR against the spring force of the slide 3. The directions indicated by the arrows P2, P3 extend transversely to the sliding direction indicated by the arrow P1. The fingers F2 are positioned in the arcuate parts 51 of the recesses 14, 15 in the upper wall 8.

The hook-shaped element 27 only engages the sidewall 5, 6. Because the recess 14, 15 also extends over the upper wall 8, a user can simply place his finger F2 against the hook-shaped element 27 and move it away from the sidewall 5, 6 against spring force, out of engagement with the sidewall 4, 5.

5 The staggered hook-shaped elements 27 are moved out of the recesses 14,15, in the directions indicated by the arrows P2, P3, against spring force and under elastic deformation of the sidewalls 18, 20 and the parts 23, 24, with the wall portions 28 of the hook-shaped elements 27 moving clear of the sidewalls 5, 6 in question so that the hook-shaped element 27 are no
10 longer located inside the recesses 14, 15. The user will then push with the thumb F1 of his left hand HL through the hole 16 against the slide 3, thereby pushing the slide 3 in a direction indicated by arrow P4 extending in the sliding direction indicated by arrow P1. The user may put his thumb F1 of his right hand HR on a corner of the housing 2 to obtain a better grip on
15 the package 1.

By pushing on the slide 3 in a direction indicated by arrow P4 the hook-shaped elements 27 will be moved away from the recesses 14, 15. As soon as the hook-shaped elements 27 have passed the recesses 14, 15 in the sliding direction indicated by arrow P1, the user can either push the slide 3
20 further out of the front side by pushing on the slide through hole 16 or pull on a front part 52 of the slide 3. When the slide 3 is partially located outside the housing 2, the user has access to the blister packs 41 located inside the slide 3.

If a relatively young child undesirably attempts to open the package
25 1, it will presumably be able to open the flap 10. The child will then pull at the part 52 of the slide 3 which is freely accessible through the opening 13 of the housing 2 or push on the slide 3 through the hole 16. However, because the wall portions 28 of the hook-shaped elements 27 abut against the edge
30 of the sidewalls 4, 5, moving the slide 3 out of the housing 2 is prevented in a simple manner.

Figures 3A and 3B show a top view and perspective view of a second embodiment of a package 101 according to the invention. The package 101 differs from the package 1 in that the hole 16 is not located in the rear wall 7 but in the sidewall 6. The hole 16 is located between the recess 15 and the rear wall 7.

To move a slide 3 located in the housing 2 of the package 101 in the sliding direction indicated by arrow P1, a user presses on the hook-shaped element 27 positioned in the recess 14 in the directions indicated by arrow P2 with his index finger F2 of his left hand HL and presses on the hook-shaped element 27 positioned in the recess 15 in the directions indicated by arrow P3 with his index finger F2 of his right hand HR against the spring force of the slide 3. The staggered hook-shaped elements 27 are moved out of the recesses 14,15, in the directions indicated by the arrows P2, P3, against spring force and under elastic deformation of the sidewalls 18, 20 and the parts 23, 24, with the wall portions 28 of the hook-shaped elements 27 moving clear of the sidewalls 5, 6 in question so that the hook-shaped element 27 are no longer located inside the recesses 14, 15. The user will then place the thumb F1 of his right hand HR through the hole 16 against the slide 3 to exert a pushing force in the direction as indicated by arrow P4 on the slide 3, thereby pushing the slide 3 in the sliding direction indicated by arrow P1. The user may put his thumb F1 of his left hand HL on a corner of the housing 2 to obtain a better grip on the package 1.

Figure 4A and 4B are a top view and perspective view of a third embodiment of a package 201 according to the invention.

The package 201 differs from the package 1 in that the hole 16 is located in the middle of the rear wall 7. Furthermore, both recesses 14, 15 are located opposite each other at the same distance L4 of the rear wall 7. A diagonal line V5 between the hole 16 and both recess 14, 15 has a length L5. A line V6 extending through the recesses 14, 15, extends perpendicular to the sidewalls

5, 6 and has a length being identical to the width W of the housing 2. The length L₅ is between 90 and 150 millimetres, for example.

After unlocking the hook-shaped element 27 positioned in the recesses 14, 15 a user can now choose which thumb F₁ he will insert into the hole 16 to exert a pushing force in the direction as indicated by arrow P₄ on the slide 3.

By the packages 1, 101, 201 the hole is located on a side of a virtual plane through the recesses 14, 15 avert of the front side of the housing 2. In figure 2A and 3A the virtual plane extend perpendicular to the bottom wall 4 and through the diagonal line V₂. In figure 4A the virtual plane extend perpendicular to the bottom wall 4 and through the line V₆.

Figure 5 is a perspective view of a fourth embodiment of a package 1 according to the invention. The package 1 differs from the package 1 as shown in figure 1 only in that the size is different. The package 1 is being used for the storage of dishwasher tablets 53. Also for such kind of products, it is important that a relatively young child is unable to get access to these products when the package 1 is closed.

It is also possible to locate the hole on a side of a virtual plane through the recesses 14, 15 directed towards the front side of the housing 2, although it will be more difficult to insert a finger in the hole and to exert a pushing force on the slide 3 in the sliding direction indicated by arrow P₁ than by the embodiments as shown in the figures, whereby the hole is located on a side of a virtual plane through the recesses 14, 15 avert of the front side of the housing 2.

It is also possible to use other materials for the slide and the housing, such as plastics suitable for thermoforming or injection-moulding, cardboard, especially tear-resistant cardboard, or a metal such as aluminium.

It is also possible to provide the slide with two pairs of hook-shaped elements and to provide the housing with a single pair of recesses near the

front side of the housing in order to define a closed position and a partially open position.

According to another possibility, the recesses are hidden from view by wall portions extending over the recesses. Said wall portions must be flexible so that the hook-shaped elements can be pressed out of the recesses located behind the wall portions as a result of pressure being exerted on said wall portions.

