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# (54) CONTAINER WITH A DISPENSING DEVICE FOR AN ARTICLE-DISPENSING MACHINE

(57) The invention relates to a container with a dispensing device for an article-dispensing machine. The container is formed by peripheral walls and a bottom wall (1) having an opening (6) through which articles (60) can pass in the direction of a delivery channel. A rotor (7) is mounted and actuated in order to rotate around a shaft (9) provided on the bottom wall (1). The rotor (7) is provided with open-bottomed cavities (8) which are disposed around the shaft (9) in order to drag the articles (60) towards the opening (6). A support member (10) fixed to the container is positioned across the top of the opening (6) and the rotor (7). A slot (20) is provided in the bottom wall (1) for the passage of a stick belonging to the article. The groove (20) includes a collecting segment (21) transversal to the direction of rotation of the rotor (7) upstream of the opening (6) and a guide segment (22) connecting said collecting segment (21) with the opening (6).

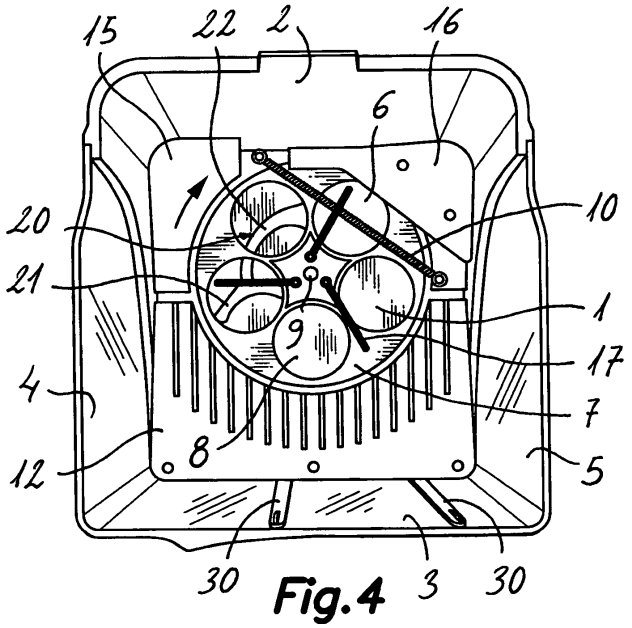


Fig.4

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## Description

### Technical Field

**[0001]** The present invention relates to a container with a dispensing device for an article-dispensing machine, especially designed to dispense articles of the type comprising a bulky body from which a stick projects.

### State of the Prior Art

**[0002]** A type of dispensing machine is well known in the art which comprises a structure supporting a container suitable for containing the articles to be dispensed. The container has a bottom wall having an opening through which said articles can pass in the direction of a delivery channel located in said structure. Inside the container, on said bottom wall, there is arranged a dispensing device comprising a rotor mounted such that it can rotate around a shaft. This rotor has a number of open-bottomed cavities arranged around said shaft. The rotor can be coupled to a mechanism associated to a coin or token selector installed in the support structure. The mentioned mechanism is adapted to make the rotor rotate step by step such that in every stationary angular position of the rotor one of said open-bottomed cavities is superposed to said opening of the bottom wall. Each of the cavities of the rotor is adapted to house one of said articles. When a particular cavity is on the bottom wall, the article housed in the cavity is retained and dragged by the rotor, and when the cavity reaches the position superposed to the opening of the bottom wall, the article passes through the cavity of the rotor and the opening of the bottom wall in the direction of said delivery channel. An elastic support member is fixed in the bottom wall or in the peripheral walls, which elastic support member is arranged across the top of the opening of the bottom wall and the top of the rotor at a sufficient height to allow the articles housed in the cavities of the rotor to pass below it. This elastic support member prevents other articles contained in the container from passing through the opening of the bottom wall after an article has been dispensed.

**[0003]** International patent application PCT 2005/ES 00028, of this applicant, discloses an example of a dispensing machine of the type described above, in which the container with the dispensing device, i.e., with the rotor, can be horizontally moved in a sliding manner in relation to the support structure between a loading position, in which a portion of the container projects from the structure providing an upper opening for refilling the container, and a working position, in which the container is integrated in the structure. If necessary, the container can be separated from the structure, for maintenance for example. When the container is placed in the working position, a peripheral gear ring of the rotor meshes automatically with a pinion of the actuation mechanism through a small rear opening of the container. In this dispensing machine, the container with the dispensing device is designed to dispense spherical, globular or bulky rounded articles, which generally consist of capsules containing surprise candies, small toys or dolls. The container is formed from a base frame, made of colored opaque plastic, defining the bottom wall, a rear wall and part of the side walls, and a transparent plastic piece defining the remaining side walls and a front wall. The articles contained in the container are visible through the transparent walls or portions of walls.

**[0004]** A type of article comprising a bulky body from which a stick projects is known on the market. This article can be a lollipop or, preferably, a capsule containing a lollipop and other surprise candies, small toys or dolls. In the latter case, the capsule includes an opening or a neck through which the stick of the lollipop contained therein projects.

**[0005]** The known article-dispensing machines are not suitable for dispensing these types of articles with a stick due to the fact that the stick, depending on the unpredictable position thereof in relation to the cavity of the rotor and the opening of the bottom wall, can cause the stick and the article to come out of the cavity or the rotation of the rotor to become jammed.

**[0006]** One objective of the present invention is to provide a container with a dispensing device for dispensing machines of the type described above suitable for indistinctly dispensing spherical, globular or bulky rounded articles, and articles of the type comprising a bulky body from which a stick projects.

### Disclosure of the Invention

**[0007]** The present invention contributes to reaching the previous and other objectives by providing a container with a dispensing device for an article-dispensing machine, said articles being of the type comprising a bulky body from which a stick projects. The container with a dispensing device is of the type comprising a bottom wall and peripheral walls defining a receptacle for containing the articles. In said bottom wall there is formed an opening through which articles can pass in the direction of a delivery channel of said dispensing machine. A rotor is mounted on a shaft in order to rotate on said bottom wall. The mentioned rotor has a number of cavities provided with an open bottom arranged around said shaft and adapted to house one of said articles and allow it to pass through. The rotor can be coupled to a mechanism associated to a coin or token selector of the dispensing machine and adapted to make the rotor rotate step by step, such that in every stationary angular position of the rotor one of said cavities is superposed to said opening of the bottom wall. A support member is fixed to the bottom wall or peripheral walls and arranged across the top of the opening of the bottom wall at a sufficient height to allow an article housed in one of the cavities of the rotor to pass below it and prevent the passage of an article located above. The container with a dispensing device according to the present invention is characterized in that

in the bottom wall of the container there is formed a through slot with a sufficient width for the passage of said stick of the article. This through slot comprises a collecting segment arranged transversally to the direction of rotation of the rotor upstream of the opening of the bottom wall, substantially encompassing the entire width of the cavities, and a guide segment connecting said collecting segment with the opening. Said guide segment runs within the path of the cavities of the rotor.

