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(54) Packing method employing non-dry, re-stick glue

Verpackungsverfahren mit nicht trockenem, mehrmals verwendbarem Klebstoff

Procédé d'emballage utilisant une colle non sèche à réutilisation

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**WO-A2-2009/092419 US-A- 3 340 847
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Description

TECHNICAL FIELD

[0001] The present invention relates to a packing method employing non-dry, re-stick glue.
(see WO 2009/092419 A2)

BACKGROUND ART

[0002] Rigid, hinged-lid packets of cigarettes are currently the most widely marketed, by being easy to produce and easy and practical to use, and by effectively protecting the cigarettes inside.

[0003] In addition to the above rigid, hinged-lid packets of cigarettes, rigid slide-open packets have been proposed comprising two partly separable containers, one inserted inside the other. In other words, a rigid, slide-open packet of cigarettes comprises an inner container, which houses a foil-wrapped group of cigarettes and is housed inside an outer container to slide, with respect to the outer container, between a closed configuration, in which the inner container is inserted inside the outer container, and an open configuration, in which the inner container is expelled from the outer container.

[0004] A rigid, hinged-lid, slide-open packet of cigarettes has also been proposed in which the inner container (or outer container) has a hinged lid, which rotates between a closed position and an open position closing and opening an open top end of the inner container. The lid has a connecting tab connected at one end to the lid, and at the other end to the outer container (or inner container), to 'automatically' rotate the lid (i.e. without the user having to touch the lid) as the inner container slides with respect to the outer container.

[0005] In currently used methods of producing hinged-lid, slide-open packets of cigarettes (see e.g. US 2011/0041463 A1), an outer blank for forming the outer container has the connecting tab, to which glue is applied; and, when the inner container is fed onto the outer blank, a rear wall of the inner container rests on the previously gummed connecting tab (i.e. to which glue has been applied) to glue the connecting tab to the rear wall of the inner container. To ensure the connecting tab is glued both firmly and quickly to the rear wall of the inner container, the connecting tab is applied with both a weak, fast-setting first permanent glue (typically fast-drying, hot-melt glue), and a stronger, slow-setting second permanent glue (typically cold, vinyl-based glue that dries very slowly but, when dry, provides for extremely firm grip). Because the fast-setting first permanent glue dries so fast, however, it must be applied close to where the inner container engages the outer blank (i.e. where the rear wall of the inner container rests on the connecting tab on the outer blank). This poses serious packing machine design problems, due to the difficulty of applying glue to the connecting tab close to where the inner container engages the outer blank, on account of the con-

necting tab, in the area referred to, being located inside a 'cradle' formed by various previously folded panels on the outer blank (i.e. the connecting tab is covered by various previously folded panels on the outer blank, and therefore difficult to reach).

DESCRIPTION OF THE INVENTION

[0006] It is an object of the present invention to provide a packing method designed to eliminate the above drawbacks, and which, in particular, is cheap and easy to implement.

[0007] According to the present invention, there is provided a packing method as claimed in the accompanying Claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] A number of non-limiting embodiments of the present invention will be described by way of example with reference to the accompanying drawings, in which:

Figure 1 shows a front view in perspective of a rigid, hinged-lid, slide-open packet of cigarettes in a closed configuration;

Figure 2 shows a front view in perspective of the Figure 1 packet of cigarettes in an open configuration;

Figure 3 shows a top plan view of the Figure 1 packet of cigarettes in an open configuration;

Figure 4 shows a front view in perspective of an outer container of the Figure 1 packet of cigarettes;

Figure 5 shows a front view in perspective of an inner container of the Figure 1 packet of cigarettes without the group of cigarettes and with a connecting tab;

Figure 6 shows a plan view of an inner blank from which to form an inner container of the Figure 1 packet of cigarettes;

Figure 7 shows a plan view of an outer blank from which to form an outer container of the Figure 1 packet of cigarettes;

Figure 8 shows a schematic in perspective of a packing machine, in accordance with the present invention, for producing the Figure 1 packet of cigarettes; Figure 9 shows a schematic in perspective of a packing wheel of a second packing unit of the Figure 8 packing machine;

Figure 10 shows a plan view of the Figure 7 outer blank partly folded and glued just prior to being fed to the Figure 9 packing wheel.