The person skilled in the art will realize that the present invention is by no means limited to the preferred embodiments. Other variations to the disclosed embodiments can be understood and effected by those skilled in the art in practicing the claimed invention, from a study of the drawings, the disclosure, and the appended claims.

In the claims, the word "comprising" does not exclude other elements or steps, and the indefinite article "a" or "an" does not exclude a plurality. The mere fact that certain measures are recited in mutually different dependent claims does not indicate that a combination of these measures cannot be used to advantage. Any reference signs in the scope should not be construed as limiting the scope of the claims.

LIST OF REFERENCE NUMERALS

1	package
2	housing
3	slide
25 4	bottom wall
5	sidewall
6	sidewall
7	rear wall
8	upper wall
30 9	pivot line

	10	flap
	11	pivot line
	12	flap portion
	13	opening
5	14	recess
	15	recess
	16	hole
	17	bottom wall
	18	sidewall
10	19	sidewall
	20	sidewall
	21	sidewall
	22	upper edge
	23	part
15	24	part
	27	hook-shaped element
	28	wall portion
	29	wall portion
	30	edge
20	31	pen
	32	opening
	33	flap
	34	pivot line
	35	pen
25	36	pen
	37	edge
	41	blister pack
	42	base plate
	43	closed pocket
30	44	ring-shaped element

	45	passage
	51	arcuate part
	52	front part
	53	dishwasher tablet
5	101	package
	201	package
	A	angle
	F1	thumb
	F2	finger
10	HL	left hand
	HR	right hand
	L1	distance
	L2	length
	L3	length
15	L4	distance
	L5	length
	P1	arrow
	P2	arrow
	P3	arrow
20	P4	arrow
	V	diagonal line
	V2	diagonal line
	V3	diagonal line
	V5	diagonal line
25	V6	line
	W	width

Conclusies

1. Verpakking (1, 101, 201) voorzien van een behuizing (2) en een in een schuifrichting (P1) schuifbaar in de behuizing (2) gelegen slede (3) welke
5 slede (3) een bodemwand (4), met de bodemwand (4) verbonden zijwanden (18, 19) alsmede ten minste een op afstand van de bodemwand (4) met de zijwanden (18, 19) verbonden flensvormige bovenrand (22) omvat, welke flensvormige bovenrand (22) is voorzien van twee zich evenwijdig aan de schuifrichting (P1) uitstrekkende gedeeltes (23, 24), waarbij elk gedeelte (23,
10 24) is voorzien van ten minste een haakvormig element (27), terwijl de behuizing (2) is voorzien van ten minste een eerste en een tweede zijwand (4, 5), waarbij elke zijwand (4, 5) is voorzien van ten minste een uitsparing (14, 15), in welke uitsparing (14, 15) ten minste een met de slede (3) verbonden haakvormig element (27) positioneerbaar is voor het ten minste
15 in positie in de behuizing (2) opsluiten van de slede (3), waarbij de haakvormige elementen (27) van de flensvormige bovenrand (22) tegen veerkracht van de flensvormige bovenrand (22) uit de uitsparingen (14, 15) verplaatsbaar zijn, waarna de slede (3) in de schuifrichting (P1) ten minste gedeeltelijk uit de behuizing (2) door een voorzijde daarvan verplaatsbaar is,
20 met het kenmerk, dat de behuizing (2) is voorzien van ten minste een gat (16) dat op afstand is gelegen van de ten minste twee uitsparingen (14, 15) in de behuizing (2), door welk gat (16) een drukkracht in de schuifrichting (P1) op de slede (3) kan worden uitgeoefend.

- 25 2. Verpakking (1, 101, 201) volgens conclusie 1, met het kenmerk, dat het gat (16) is gelegen aan een van de voorzijde van de behuizing (2) afgekeerde zijde van een virtueel vlak door de uitsparingen (14, 15).

3. Verpakking (1, 101, 201) volgens conclusie 1 of 2, met het kenmerk,
30 dat de behuizing (2) aan een achterzijde gezien in de schuifrichting (P1) is

voorzien van een achterwand (7), welke achterwand (7) is voorzien van het ten minste een gat (16).

4. Verpakking (1, 101, 201) volgens conclusie 3, met het kenmerk, dat het
5 gat (16) op eenzelfde afstand van de uitsparing (14) in de eerste zijwand (4)
en de uitsparing (15) in de tweede zijwand (5) is gelegen.

5. Verpakking (1, 101, 201) volgens een der voorgaande conclusies, met
het kenmerk, dat het ten minste ene gat (16) is gelegen in ten minste een
10 van de zijwanden (4, 5).

6. Verpakking (1, 101, 201) volgens een der voorgaande conclusies, met
het kenmerk, dat het gat (16) gedeeltelijk is gelegen in een bovenwand (8)
van de behuizing (2).

15

7. Verpakking (1, 101, 201) volgens een der voorgaande conclusies, met
het kenmerk, dat de uitsparing (14) in de eerste zijwand (4) en het
haakvormige element (27) dat daarin wordt gepositioneerd zijn versprongen,
gezien in de schuifrichting (P₁), ten opzichte van de uitsparing (15) in de
20 tweede zijwand (5) en het haakvormige element (27) dat daarin wordt
gepositioneerd.

8. Verpakking (1, 101, 201) volgens conclusie 7, met het kenmerk, dat een
virtuele diagonale lijn (V₂) tussen de versprongen uitsparingen (14, 15) in de
25 twee zijwanden (4, 5) een hoek van maximaal 60 graden met de zijwand (4,
5) insluit.

9. Verpakking (1, 101, 201) volgens een der voorgaande conclusies, met
het kenmerk, dat de twee zijwanden (4, 5) op een afstand (W₁) van ten
30 minste 90-300 millimeter van elkaar zijn gelegen.