**[0008]** With this construction, when an article falls inside one of the cavities of the rotor with the stick inside the cavity, the bulky body is supported on an edge of the mouth of the cavity, and then when the rotor rotates making the cavity pass above the collecting segment of the through slot existing in the bottom wall, the free end of the stick meets the collecting segment and penetrates therein such that the bulky body is correctly housed in the cavity. A subsequent forward movement of the rotor drags the article with the stick inserted in the guide segment until the article falls through the opening of the bottom wall without the risk of the stick, and therefore the article, coming out of or being removed from the cavity of the rotor, or even of the stick being able to cause jamming in the rotation of the rotor.

**[0009]** Furthermore, the existence of the through slot does not prevent the dispensing machine from working if it is desired to dispense spherical, globular or bulky rounded articles. In other words, a dispensing machine equipped with the container with a dispensing device of the present invention is prepared to indistinctly dispense spherical, globular or bulky rounded articles or articles with a bulky body from which a stick projects without needing to carry out any transformation or adjustment, provided that both articles are within one and the same size range.

**[0010]** The container with a dispensing device of the present invention optionally provides holding elements in the form of a strip placed against an inner surface of a transparent wall or transparent portion of a wall for the purpose of holding a sheet, for example, a sheet with information about the articles to be dispensed contained in the container, or a sheet showing surprise candies, small toys or dolls contained in the articles to be dispensed, in the event that they are in the form of capsules.

**[0011]** The container with a dispensing device of the present invention also optionally provides a display box having a front opening internally opposite to a transparent wall or transparent portion of a wall of the container, and fixing configurations adapted to cooperate with configurations of the container to detachably fix said display box to the inside of the container. This display box includes shelves adapted to support a sample of surprise candies, small toys or dolls contained in the articles to be dispensed, when they are in the form of capsules.

## Brief Description of the Drawings

**[0012]** The previous and other advantages and features will be more fully understood from the following detailed description of an embodiment with reference to the attached drawings, in which:

Fig. 1 is a schematic side view showing an example of an article to be dispensed for which the container with a dispensing device of the present invention is adapted;

Fig. 2 is a perspective exploded view of an embodiment of the container with a dispensing device of the present invention;

Fig. 3 is a perspective top view of the container without the dispensing device;

Fig. 4 is a perspective top view of the container with the dispensing device basically formed by a rotor and a support member;

Fig. 5 is a perspective view of the rotor;

Fig. 6 is a partial perspective view with partially sectioned parts to show holding elements in the form of a strip installed inside the container;

Fig. 7 is a partial cross-section view showing the installation of the holding elements inside the container;

Fig. 8 is a partial cross-section view showing the installation of a display box inside the container;

Fig. 9 is a front view of the display box; and

Fig. 10 is a rear view of the display box.

## Detailed Description of an Exemplary Embodiment

**[0013]** With reference first to Fig. 1, an article to be dispensed for which the container with a dispensing device of the present invention is adapted is shown by way of example with reference number 60. Article 60 is of a known type and comprises a bulky body 61 from which a stick 62 projects. The mentioned bulky body 61 is a capsule containing a lollipop 64 and one or more surprise objects 65, such as other candies, small toys or dolls. The stick 62 belongs to the lollipop 64, and one of the two halves forming the mentioned capsule comprises an opening or neck 63 through which the stick 62 of the lollipop 64 projects.

**[0014]** It must be noted, however, that the container with a dispensing device of the present invention can also dispense spherical, globular or bulky rounded articles as well as articles formed by a bulky body with a stick in which the bulky body is solid, such as a sweet.

**[0015]** Fig. 2 shows some of the parts forming the container of the present invention. The container is formed from a base frame 70, which is generally made of colored opaque plastic and defines a bottom wall 1, a rear wall 2 and part of side walls 4, 5, and a transparent plastic piece 80 defining the remaining part of the side walls 4, 5 and a front wall 3. Thus, the real wall 2, front wall 3 and side walls 4, 5 surround the bottom wall 1 defining a receptacle for containing the articles 60. The articles 60 contained in the container are visible through the front transparent wall 2 and the transparent portions of the

side walls 4, 5. In the bottom wall 1 there is formed an opening 6 through which the articles 60 can pass in the direction of a delivery channel (not shown) of said dispensing machine and a through slot 20 with a sufficient width to allow the passage of the stick 62 of the article 60, and preferably to allow the passage of the neck 63 of the article 60. The features of the through slot 20 will be described in detail below. The construction of the container shown in Fig. 2 corresponds to that described in the mentioned international patent application PCT 2005/ES 00028, of this applicant. However, for the purposes of the present invention, other constructions and other configurations are possible, provided that they comprise a bottom wall with a through slot for the stick of the articles, an opening for the passage of the articles and one or more peripheral walls.

**[0016]** Fig. 3 shows the container of Fig. 2 assembled, where the bottom wall 1 with a circular portion in which said through slot 20 and the opening 6 are formed can be observed. At the center of the bottom wall 1 there is arranged a shaft 9 on which there is mounted a rotor which is shown separately in Fig. 5 and installed inside the container in Fig. 4. The mentioned rotor 7 is adapted to rotate around said shaft 9 on the bottom wall 1. The rotor has a gear ring 13 (shown schematically in Fig. 5) formed in its periphery which meshes automatically through a rear opening 14 of the container with a pinion of an actuation mechanism existing in the dispensing machine (not shown) when the container is placed in a working position. The rotor 7 has a number of cavities 8 arranged around said shaft 9. Each of these cavities 8 is provided with an open bottom and has dimensions adapted to house at least the bulky body 61 of the article 60 and to allow the article 60 to pass therethrough. The mentioned actuation mechanism is associated to a coin or token selector (not shown) of the dispensing machine and is adapted to make the rotor 7 rotate step by step such that in every stationary angular position of the rotor 7 one of said cavities 8 is superposed to said opening 6 of the bottom wall 1. Thus, when a particular cavity 8 of the rotor 7 is on the bottom wall 1, the article 60 housed therein rests on the bottom wall and can be dragged by the rotation of the rotor. When the cavity 8 reaches the position superposed to the opening 6 of the bottom wall 1, the article 60 housed in the cavity 8 falls through the opening 6.