PREFERRED EMBODIMENTS OF THE INVENTION

[0009] Number 1 in Figures 1 and 2 indicates as a whole a rigid, slide-open packet of cigarettes, which opens in a translatory (linear) movement.

[0010] The Figure 1 packet 1 of cigarettes comprises a wrapped, i.e. foil-wrapped group 2 of cigarettes (shown

in Figure 2). Packet 1 of cigarettes also comprises a rigid inner container 3 actually containing the wrapped group 2 of cigarettes; and a rigid outer container 4, which houses inner container 3 to allow inner container 3 to slide in a translatory movement, with respect to outer container 4, between a closed configuration (Figure 1), in which inner container 3 is inserted fully inside outer container 4, and an open configuration (Figure 2), in which inner container 3 is expelled from outer container 4 to allow access to wrapped group 2 of cigarettes.

[0011] As shown in Figure 5, inner container 3 is parallelepiped-shaped, and comprises a bottom wall 5; an open top end 6 opposite bottom wall 5; a front wall 7 and rear wall 8 opposite and parallel to each other; and two parallel lateral walls 9 interposed between walls 7 and 8.

[0012] As shown in Figure 4, outer container 4 has an open top end 10; and a lid 11 hinged to outer container 4 along a hinge 12 to rotate, with respect to outer container 4, between an open position (Figures 2, 3 and 4) and a closed position (Figure 1) respectively opening and closing open top end 10 of outer container 4 and, at the same time, also open top end 6 of inner container 3. Outer container 4 is parallelepiped-shaped, and comprises a bottom wall 13 opposite open top end 10; a front wall 14 and rear wall 15 opposite and parallel to each other; and two parallel lateral walls 16 interposed between walls 14 and 15.

[0013] Lid 11 comprises a top wall 17 which closes open top end 10 of outer container 4 (and, at the same time, open top end 6 of inner container 3) when the lid is closed. Top wall 17 of lid 11 is 'flat' (i.e. is formed from one cardboard panel or a number of compacted cardboard panels, and is therefore solid). When lid 11 is closed, top wall 17 of lid 11 is flush with the top edges of walls 14, 15 and 16 of outer container 4.

[0014] In a preferred embodiment, rear wall 8 of inner container 3 is connected to top wall 17 of lid 11 by a connecting tab 20 to rotate lid 11 'automatically' (i.e. without the user having to touch lid 11) as inner container 3 slides with respect to outer container 4. In other words, by means of connecting tab 20 connecting top wall 17 of lid 11 mechanically to rear wall 8 of inner container 3, inner container 3, as it slides with respect to outer container 4 from the closed to the open configuration, pushes lid 11 from the closed to the open position 'automatically' (i.e. without the user having to touch lid 11); and similarly, as inner container 3 slides with respect to outer container 4 from the open to the closed configuration, lid 11 is drawn by inner container 3 from the open to the closed position 'automatically' (i.e. without the user having to touch lid 11). The user therefore need simply exert sufficient thrust to slide inner container 3 with respect to outer container 4, without having to touch lid 11, which is rotated 'automatically'. Preferably, connecting tab 20 is connected seamlessly to lid 11, and is glued to rear wall 8 of inner container 3.

[0015] As shown in Figures 1, 2 and 4, lateral wall 16 of outer container 4 has a through window 21 allowing

access to underlying lateral wall 9 of inner container 3 facing lateral wall 16 of outer container 4, to exert thrust on inner container 3 to move it between the closed and open configurations. In other words, to use packet 1 of cigarettes, the user holds outer container 4 with one hand and, with the thumb of the same hand, pushes on lateral wall 9 of inner container 3 through window 21 in lateral wall 16 of outer container 4, to exert thrust on inner container 3 and slide it with respect to outer container 4.

[0016] Containers 3 and 4 of the Figure 1-5 packet 1 of cigarettes are formed from corresponding blanks 22 and 23 as shown in Figures 6 and 7. Among other things, each blank 22, 23 comprises a number of parts, which are indicated, where possible, using the same reference numbers, with superscripts, as for the corresponding walls of respective container 3, 4.