10. Verpakking (1, 101, 201) volgens een der voorgaande conclusies, met het kenmerk, dat de verpakking (1, 101, 201) is voorzien van ten minst een blister verpakking (41) die in de slede (3) is gestapeld, welke slede (3) is
5 voorzien van een pen (31), terwijl de ten miste ene blister verpakking (41) is voorzien van een doorgang (45), waarbij de pen (31) van de slede (3) zich uitstrekt door de doorgang (45) van de ten minste ene blister verpakking (41) die in de slede (3) is gestapeld.
- 10 11. Verpakking (1, 101, 201) volgens een der voorgaande conclusies, met het kenmerk, dat de slede (3) is vervaardigd van kunststoffen materiaal, onder gebruik making van een thermovormproces.
12. Verpakking (1, 101, 201) volgens een der voorgaande conclusies, met
15 het kenmerk, dat behuizing (2) is vervaardigd van karton.
13. Slede (3) geschikt voor een verpakking (1, 101, 201) volgens een der voorgaande conclusies.
- 20 14. Behuizing (2) geschikt voor een verpakking (1, 101, 201) volgens een der voorgaande conclusies.

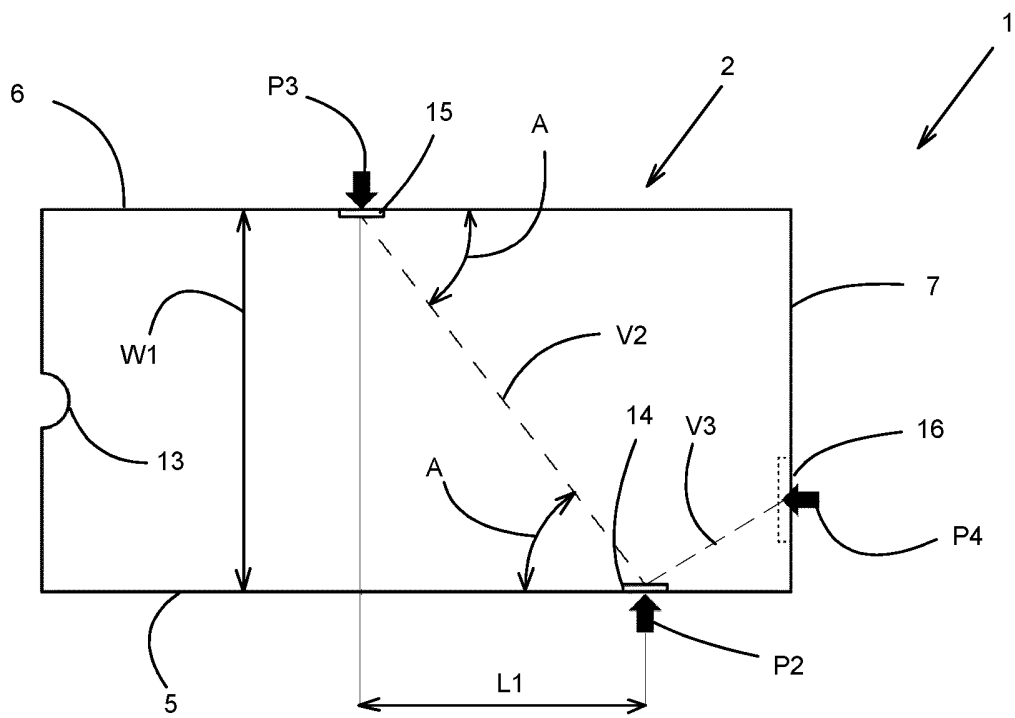