**[0017]** As better shown in Fig. 3, the through slot 20 comprises a collecting segment 21 arranged transversally to the direction of rotation of the rotor 7 (shown by an arrow in Fig. 4) upstream of the opening 6 of the bottom wall 1. This collecting segment 21 substantially encompasses the entire width of the cavities 8, such that the stick 62 of an article 60 housed in a cavity 8 and dragged by the rotor 7 will necessarily meet the collecting segment 21 and fall therein. This will occur especially when the article 60 is dragged, for example, with the stick 62 inside the cavity 8 and the bulky body 61 supported on an edge of the mouth of the cavity 8, and especially if the stick 62 is in front of the bulky body 61 in relation to direction of rotation of the rotor 7, the latter being the most unfavorable situations for the stick 62 and the entire article 60 to possibly come out of or be removed from the cavity 8 of the rotor 7, or for causing possible jamming in the rotation of the rotor 7. The through slot 20 further comprises a guide segment 22 connecting the collecting segment 21 with the opening 6. This guide segment 22 runs within the path of the cavities 8, such that the article 60, with the stick 62 inserted in the through slot 20 and the bulky body 61 housed in the corresponding cavity 8 is dragged by the rotation of the rotor 7 until the cavity 8 reaches the angular position superposed to the opening 6 of the bottom wall 1 of the container (Fig. 4), at which time the article 60 will fall without problems through the opening 6. Obviously, in the dispensing machine there is provided a sufficient gap below the bottom wall 1 of the container to allow the movement of the stick 62 inserted in the through slot 20.

**[0018]** The collecting segment 21 of the through slot 20 has two ends and a mid-area 23 that is located further ahead than said two ends in relation to the direction of rotation of the rotor 7. The guide segment 22 is connected to the collecting segment 21 in said mid-area 23 thereof that is located further ahead. The stick 62 inserted in any point of the collecting segment 21 is thus directed towards the entrance of the guide segment 22 when the bulky body 61 is dragged by the rotor 7 towards the opening 6. The guide segment 22 progressively widens from the collecting segment 21 to the opening 6.

**[0019]** In the embodiment shown, a front ramp piece 12 is fixed on the bottom wall 1, which ramp piece is inclined to direct the articles 60 towards the rotor 7. The bottom wall 1 defines, next to a rear corner of the container, a first rear ramp 15 inclined to direct the articles 60 towards the rotor 7. On the bottom wall 1, and next to the other rear corner, there is mounted a second rear ramp piece 16 having a projecting portion partially superposed to the opening 6 of the bottom wall 1 and to the rotor 7. In front of this second rear ramp piece 16 there is arranged a support member 10, generally in the form of a prestressed coil spring fixed at its ends to the bottom wall 1, although alternatively it could be fixed to the rear wall 2 and to the side wall 5 of the container. The mentioned support member 10 is positioned across the top of the opening 6 of the bottom wall 1 at a sufficient height to allow an article 60 housed in one of the cavities 8 of the rotor 7 to pass below it and at the same time to prevent the passage of an article 60 located above towards the opening 6. At the center of the rotor there is formed a pyramid 18 having as many inclined faces as there are cavities 8 in the rotor 7 to direct the articles 60 towards the cavities 8. Stirring members 17, for example, in the form of prestressed coil springs are fixed to said pyramid 18, which stirring members 17 extend upwards and towards the periphery of the rotor and are useful for stirring the mass of articles 60 contained in the container every time the rotor 7 carries out a rotation.

**[0020]** It must be noted that when the article 60 is dragged by the rotor 7 with the bulky body 61 housed inside one of the cavities 8 and the stick 62 partially outside the cavity, the dispensing device of the container of the present invention has no difficulty in dispensing such article. For a person skilled in the art it will be evident that the container with a dispensing device of the present invention, as it has been previously described and shown, will be able to indistinctly dispense spherical, globular or bulky rounded articles and articles of the type comprising a bulky body from which a stick projects, such as the article 60 shown in Fig. 1, for example.

**[0021]** With reference now to Figs. 6 and 7, the container of the present invention also includes a pair of holding elements 30 extending internally along at least one part of said transparent wall 3. In the embodiment shown, each holding element 30 is in the form of an elongated vertical strip with a fixed end 31, a free end 32, and a securing surface placed against an inner surface of said transparent wall 3 between said fixed and free ends 31, 32. In the mentioned fixed end 31 (Fig. 7), the holding element 30 has formed therein a support configuration with a hole 34 adapted to receive a fixing element 36, such as a screw, installed through a hole 19 formed next to the base of the transparent wall 3. At said free end 32, the holding element 30 has a handgrip 35 formed. The holding elements 30 are sufficiently elastic so that they can be bent, for example, by pulling the handgrips 35, to allow inserting a sheet 33 between said securing surface of the elastic element 30 and said inner surface of the transparent wall 3, and to recover their original shape upon being released for the purpose of securing said sheet 33 placed against the transparent wall 3 or transparent wall portion. Once the sheet 33 is placed, it will be visible through the transparent wall 3 and can have, for example, written information about the articles 60 to be dispensed contained in the container and/or a depiction of surprise candies, small toys or dolls contained in the articles 60 in the form of a capsule to be dispensed.

**[0022]** It must be noted that for the purposes of the present invention, the holding elements 30 can have other configurations and other forms of assembly. For example, more than two parallel holding elements in the form of a strip or a single holding element in a branched form could be arranged, or the one or more holding elements could be placed against a transparent portion of a peripheral wall of the container. Likewise, their fixed end could be fixed to a base portion of the transparent wall, or of the wall with a transparent portion, or to a support next to it. What is essential is that at least one holding element 30 has a fixed end 31, a free end 32 and a securing surface placed against an inner surface of a transparent wall or transparent portion of a peripheral wall of the container for securing a sheet which is externally visible through said transparent wall or transparent portion.