[0017] With reference to Figure 6, inner blank 22 has two longitudinal fold lines 24, and a number of transverse fold lines 25 which define, between the two longitudinal fold lines 24, a panel 7' forming front wall 7 of inner container 3; a panel 5' forming bottom wall 5 of inner container 3; and a panel 8' forming rear wall 8 of inner container 3. Panel 8' is connected along a transverse fold line 25 to a reinforcing panel 8", in turn connected along a transverse fold line 25 to a further reinforcing panel 8"". Reinforcing panels 8" and 8"" are folded 180° about respective transverse fold lines 25 and glued onto an inner surface of panel 8' to thicken (reinforce) rear wall 8. A different embodiment, not shown, has no reinforcing panels 8" and 8"".

[0018] Panel 7' has two lateral wings 9', which form respective outer portions of lateral walls 9, are located on opposite sides of panel 7', and are separated from panel 7' by longitudinal fold lines 24. Panel 8' has two lateral wings 9", which are glued to corresponding wings 9', form respective inner portions of lateral walls 9, are located on opposite sides of panel 8', and are separated from panel 8' by longitudinal fold lines 24. Each lateral wing 9" of panel 8' has a tab 26 separated from respective lateral wing 9" by a transverse fold line 25.

[0019] With reference to Figure 7, outer blank 23 has two longitudinal fold lines 27, and a number of transverse fold lines 28 which define, between the two longitudinal fold lines 27, a panel 17' forming top wall 17 of lid 11; a panel 15' forming rear wall 15 of outer container 4; a panel 13' forming bottom wall 13 of outer container 4; and a panel 14' forming front wall 14 of outer container 4.

[0020] Panel 17' is connected along a transverse fold line 28 to connecting tab 20, which comprises three panels 20', 20", 20''' separated by respective transverse fold lines 28. Panel 20' of connecting tab 20 is glued to an inner surface of top wall 17 of lid 11 (i.e. to an inner surface of panel 17'), and panel 20''' of connecting tab 20 is glued to an outer surface of rear wall 8 of inner container 3 (i.e. to an outer surface of panel 8').

[0021] Panel 14' has two lateral wings 16', which form respective outer portions of lateral walls 16, are located on opposite sides of panel 14', and are separated from

panel 14' by longitudinal fold lines 27. Panel 15' has two lateral wings 16", which are glued to corresponding wings 16', form respective inner portions of lateral walls 16, are located on opposite sides of panel 15', and are separated from panel 15' by longitudinal fold lines 27. Each lateral wing 16" of panel 15' has a tab 29 separated from respective lateral wing 16" by a transverse fold line 28.

[0022] Figure 8 shows a schematic of a cigarette packing machine 30 for producing packets 1 of cigarettes. Packing machine 30 comprises, in succession, a packing unit 31 for forming wrapped groups 2 of cigarettes; a packing unit 32 for forming inner containers 3 by folding inner blanks 22 about corresponding wrapped groups 2 of cigarettes; a packing unit 33 for forming outer containers 4 (and so completing packets 1 of cigarettes) by folding outer blanks 23 about corresponding inner containers 3; and, finally, a processing unit 34, which receives packets 1 of cigarettes from packing unit 33 and opens (i.e. slides inner container 3 for the first time with respect to outer container 4, to partly expel inner container 3 and so rotate lid 11 into the open position) and closes each packet 1 of cigarettes.

[0023] As shown in Figure 9, packing unit 33 comprises a packing conveyor 69 with a number of packing pockets 70, each for housing an outer blank 23 and corresponding inner container 3, and for feeding outer blank 23 and inner container 3 along a packing path P4 extending between an input station S8 and an output station S10.

[0024] Packing unit 33 preferably comprises a packing conveyor (not shown) for partly prefolding outer blanks 23 and feeding the pre-folded outer blanks 23 to packing conveyor 69. A prefolded outer blank 23 (i.e. as it is fed to packing conveyor 69) is shown in Figure 10, in which tab 20 is folded 180° (about corresponding transverse fold line 28 connecting tab 20 to panel 17'), panels 20' and 20" are superimposed on the inner surface of panel 17', and panel 20''' contacts the inner surface of panel 15'. As stated, only panel 20' is glued to panel 17'.

[0025] At input station S8, a partly prefolded outer blank 23 is fed into a packing pocket 70 so as to further fold outer blank 23. At a feed station S9 between input station S8 and output station S10, an inner container 3 is fed into a packing pocket 70 and onto the previously inserted outer blank 23. More specifically, rear wall 8 of inner container 3 is positioned resting on panel 15' of outer blank 23. At output station S10, outer container 4 (formed by folding outer blank 23 about inner container 3) is expelled from packing pocket 70 and fed to processing unit 34.