Fig. 2A

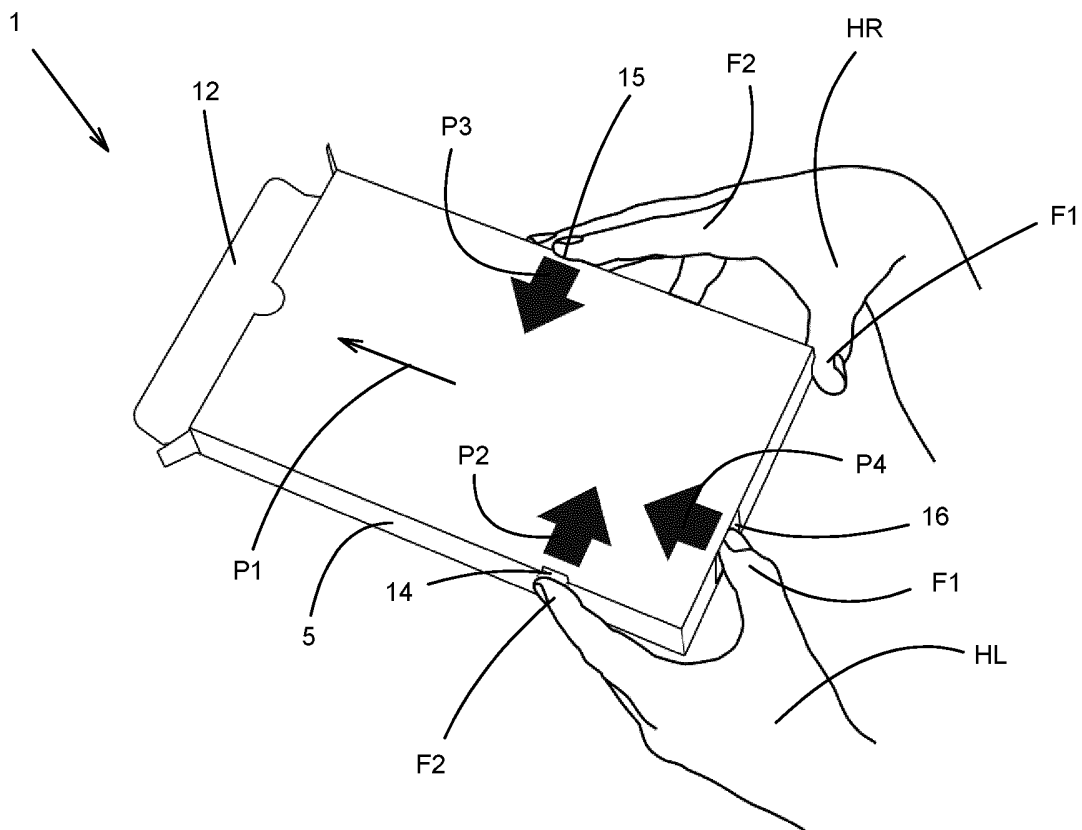


Fig. 2B

3/5

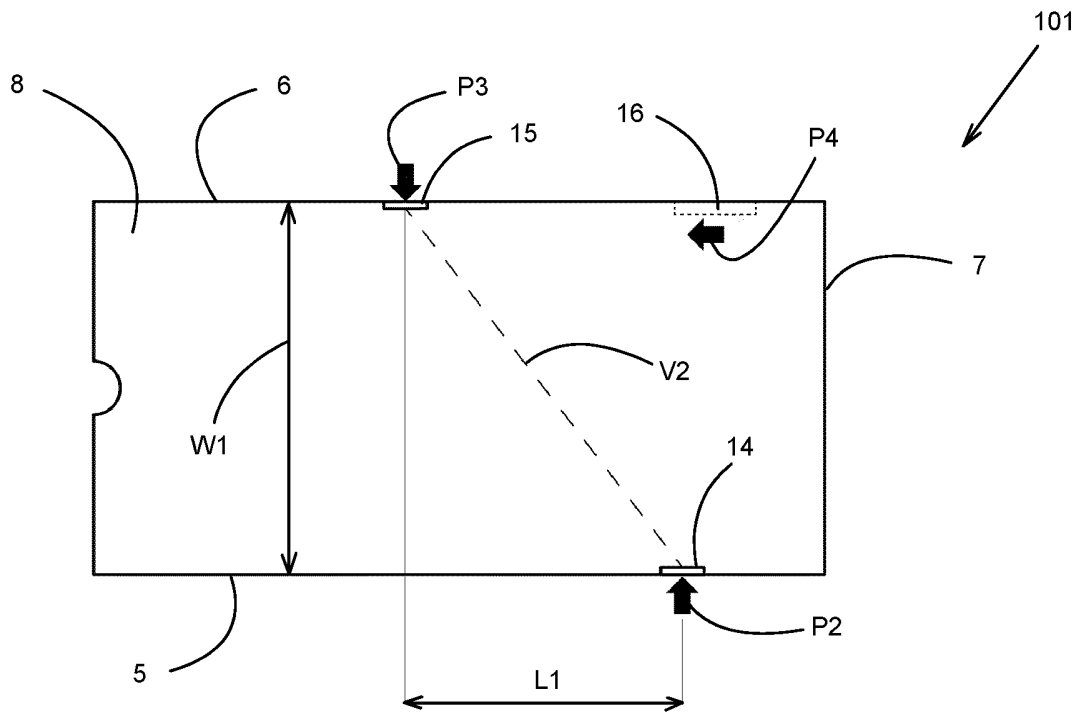


Fig. 3A

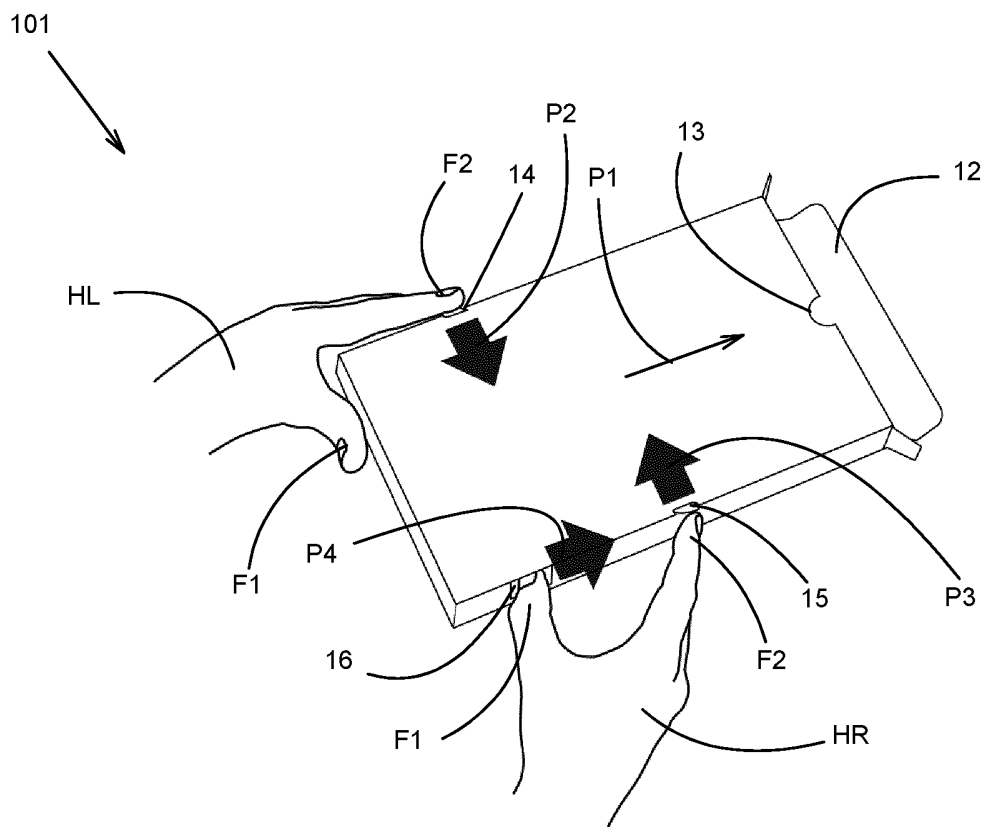


Fig. 3B

4/5

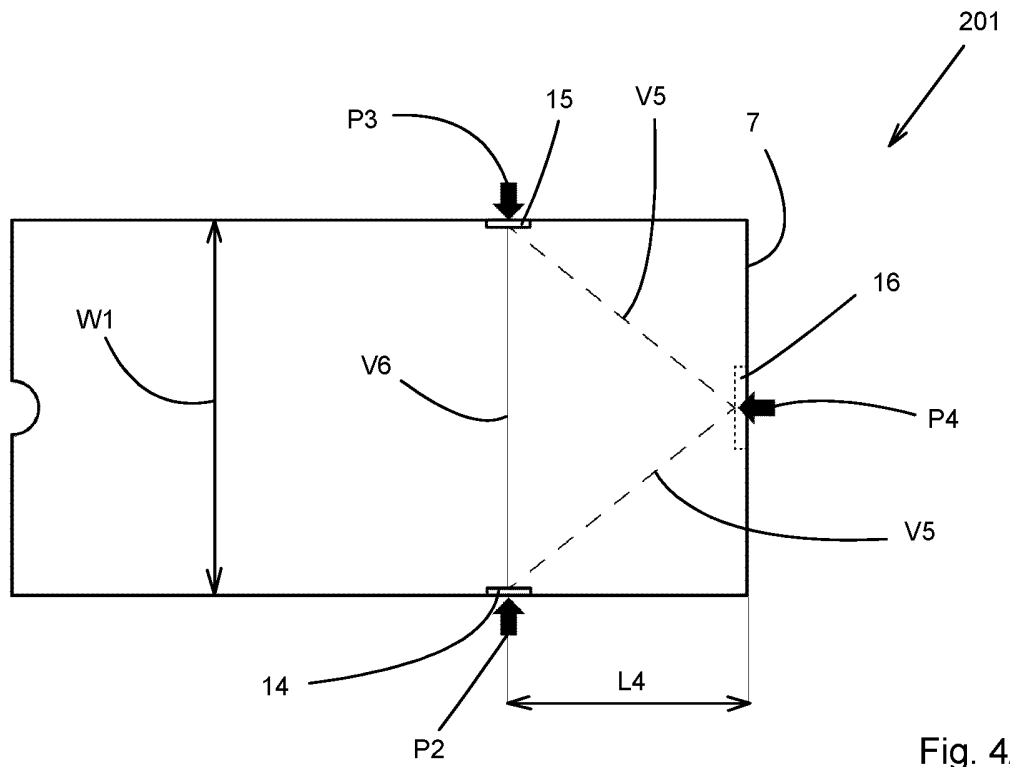


Fig. 4A

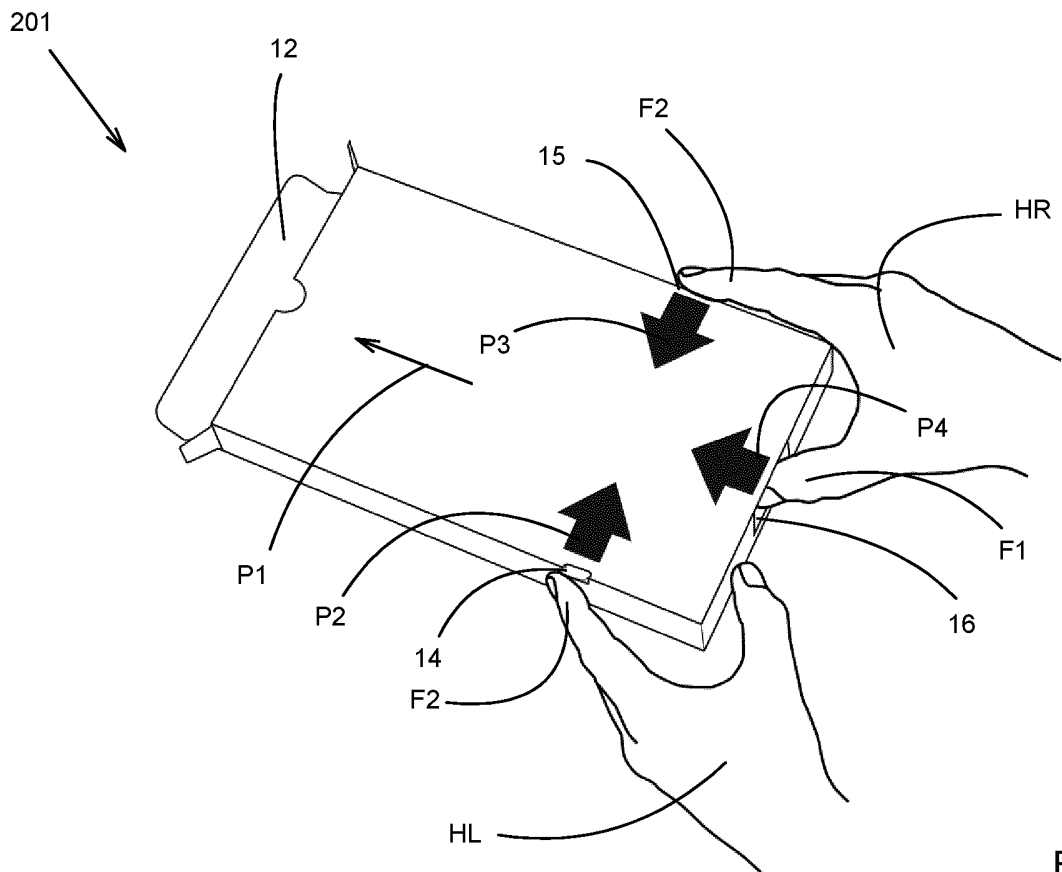


Fig. 4B

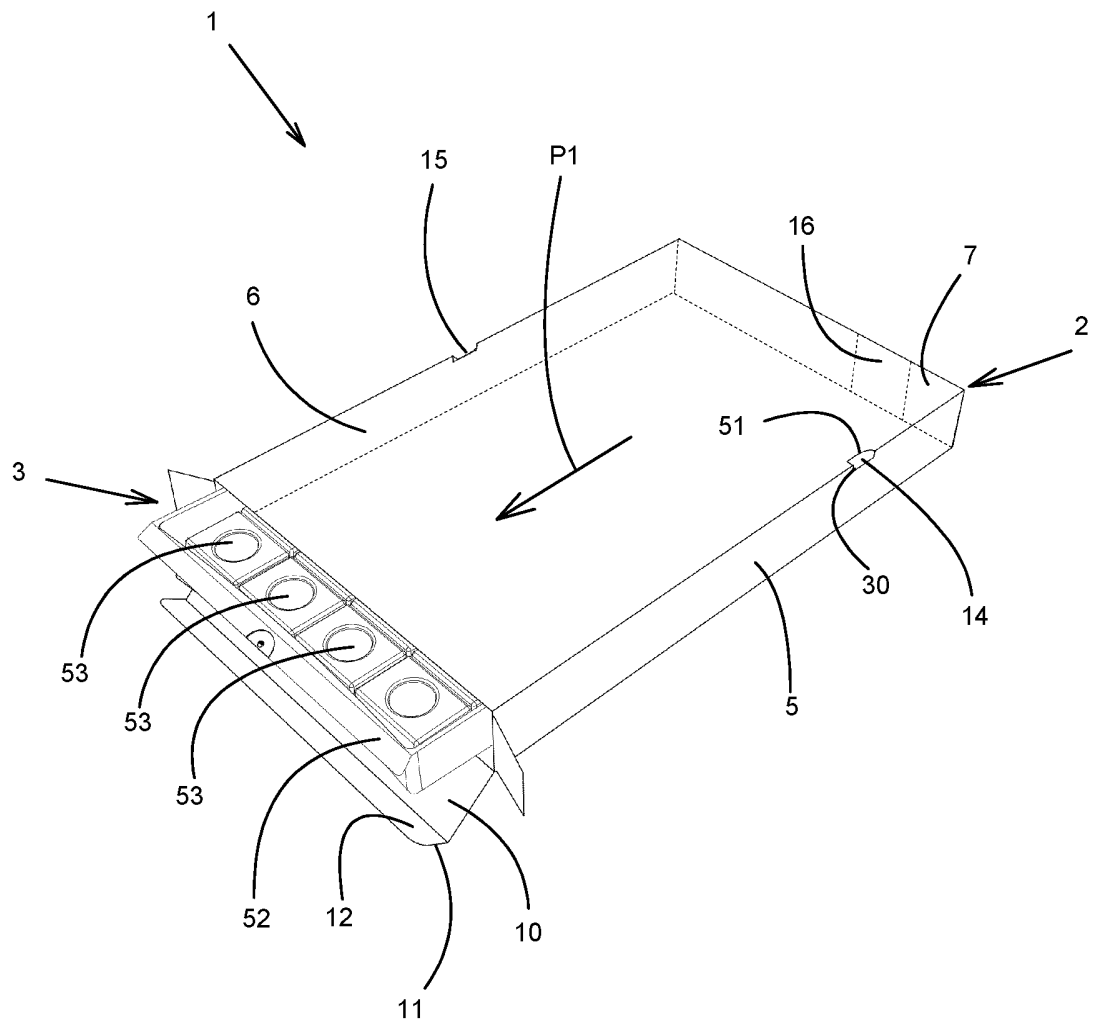


Fig. 5

ABSTRACT

A package comprises a housing and a slide. The package is slidably accommodated in the housing in a sliding direction. The slide comprises a
5 bottom wall, sidewalls connected to the bottom wall as well as at least one flange-shaped upper edge spaced from the bottom wall. The upper edge is connected to the sidewalls. The flange-shaped upper edge comprises two parts that extend parallel to the sliding direction. Each part is provided with at least one hook-shaped element. The housing comprises at least a first and
10 a second sidewall. Each sidewall is provided with at least one recess. In the recess at least one hook-shaped element connected to the slide can be positioned for