**[0023]** With reference now to Figs. 8, 9 and 10, the container of the present invention includes a display box 40 having a rear wall 41, side walls 42, 43, upper and lower walls 44, 45, and a front opening adapted to be internally opposite to said transparent wall 3, such that the inside of said display box 40 is visible through the transparent wall 3. Inside the display box 40 there are arranged shelves 46 having ends adapted to be inserted in a sliding manner in guide grooves 47 formed internally in said side walls 42, 43. For each shelf 46 there are several of said guide grooves 47 on each side, to allow adjusting the installation height of the shelves 46. These shelves are provided to support samples of the surprise candies, small toys or dolls contained in the capsules or articles 60. For example, each of the articles 60 can randomly contain a small toy or doll belonging to a set of collectable small toys or dolls, and the display box can show the complete collection of small toys or dolls. Each of the shelves 46 has a securing rib 56 adjacent to its front edge to be inserted by snap-fitting in slots of one or more label supports 48 for the purpose of securing said one or more label supports 48 in any positions along said securing rib 56. These label supports can thus be placed, for example, in selected positions along the mentioned securing rib 48 coinciding with the positions of the small toys or dolls displayed, and are useful as a support for labels related to each of them. Alternatively, a slot in which a rib formed in each label support 48 would be inserted by snap-fitting could be formed in each shelf with an equivalent result.

**[0024]** In an inner upper part of said rear wall 41 there are arranged tabs 49 cooperating with rear edges of the shelves 46 to secure a sheet 50 (Fig. 9) placed against an inner surface of the rear wall 41. This sheet 50 can contain, for example, additional graphic and/or written information relating to the surprise candies, small toys or dolls contained in the capsules and/or displayed in the display box, and is visible through the transparent wall 3, behind the shelves. The rear wall 41 of the display box, like the shelves 46, can have formed therein a plurality of holes 55 for the passage of securing elements (not shown) to secure objects to be shown. These securing elements can be, for example, preferably transparent bows of thread, or sharp elements such as pins, among others. The rear wall 41 of the display box 40 can include other openings 57 (Fig. 9) useful as handgrips in order to facilitate its handling.

**[0025]** To detachably fix the display box 40 to the inside of the container, the display box 40 comprises fixing configurations adapted to cooperate with configurations of the container without needing to use tools or fixing elements. These fixing configurations can even be expressly designed to cooperate with configurations of a pre-existing container.

**[0026]** In the embodiment shown in Figs. 8, 9 and 10, the mentioned fixing configurations of the display box 40 comprise, on one hand, a front edge 51 of the upper wall 44, which is adapted to be fitted in an inner upper rim 11 of the transparent wall 3 (see the installation example in Fig. 8). The upper wall 44 of the display box 40 is preferably inclined upwards and forwards to facilitate said

fitting. On the other hand, the fixing configurations of the display box 40 comprise partitions 52 extending downwards from said lower wall 45. These partitions 52 have a final portion adapted to be fitted in a clearance between the transparent wall 3 and the aforementioned front ramp piece 12 fixed to the bottom wall 1. Elastic tabs 53 (Figs. 8 and 10) are inwardly projected from said partitions 52, which elastic tabs 53 are adapted to be elastically deformed and be supported on said front ramp piece 12. The elastic recovery force of said elastic tabs 53 thus pushes the display box 40 upwards to maintain said front edge 51 of the upper wall 44 fitted in said inner upper rim 11 of the transparent wall 3. The elastic tabs 53 are placed at different heights (Fig. 10) in order to be adapted to a curvature of the front ramp piece 12 (shown in Fig. 6). The side partitions 52 are optionally joined by a front flap 58. Additionally, the fixing configurations of the display box 40 further comprise flanges 54 extending upwards from the upper wall 44 to interact with a configuration (not shown) existing in the aforementioned support structure of the dispensing machine in order to lock the display box 40 in relation to the container against side movements.

**[0027]** The installation of the display box 40 (Fig. 8) is generally alternative to the installation of the holding elements 30 (Fig. 7) in the inner part of the front transparent wall 3. Obviously, for the purposes of the present invention, the mentioned front opening of the display box 40 could be opposite to a transparent portion of another of the peripheral walls of the container, in which case it could be simultaneously used with the holding elements 30, or vice versa. The fixing configurations of the display box 40 could further comprise other shapes which could occur to a person skilled in the art to cooperate with configurations of any other pre-existing container in order to releasably fix the display box 40 to the inside of the container.

**[0028]** A person skilled in the art will be able to introduce variations and modifications in the embodiment shown and described without departing from the scope of the present invention as it is defined in the attached claims.

## Claims

1. A container with a dispensing device for an article-dispensing machine, said articles (60) being of the type comprising a bulky body (61) from which a stick (62) projects, and said container with a dispensing device being of the type comprising:

   a bottom wall (1) and peripheral walls (2, 3, 4, 5) defining a receptacle for containing the articles (60), there being formed in said bottom wall (1) an opening (6) through which said articles (60) can pass in the direction of a delivery channel of said dispensing machine;

   a rotor (7) mounted on a shaft (9) in order to rotate on said bottom wall (1), said rotor (7) having a number of open-bottomed cavities (8) arranged around said shaft (9) and adapted to house one of said articles (60) and allow it to pass through, the rotor (7) being able to be coupled to an actuation mechanism associated to a coin or token selector of the dispensing machine adapted to make the rotor (7) rotate step by step such that in every stationary angular position of the rotor (7) one of said cavities (8) is superposed to said opening (6) of the bottom wall (1); and

   a support member (10) fixed to the bottom wall (1) or peripheral walls (2, 3, 4, 5) and arranged across the top of the opening (6) of the bottom wall (1) at a sufficient height to allow an article (60) housed in one of the cavities (8) of the rotor (7) to pass below it and prevent the passage of an article (60) located above;

   **characterized in that** in the bottom wall (1) of the container there is formed a through slot (20) with a sufficient width for the passage of said stick (62) of the article (60), said through slot (20) comprising a collecting segment (21) arranged transversally to the direction of rotation of the rotor (7) upstream of the opening (6) of the bottom wall (1), substantially encompassing the entire width of the cavities (8), and a guide segment (22) connecting said collecting segment (21) with the opening (6), said guide segment (22) running within the path of the cavities (8).

2. The container according to claim 1, **characterized in that** said collecting segment (21) has two ends and a mid-area (23) that is located further ahead than said two ends in relation to the direction of rotation of the rotor (7), and the guide segment (22) is connected to the collecting segment (21) in said mid-area (23) thereof that is located further ahead.

3. The container according to claim 2, **characterized in that** the guide segment (22) progressively widens from the collecting segment (21) to the opening (6).