[0026] At input station S8, a folding device 71 folds tabs 29 of outer blank 23 ninety degrees (about corresponding transverse fold lines 28) with respect to wings 16", and then, by inserting outer blank 23 inside packing pocket 70, folds panel 13' ninety degrees (about corresponding transverse fold line 28), and folds the two wings 16" ninety degrees (about corresponding longitudinal fold lines 27, while panel 17' of outer blank 23 remains coplanar with panel 15'). In other words, after tabs 29 are

folded 90°, insertion of outer blank 23 inside packing pocket 70 folds panel 13' and the two wings 16" ninety degrees (while panel 17' of outer blank 23 remains coplanar with panel 15'). Between feed station S9 and output station S10, a folding device 72 folds panel 17' of outer blank 23 (i.e. lid 11) 90° (about corresponding transverse fold line 28) with respect to panel 15', and at the same time slides inner container 3 axially with respect to outer blank 23 (as explained more clearly below). Directly downstream from folding device 72, a folding device 73 folds panel 14' ninety degrees (about corresponding transverse fold line 28). Folding outer blank 23 is completed at output station S10 as outer container 4 is expelled from packing pocket 70: as outer container 4 is expelled, a folding device 74 folds wings 16' ninety degrees (about corresponding longitudinal fold lines 27) onto wings 16" to form lateral walls 16 of outer container 4. A gumming device (not shown) is preferably provided directly upstream from folding device 74 to deposit glue between wings 16' and 16" just before wings 16' are folded.

[0027] In a preferred embodiment shown in Figures 8 and 9, packing conveyor 69 is defined by a wheel which rotates in steps about a central horizontal axis of rotation 75, so packing path P4 is circular and extends from input station S8 to output station S10.

[0028] Upstream from input station S8 of packing conveyor 69, a gumming device 77 deposits glue between tabs 29 and panel 13' of outer blank 23. Gumming device 77 also deposits glue 78 and glue 79 (Figure 10) onto panel 20''' of connecting tab 20 previously folded onto panel 15' when partly prefolding outer blank 23. Glue 78 and glue 79 glue rear wall 8 of inner container 3 to connecting tab 20 (i.e. to panel 20''' of connecting tab 20) as inner container 3 is fed onto panel 15' of outer blank 23 at feed station S9 of packing conveyor 69.

[0029] As stated, gumming device 77 deposits glue 78 and glue 79 simultaneously onto panel 20''' of connecting tab 20 previously folded onto panel 15'. Glue 78 and glue 79 glue rear wall 8 of inner container 3 to connecting tab 20 (i.e. to panel 20''' of connecting tab 20) as inner container 3 is fed onto panel 15' of outer blank 23 at feed station S9 of packing conveyor 69. Glue 78 is permanent, drying glue, i.e. a certain length of time after it is deposited, the volatile components of glue 78 evaporate to form a permanent connection that can only be separated by irreparably tearing the connection apart; whereas glue 79 is non-dry, re-stick glue, i.e. even a long time after it is deposited, the characteristics of glue 79 remain unchanged, allowing the glued parts to be separated and stuck back together repeatedly. Preferably, permanent, drying glue 78 is a cold, vinyl-based glue.

[0030] According to the invention, non-dry, re-stick glue 79 is deposited far from a hinge 12' of connecting tab 20 (hinge 12' of connecting tab 20 is defined by the transverse fold line 28 separating panels 20" and 20'''), whereas permanent, drying glue 78 is deposited close to hinge 12' of connecting tab 20, so that, as folding de-

vice 72 folds lid 11, non-dry, re-stick glue 79 is subjected to shear (i.e. greater) stress, while permanent, drying glue 78 is subjected to tensile (i.e. less) stress. Because non-dry, re-stick glue 79 is capable of achieving maximum grip much faster (practically instantaneously), it is important that it be subjected to the greater stress; and, similarly, it is important that permanent, drying glue 78 be subjected to less stress, by taking a relatively long time to achieve adequate grip.