at least locking the slide in position in the housing. The hook-shaped elements of the flange-shaped upper edge can be moved out of the recesses against the spring force of the flange-shaped upper edge. The
15 slide can then be moved in the sliding direction at least partially out of the housing through a front side thereof. The housing is provided with at least one hole spaced apart from the at least two recesses in the housing, through which hole a pushing force in the sliding direction can be exerted on the slide.

SAMENWERKINGSVERDRAG (PCT)

RAPPORT BETREFFENDE NIEUWHEIDSONDERZOEK VAN INTERNATIONAAL TYPE

IDENTIFICATIE VAN DE NATIONALE AANVRAGE		KENMERK VAN DE AANVRAGER OF VAN DE GEMACHTIGDE	
		P10851NL00	
Nederlandse aanvraag nr.		Indieningsdatum	
2014275		11-02-2015	
		Ingeroepen voorrangsdatum	
Aanvrager (Naam)			
Ecobliss Holding B.V.			
Datum van het verzoek voor een onderzoek van internationaal type		Door de instantie voor Internationaal Onderzoek aan het verzoek voor een onderzoek van internationaal type toegekend nr.	
07-04-2015		SN63884	
I. CLASSIFICATIE VAN HET ONDERWERP (bij toepassing van verschillende classificaties, alle classificatiesymbolen opgeven)			
Volgens de internationale classificatie (IPC)			
B65D77/04;B65D5/38			
II. ONDERZOCHE GEBIEDEN VAN DE TECHNIEK			
Onderzochte minimumdocumentatie			
Classificatiesysteem	Classificatiesymbolen		
IPC	B65D		
Onderzochte andere documentatie dan de minimum documentatie, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen			
III. ☐	GEEN ONDERZOEK MOGELIJK VOOR BEPAALDE CONCLUSIES (opmerkingen op aanvullingstblad)		
IV. ☐	GEBREK AAN EENHEID VAN UITVINDING (opmerkingen op aanvullingstblad)		

**ONDERZOEKSRAPPORT BETREFFENDE HET
RESULTAAT VAN HET ONDERZOEK NAAR DE STAND
VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Nummer van het verzoek om een onderzoek naar
de stand van de techniek

NL 2014275

A. CLASSIFICATIE VAN HET ONDERWERP
INV. B65077/04 B65D5/38
ADD.

Volgens de Internationale Classificatie van octrooien (IPC) of zowel volgens de nationale classificatie als volgens de IPC.