4. The container according to claim 1, **characterized in that** at least one of said peripheral walls (2, 3, 4, 5) is a transparent wall (3) or comprises a transparent portion, and **in that** it includes at least one holding element (30) extending internally along at least one part of said transparent wall (3) or transparent portion, said holding element (30) having a fixed end (31) fixed to the transparent wall (3) or transparent portion, or to a support next to it, a free end (32), and a securing surface placed against an inner surface of said transparent wall (3) or transparent portion, the holding element (30) being sufficiently elastic to allow inserting a sheet (33) between said securing

surface of the elastic element (30) and said inner surface of the transparent wall (3) or transparent portion, and to secure said sheet (33) placed against the transparent wall (3) or transparent portion.

**5.** The container according to claim 4, **characterized in that** it comprises at least two of said holding elements (30) in the form of a vertical strip, each holding element (30) comprising a support configuration at said fixed end (31) with a hole (34) adapted to receive a fixing element (36) installed through a hole next to the base of the transparent wall (3) or transparent portion, and a handgrip (35) at said free end (32).

**6.** The container according to claim 1, **characterized in that** at least one of said peripheral walls (2, 3, 4, 5) is a transparent wall (3) or comprises a transparent portion, and **in that** it includes a display box (40) having a rear wall (41), side walls (42, 43), upper and lower walls (44, 45), a front opening internally opposite to said transparent wall (3) or transparent portion, and fixing configurations adapted to cooperate with configurations of the container to detachably fix said display box (40) to the inside of the container.

**7.** The container according to claim 6, **characterized in that** the display box (40) comprises one or more shelves (46) having ends adapted to be inserted in a sliding manner in guide grooves (47) formed internally in said side walls (42, 43).

**8.** The container according to claim 7, **characterized in that** said shelves (46) have a configuration adjacent to their front edge adapted to receive the coupling by snap-fitting of complementary configurations formed in one or more label supports (48) for the purpose of securing one or more label supports (48) in any positions along the shelf (46).

**9.** The container according to claim 7, **characterized in that** in an inner upper part of said rear wall (41) there are arranged tabs (49) cooperating with rear edges of said shelves (46) to secure a sheet (50) placed against an inner surface of the rear wall (41).

**10.** The container according to claim 6, **characterized in that** said fixing configurations of the display box (40) comprise a front edge (51) of said upper wall (44) adapted to be fitted in an inner upper rim (11) of the transparent wall (3) or wall with a transparent portion, partitions (52) extending downwards from said lower wall (45) and adapted to be fitted in a clearance between the transparent wall (3) or wall with a transparent portion and a ramp piece (12) fixed to the bottom wall (1), and elastic tabs (53) projecting from said partitions (52), said elastic tabs (53) being adapted to be elastically deformed and be supported on said ramp piece (12) and thus push the display box (40) upwards to maintain said front edge (51) fitted in said inner upper rim (11).

**11.** The container according to claim 10, **characterized in that** the fixing configurations of the display box (40) further comprise flanges (54) extending upwards from the upper' wall (44) to interact with a configuration existing in a structure of the dispensing machine in order to lock the display box (40) against side movements.

**12.** The container according to claim 6, **characterized in that** the rear wall (41) and/or the shelves (46) have formed therein a plurality of holes (55) for the passage of securing elements for securing the objects to be displayed.