B. ONDERZOCHE GEBIEDEN VAN DE TECHNIEK

Onderzochte minimum documentatie (klassificatie gevolgd door classificatiesymbolen)

B65D

Onderzochte andere documentatie dan de minimum documentatie, voor dergelijke documenten, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen

Tijdens het onderzoek geraadpleegde elektronische gegevensbestanden (naam van de gegevensbestanden en, waar uitvoerbaar, gebruikte trefwoorden)

EPO-Internal, WPI Data

C. VAN BELANG GEACHTE DOCUMENTEN

Categorie *	Gesceekende documenten, eventueel met aanduiding van speciaal van belang zijnde passages	Van belang voor conclusie nr.
X	JP H09 58748 A (DAINIPPON PRINTING CO LTD) 4 maart 1997 (1997-03-04)	1,2,5,9, 11-14
Y	* samenvatting; figuren 1-4 *	4
X,D	WO 2015/000896 A1 (ECOBLISS HOLDING B V [NL]) 8 januari 2015 (2015-01-08) in de aanvraag genoemd	13
Y	* het gehele document *	1-3,5-9, 11-14
Y	G8 166 861 A (AVON JAMES GRAY) 28 juli 1921 (1921-07-28)	1-4,7-9, 11-14
Y	* het gehele document *	
Y	WO 2011/154822 A1 (GD SPA [IT]; GHINI MARCO [IT]; BIONDI ANDREA [IT]) 15 december 2011 (2011-12-15)	1-3,6-9, 11-14
	* bladzijde 6, regels 3-8; figuren 1-2 *	
	----- -/-	



Verdere documenten worden vermeld in het vervolg van vak C.



Leden van dezelfde octroofamilie zijn vermeld in een bijlage

*** Speciale categorieën van aangehaalde documenten**

"A" niet tot de categorie X of Y behorende literatuur die de stand van de techniek beschrijft

"C" in de octrooiaanvraag vermeld

"E" eerdere octroop(aanvraag), gepubliceerd op of na de indieningsdatum, waarin dezelfde uitvinding wordt beschreven

"L" om andere redenen vermeldde literatuur

"O" niet-schriftelijke stand van de techniek

"P" tussen de voorzetsdatum en de indieningsdatum gepubliceerde literatuur

"T" na de indieningsdatum of de voorzetsdatum gepubliceerde literatuur die niet bezwaarlijk is voor de octrooiaanvraag, maar wordt vermeld ter verheldering van de theorie of het principe dat ten grondslag ligt aan de uitvinding

"X" de conclusie wordt als niet nieuw of niet inventief beschouwd ten opzichte van deze literatuur

"Y" de conclusie wordt als niet inventief beschouwd ten opzichte van de combinatie van deze literatuur met andere gesceekende literatuur van dezelfde categorie, waarbij de combinatie voor de vakman voor de hand liggend wordt geacht

"Z" lid van dezelfde octroofamilie of overeenkomstige octrooipublicatie

Datum waarop het onderzoek naar de stand van de techniek van internationaal type werd voltooid

30 september 2015

Verzenddatum van het rapport van het onderzoek naar de stand van de techniek van internationaal type

Naam en adres van de instantie

European Patent Office, P.O. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
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Fax: (+31-70) 340-3016

De bevoegde ambtenaar

Leijten, René

**ONDERZOEKSRAPPORT BETREFFENDE HET
RESULTAAT VAN HET ONDERZOEK NAAR DE STAND
VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Nummer van het verzoek om een onderzoek naar
de stand van de techniek

NL 2014275

C (Verzoek) VAN BELANG GEACHTE DOCUMENTEN

Categorie *	Geachte documenten, eventueel met aanduiding van specifiek van belang zijnde passages	Van belang voor conclusie nr.
Y	BE 803 778 A1 (CHEM FAB VON HEYDEN G M B H) 17 december 1973 (1973-12-17) * figuur * *	5
A	----- US 4 364 488 A (ANJOU GUNNAR) 21 december 1982 (1982-12-21) * kolom 2, regel 56 - kolom 3, regel 15; figuren 1-16 *	1-14
A	----- US 2011/108451 A1 (SACK RYEN [US] ET AL) 12 mei 2011 (2011-05-12) * het gehele document *	1-14
A	----- EP 0 053 593 A1 (ANJOU GUNNAR) 9 juni 1982 (1982-06-09) * het gehele document *	1-14
A	----- JP S56 125816 U (.) 25 september 1981 (1981-09-25) * samenvatting; figuur 1 *	1-14

**ONDERZOEKSRAPPORT BETREFFENDE HET
RESULTAAT VAN HET ONDERZOEK NAAR DE STAND
VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