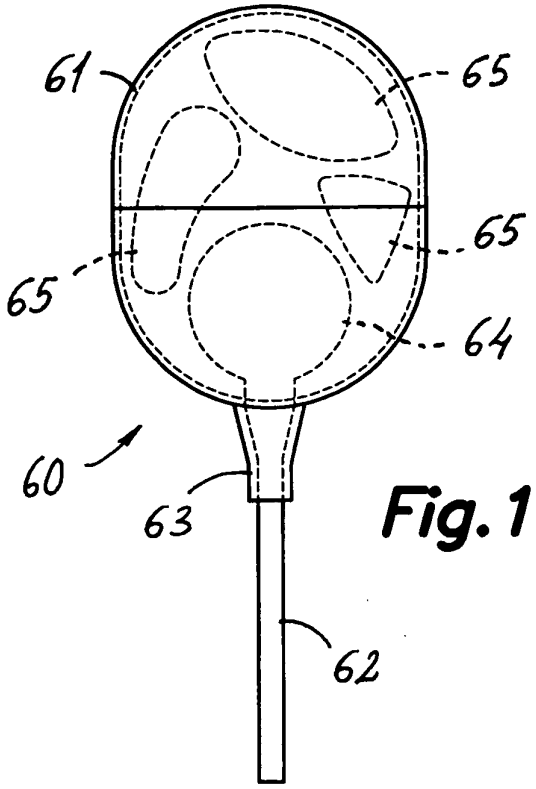


Fig. 1



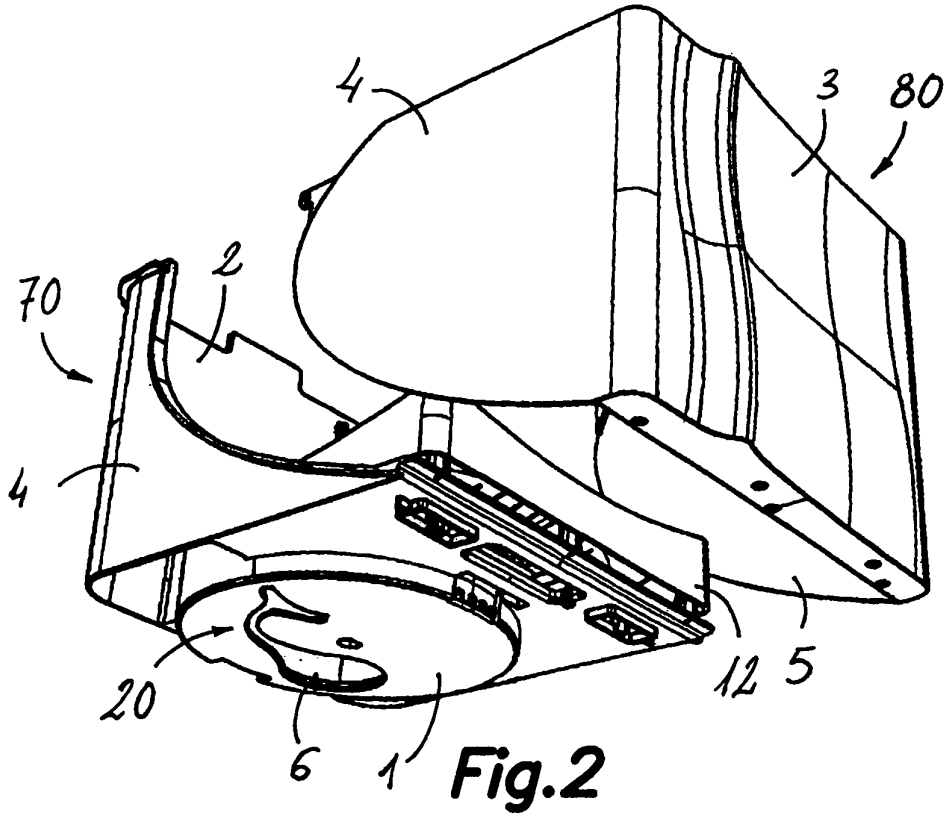


Fig.2

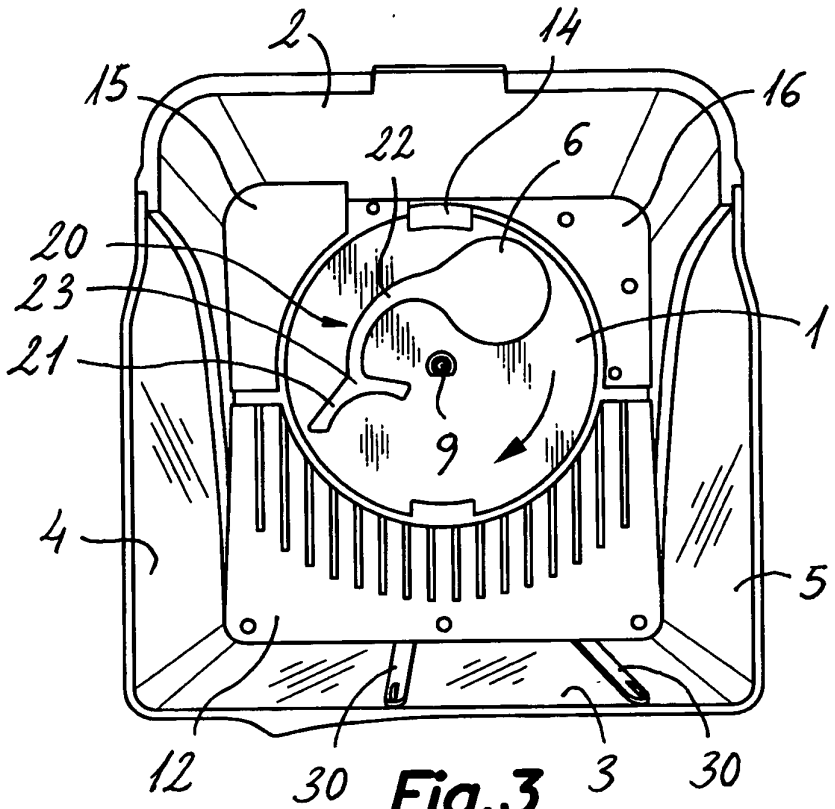
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Fig.3

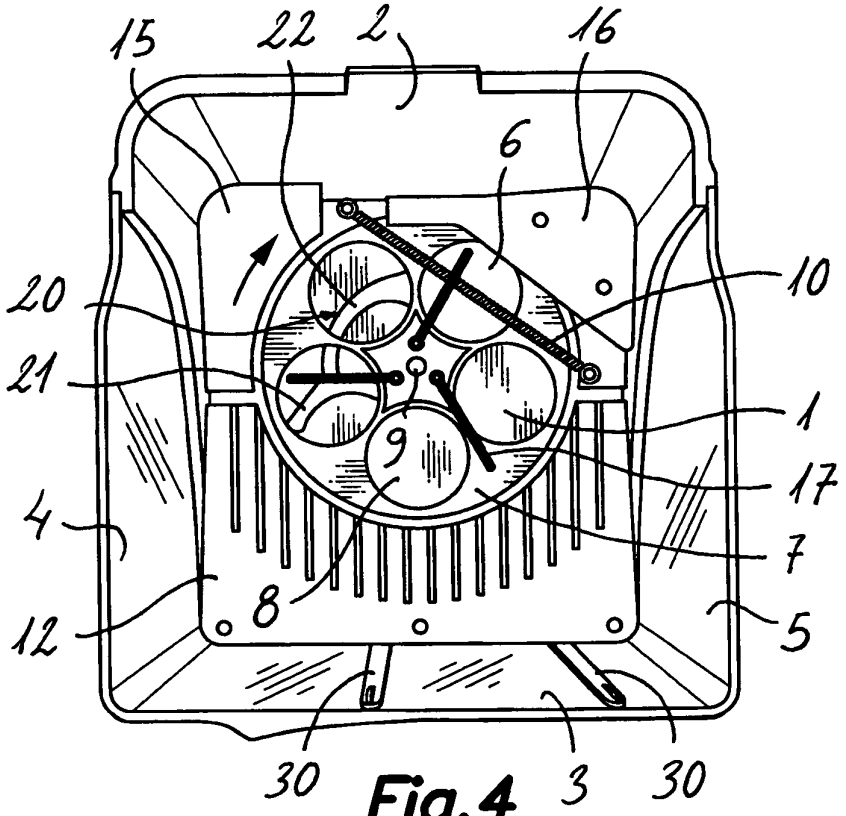
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Fig.4

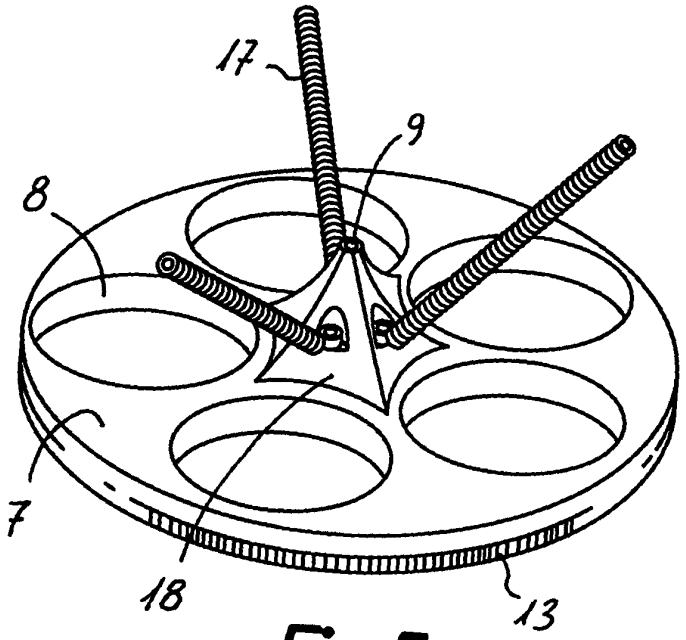


Fig.5

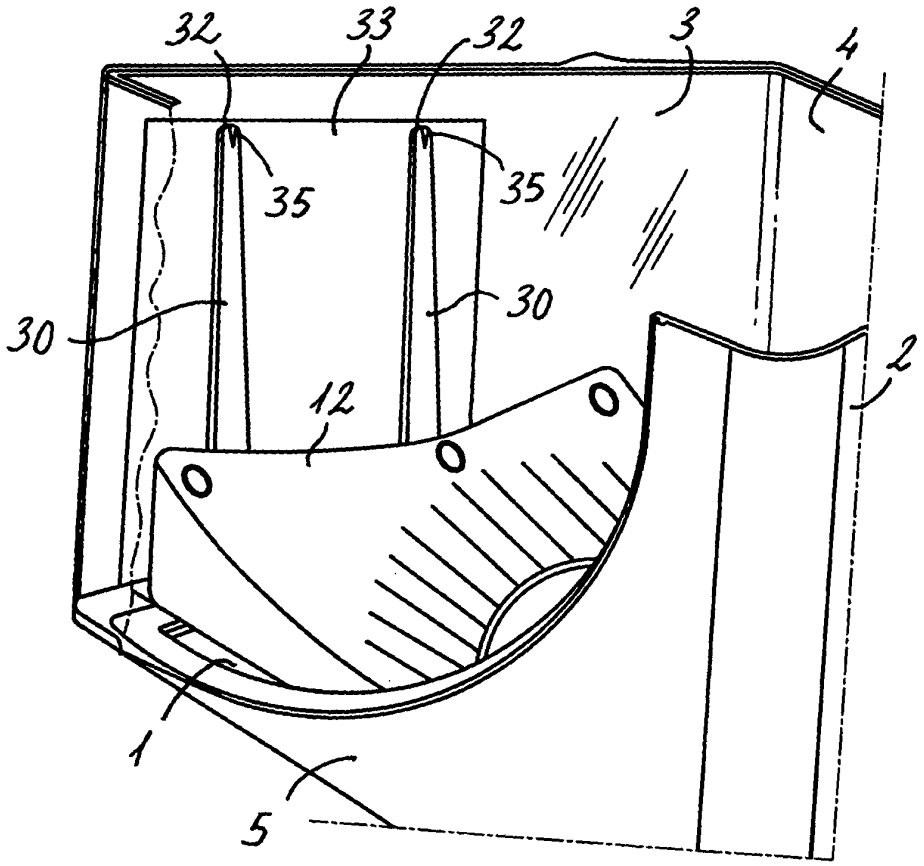


Fig.6

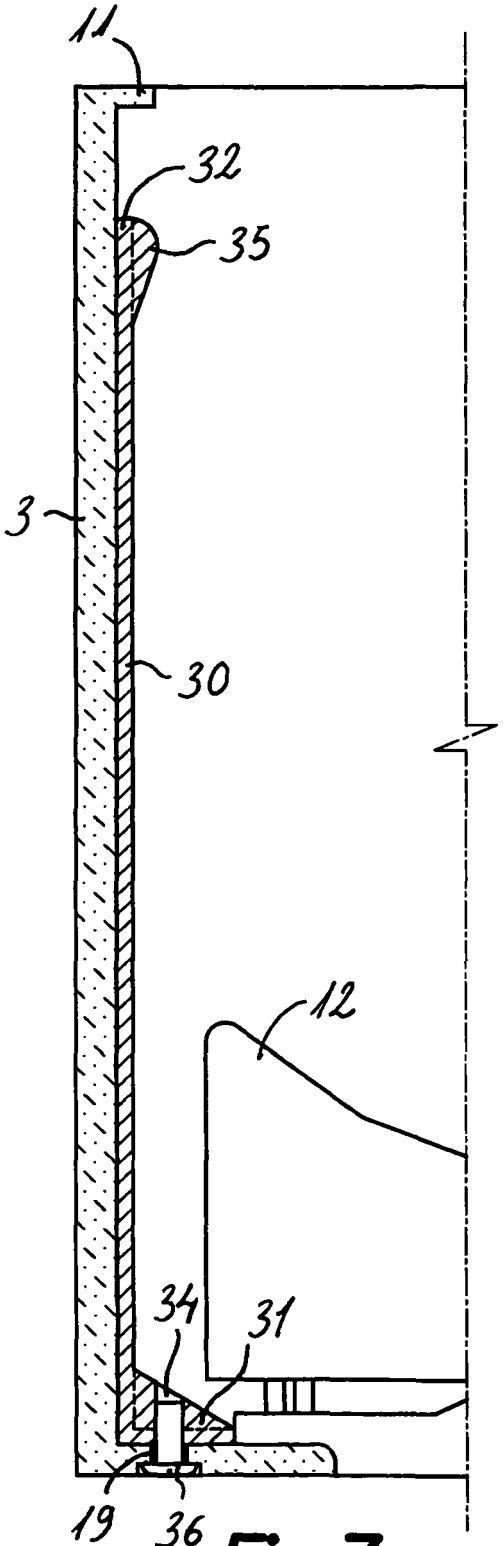
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Fig.7