informatie over leden van dezelfde oestroefamilie

Nummer van het verzoek om een onderzoek naar
de stand van de techniek

NL 2014275

In het rapport genoemd oestroegeschrift	Datum van publicatie	Overeenkomst(en) geschrift(en)	Datum van publicatie	
JP H0958748	A	04-03-1997	JP 3654968 B2 JP H0958748 A	02-06-2005 04-03-1997
WO 2015000896	A1	08-01-2015	NL 2011090 C WO 2015000896 A1	06-01-2015 08-01-2015
GB 166861	A	28-07-1921	GEEN	
WO 2011154822	A1	15-12-2011	CA 2800213 A1 EP 2580134 A1 IT 8020130124 U1 JP 2013531589 A KR 20140032859 A RU 2012153239 A US 2013140201 A1 WO 2011154822 A1	15-12-2011 17-04-2013 29-01-2014 08-08-2013 17-03-2014 20-07-2014 06-06-2013 15-12-2011
BE 803778	A1	17-12-1973	GEEN	
US 4364488	A	21-12-1982	AU 6317480 A BR 8006720 A CA 1144523 A1 DE 3068124 D1 DK 440180 A EP 0027589 A1 FI 803207 A JP 55664942 A NO 803089 A US 4364488 A	30-04-1981 22-04-1981 12-04-1983 12-07-1984 20-04-1981 29-04-1981 20-04-1981 02-06-1981 21-04-1981 21-12-1982
US 2011108451	A1	12-05-2011	GEEN	
EP 0053593	A1	09-06-1982	AU 546683 B2 AU 7796381 A BR 8107761 A CA 1162886 A1 DE 3171617 D1 DK 524381 A EP 0053593 A1 FI 813753 A JP H057178 Y2 JP H02131978 U JP 557114468 A NO 814036 A SE 433341 B US 4401210 A	12-09-1985 03-06-1982 31-08-1982 28-02-1984 05-09-1985 28-05-1982 09-06-1982 28-05-1982 23-02-1993 01-11-1990 16-07-1982 28-05-1982 21-05-1984 30-08-1983
JP 556125816	U	25-09-1981	GEEN	

WRITTEN OPINION

File No. SN63884	Filing date (day/month/year) 11.02.2015	Priority date (day/month/year)	Application No. NL2014275
International Patent Classification (IPC) INV. B65D77/04 B65D5/38			
Applicant Ecobliss Holding B.V.			

This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the application
- ☐ Box No. VIII Certain observations on the application

	Examiner Leijten, René
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WRITTEN OPINION

Application number
NL2014275

Box No. I Basis of this opinion

1. This opinion has been established on the basis of the latest set of claims filed before the start of the search.
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing:
 - ☐ contained in the application as filed.
 - ☐ filed together with the application in electronic form.
 - ☐ furnished subsequently for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty	Yes: Claims	3, 4, 6-11
	No: Claims	1, 2, 5, 12-14
Inventive step	Yes: Claims	10
	No: Claims	1-9, 11-14
Industrial applicability	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

1 Reference is made to the following documents:

- D1 JP H09 58748 A
- D2 WO 2015/000896 A1
- D3 GB 166 861 A
- D4 WO 2011/154822 A1
- D5 BE 803 778 A1
- D6 US 4 364 488 A

2 INDEPENDENT CLAIM 1

The present application does not meet the criteria of patentability, because the subject-matter of claim 1 is not new.

The document D1 discloses (the references in parentheses applying to this document):

Verpakking voorzien van een behuizing (1) en een in een schuifrichting schuifbaar in de behuizing gelegen slede (2) welke slede een bodemwand, met de bodemwand verbonden zijwanden alsmede ten minste een op afstand van de bodemwand met de zijwanden verbonden flensvormige bovenrand (6) omvat, welke flensvormige bovenrand is voorzien van twee zich evenwijdig aan de schuifrichting uitstrekkende gedeeltes, waarbij elk gedeelte is voorzien van ten minste een haakvormig element (7), terwijl de behuizing is voorzien van ten minste een eerste en een tweede zijwand, waarbij elke zijwand is voorzien van ten minste een uitsparing (5), in welke uitsparing ten minste een met de slede verbonden haakvormig element positioneerbaar is voor het ten minste in positie in de behuizing opsluiten van de slede, waarbij de haakvormige elementen van de flensvormige bovenrand tegen veerkracht

van de flensvormige bovenrand uit de uitsparingen verplaatsbaar zijn, waarna de slede in de schuifrichting ten minste gedeeltelijk uit de behuizing door een voorzijde daarvan verplaatsbaar is, waarbij de behuizing is voorzien van ten minste een gat dat op afstand is gelegen van de ten minste twee uitsparingen in de behuizing, door welk gat een drukkracht in de schuifrichting op de slede kan worden uitgeoefend. (Abstract; fig. 1-4)*

* The sleeve 1 has no back wall and therefore is considered to comprise a hole at the back side for inserting a finger.

3 INDEPENDENT CLAIMS 13 and 14

The same reasoning applies, mutatis mutandis, to the subject-matter of the independent claims 13 and 14, which therefore are also considered not new. For the sake of completeness it is pointed out that also document D2 discloses the subject-matter of claim 13.

4 INDEPENDENT CLAIM 1

The document D2 is regarded as being the closest prior art to the subject-matter of claim 1, from which claim 1 differs in that:

de behuizing is voorzien van ten minste een gat dat op afstand is gelegen van de ten minste twee uitsparingen in de behuizing, door welk gat een drukkracht in de schuifrichting op de slede kan worden uitgeoefend.

The subject-matter of claim 1 is therefore new.

The problem to be solved by the present invention may therefore be regarded as: How to improve the housing known from D2 so that the user can easier remove the tray from the housing without compromising the childproof properties of the package.

Sliding packages (also called "drawer-and-shell" packages) are commonly known in the technical field of packaging. In many packages the housing is adapted so that the user can use his/her finger to push the tray out of the housing, for example by not providing a back wall (as in D1 and D6) or by providing an opening in the back wall, side wall and/or top wall (as in D3-D5).

Therefore, when confronted with the above mentioned problem, the skilled person would realize that including an opening in the back wall, as disclosed in D3, would solve the problem of the housing of D2. Therefore, the skilled person would include such an opening without any inventive activity.

Therefore, the solution proposed in claim 1 of the present application cannot be considered as involving an inventive step.

5 DEPENDENT CLAIMS 2-9, 11 and 12

Dependent claims 2-9, 11 and 12 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of novelty (2, 5 and 12) or inventive step (3, 4, 6-9 and 11), see documents D1-D5 and the corresponding passages cited in the search report.

6 DEPENDENT CLAIM 10

Dependent claim 10 meets the requirements of novelty and inventive step, because none of the prior art documents appears to suggest the features of this claim.