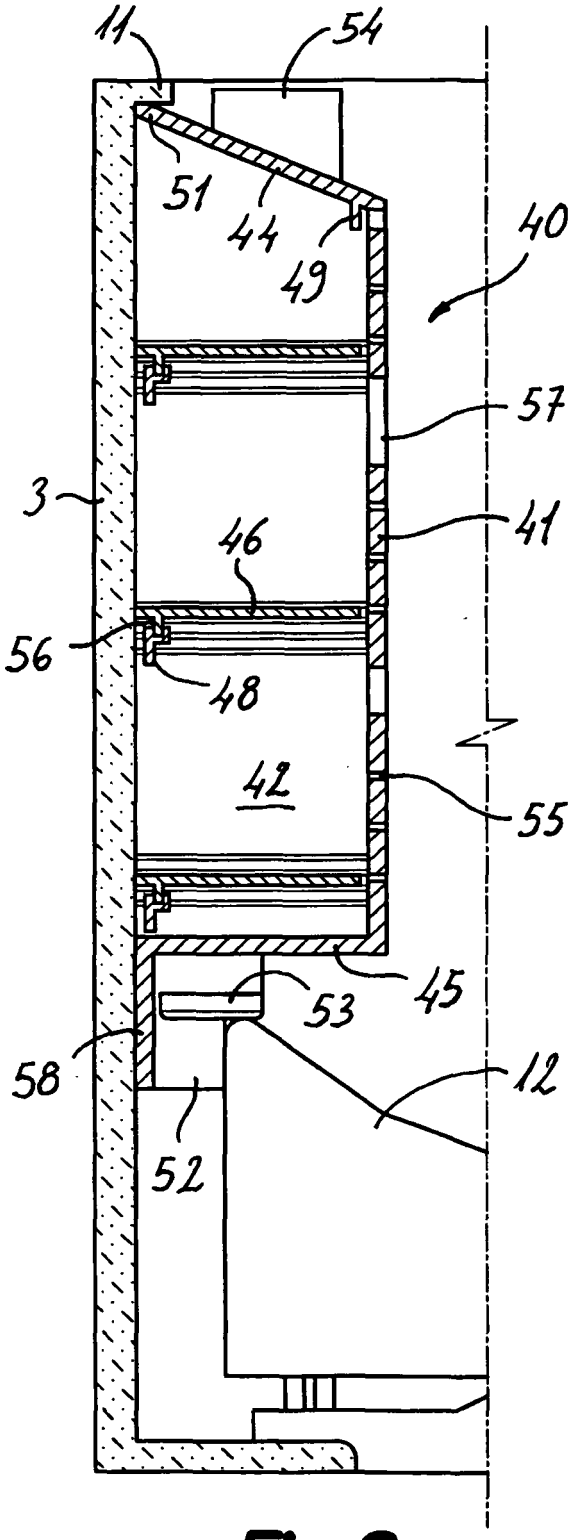
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Fig.8

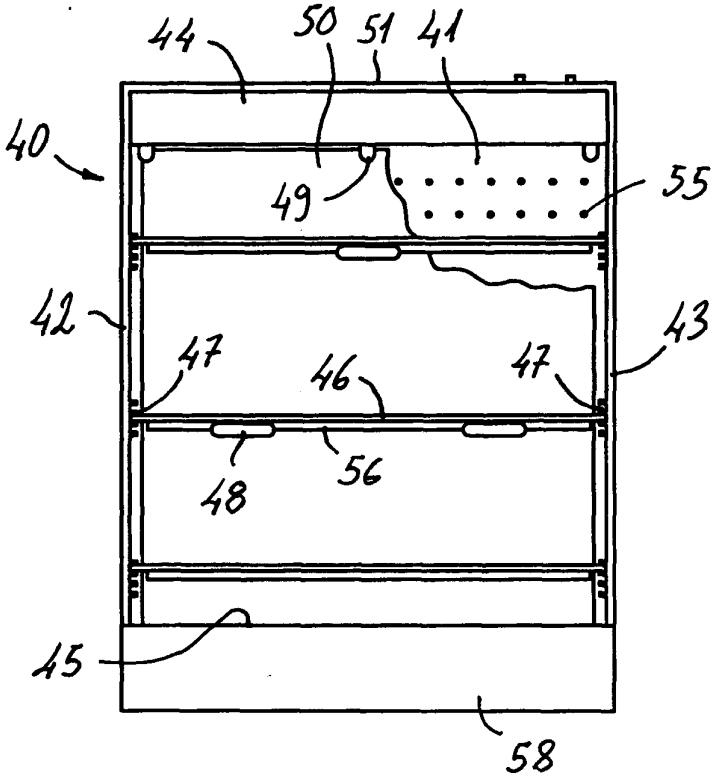
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Fig.9

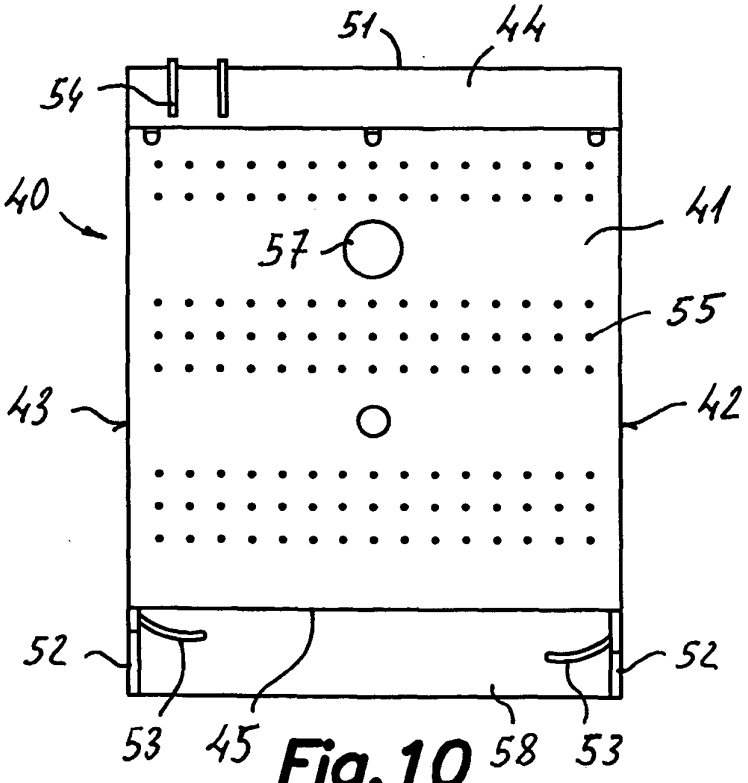
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Fig.10

**INTERNATIONAL SEARCH REPORT**

International application No.
PCT/ ES 2006/000023

A. CLASSIFICATION OF SUBJECT MATTER

*G 07 F 11/44* (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G 07 F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CIBEPAT, EPODOC, WIPL, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | US 4440312 A (GLASER) 03.04.1984, **The whole document** | 1, 4, 6 |
| A | US 2001010315 A1 (TOMIOKA) 02.08.2001, **The whole document** | 1, 4, 6 |
| A | US 6182859 B1 (BOLEN) 06.02.2001, **The whole document** | 1, 4, 6 |
| A | US 2990975 A (THE NORTWESTERN CORP) 04.07.1961, **The whole document** | 1, 4, 6 |

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| **20 APRIL 2006 (20.04.06)** | **26 APRIL 2006 (26.04.06)** |
| Name and mailing address of the ISA/ **S.P.T.O.** Facsimile No. | Authorized officer Telephone No. |

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**INTERNATIONAL SEARCH REPORT**
Information on patent family members

International application No.
PCT/ ES 2006/000023

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Form PCT/ISA/210 (patent family annex) (April 2005)

## REFERENCES CITED IN THE DESCRIPTION

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