[0031] In a preferred embodiment, the above combination of permanent, drying glue 78 and non-dry, re-stick glue 79 is not limited to the particular case described, but may be used to advantage in any application involving gluing together two separate parts to form a package by folding a blank (i.e. a sheet of packing material) about a group of articles. By way of example, each of the glues deposited on blanks 22 and 23 may comprise a portion of permanent, fast-dry (i.e. hot-melt) glue, and a portion of permanent, slow-dry (i.e. cold) glue. Alternatively, in each of the glues deposited on blanks 22 and 23, a portion of non-dry, re-stick glue, analogous to non-dry, re-stick glue 79 described, may be substituted for the portion of permanent, fast-dry (i.e. hot-melt) glue.

[0032] In the packing method described, both glues 78 and 79 are applied using gumming device 77 located upstream from packing conveyor 69, i.e. in an area in which outer blank 23 is still substantially flat, and connecting tab 20 (i.e. panel 20" of connecting tab 20) can be reached and gummed easily. Both glues 78 and 79 can therefore be deposited easily and effectively on connecting tab 20 (i.e. on panel 20" of connecting tab 20), and using a gumming device 77 that is easy to produce and assemble on packing machine 30. This is made possible by the 'fast-setting' glue 79 being non-dry, re-stick glue, as opposed to conventional permanent, fast-dry, hot-melt glue (which must therefore be deposited just prior to use). Non-dry, re-stick glue 79 also provides for immediate grip, and can be applied anywhere and at any time. In fact, being non-dry, it could, theoretically, be deposited on outer blank 23 even days before outer blank 23 is folded.

Claims

1. A packing method for producing a package (1) by folding at least one blank (23) around a group (2) of articles; the packing method comprising the steps of:

applying, between two parts (20", 8) to be joined of the package (1), both a first glue (79), and a permanent drying second glue (78) different from the first glue (79); and bringing the two parts (20", 8) into contact, to glue the two parts (20", 8) together by means of the first glue (79) and the second glue (78); wherein the first glue (79) is non-dry, re-stick glue, i.e. even a long time after it is deposited,

the characteristics of the first glue (79) remain unchanged, allowing the glued parts to be separated and stuck back together repeatedly; the packing method being **characterized in that:**

the package (1) is a slide-open package (1) of smoking articles, with a hinged lid (11), and comprises: an inner container (3) formed by folding a first or inner blank (22) and housing a group (2) of smoking articles and having an open top end (6); an outer container (4) formed by folding a second or outer blank (23) and housing the inner container (3) to allow the inner container (3) to slide with respect to the outer container (4) between a closed position, in which the inner container (3) is inserted inside the outer container (4), and an open position, in which the inner container (3) is expelled from the outer container (4); and a lid (11), which is hinged to a rear wall (15) of the outer container (4), closes the open top end (6) of the inner container (3) when closed, and is connected to the inner container (3) by a connecting tab (20); and the packing method comprises the further steps of:

placing the connecting tab (20) in contact with a first panel (15') of the outer blank (23); applying the first and second glue (79, 78) between the connecting tab (20) and a rear wall (8) of the inner container (3) by applying the non-dry, re-stick first glue (79) far away from a hinge (12') of the connecting tab (20) and by applying the permanent drying second glue (78) close to the hinge (12') of the connecting tab (20); and placing the inner container (3) on the first panel (15') of the outer blank (23), to glue the connecting tab (20) to the rear wall (8) of the inner container (3).

2. A packing method according to Claim 1, wherein the permanent drying second glue (78) is a cold, preferably vinyl-based glue.
3. A packing method according to Claim 1 or 2, and comprising the further step of applying the first and second glue (79, 78) simultaneously.

Patentansprüche

1. Verpackungsverfahren zum Herstellen einer Verpa-

ckung (1) durch Falten wenigstens eines Zuschnitts (23) um eine Gruppe (1) von Artikeln; wobei das Verpackungsverfahren die folgenden Schritte umfasst:

Aufbringen zwischen zwei zu verbindenden Teilen (20'', 8) der Verpackung (1) sowohl eines ersten Klebstoffs (29) als auch eines permanenten trocknenden zweiten Klebstoffs (78), der von dem ersten Klebstoff (79) verschieden ist; und
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 wobei das Verpackungsverfahren **dadurch gekennzeichnet ist, dass:**

die Verpackung (1) eine gleitend öffnende Verpackung (1) von Rauchartikeln mit einem angelenkten Deckel (11) ist und umfasst:

einen inneren Behälter (3), der durch Falten eines ersten oder inneren Zuschnitts (22) und Aufnehmen einer Gruppe (1) von Rauchartikeln gebildet ist und ein offenes oberes Ende (6) besitzt; einen äußeren Behälter (4), der
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 das Verpackungsverfahren die folgenden weiteren Schritte umfasst:

Anordnen der Verbindungsflasche

(20) in Kontakt mit einer ersten Panele (15') des äußeren Zuschnitts (23);

Aufbringen des ersten und des zweiten Klebstoffs (79, 78) zwischen der Verbindungsflasche (20) und einer Rückwand (8) des inneren Behälters (3) durch Aufbringen des nicht trockenen, wieder haftenden ersten Klebstoffs (79) entfernt von einem Scharnier (12') der Verbindungsflasche (20) und durch Aufbringen des permanenten trocknenden zweiten Klebstoffs (78) in der Nähe des Scharniers (12') der Verbindungsflasche (20); und

Anordnen des inneren Behälters (3) auf der ersten Panele (15') des äußeren Zuschnitts (23), um die Verbindungsflasche (20) an die Rückwand (8) des inneren Behälters (3) zu kleben.

2. Verpackungsverfahren nach Anspruch 1, wobei der permanente trocknende zweite Klebstoff (78) ein kalter Klebstoff vorzugsweise auf Vinylbasis ist.

3. Verpackungsverfahren nach Anspruch 1 oder 2, das den weiteren Schritt des gleichzeitigen Aufbringens des ersten und des zweiten Klebstoffs (79, 78) umfasst.

Revendications

1. Procédé de conditionnement pour produire un emballage (1) par pliage d'au moins une découpe plate (23) autour d'un groupe (2) d'articles ; le procédé de conditionnement comprenant les étapes consistant à :

appliquer, entre deux parties (20'', 8) devant être raccordées de l'emballage (1), à la fois une première colle (79), et une seconde colle à séchage permanent (78) différente de la première colle (79) ; et

mettre les deux parties (20'', 8) en contact l'une avec l'autre, pour coller les deux parties (20'', 8) l'une à l'autre au moyen de la première colle (79) et de la seconde colle (78) ;

la première colle (79) étant une colle non-sèche, à réutilisation, c'est-à-dire que même longtemps après son dépôt, les caractéristiques de la première colle (79) demeurent inchangées, permettant aux parties collées d'être séparées et recolées l'une à l'autre de manière répétée ;

le procédé de conditionnement étant **caractéri-**

sé en ce que :

multanément.

l'emballage (1) est un emballage à ouverture par glissement (1) d'articles à fumer, comportant un couvercle articulé (11), et comprend : un contenant interne (3) formé en pliant une première découpe plate ou découpe plate interne (22) et en logeant un groupe (2) d'articles à fumer et comportant une extrémité supérieure ouverte (6) ; un contenant externe (4) formé en pliant une seconde découpe plate ou découpe plate externe (23) et en logeant le contenant interne (3) pour permettre au contenant interne (3) de glisser par rapport au contenant externe (4) entre une position fermée, dans laquelle le contenant interne (3) est inséré à l'intérieur du contenant externe (4), et une position ouverte, dans laquelle le contenant interne (3) est expulsé hors du contenant externe (4) ; et un couvercle (11), qui est articulé sur une paroi arrière (15) du contenant externe (4), ferme l'extrémité supérieure ouverte (6) du contenant interne (3) une fois fermé, et est raccordé au contenant interne (3) par une patte de connexion (20) ; et

le procédé de conditionnement comprenant les étapes supplémentaires consistant à :

mettre la patte de connexion (20) en contact avec un premier panneau (15') de la découpe plate externe (23) ; appliquer les première et seconde colles (79, 78) entre la patte de connexion (20) et une paroi arrière (8) du contenant interne (3) en appliquant la première colle (79) non-sèche, à réutilisation, à distance d'une articulation (12') de la patte de connexion (20) et en appliquant la seconde colle à séchage permanent (78) à proximité de l'articulation (12') de la patte de connexion (20) ; et placer le contenant interne (3) sur le premier panneau (15') de la découpe plate externe (23), pour coller la patte de connexion (20) à la paroi arrière (8) du contenant interne (3).

2. Procédé de conditionnement selon la revendication 1, dans lequel la seconde colle à séchage permanent (78) est une colle froide, de préférence à base de vinyle.

3. Procédé de conditionnement selon la revendication 1 ou 2, et comprenant l'étape supplémentaire d'application des première et seconde colles (79, 78) si-

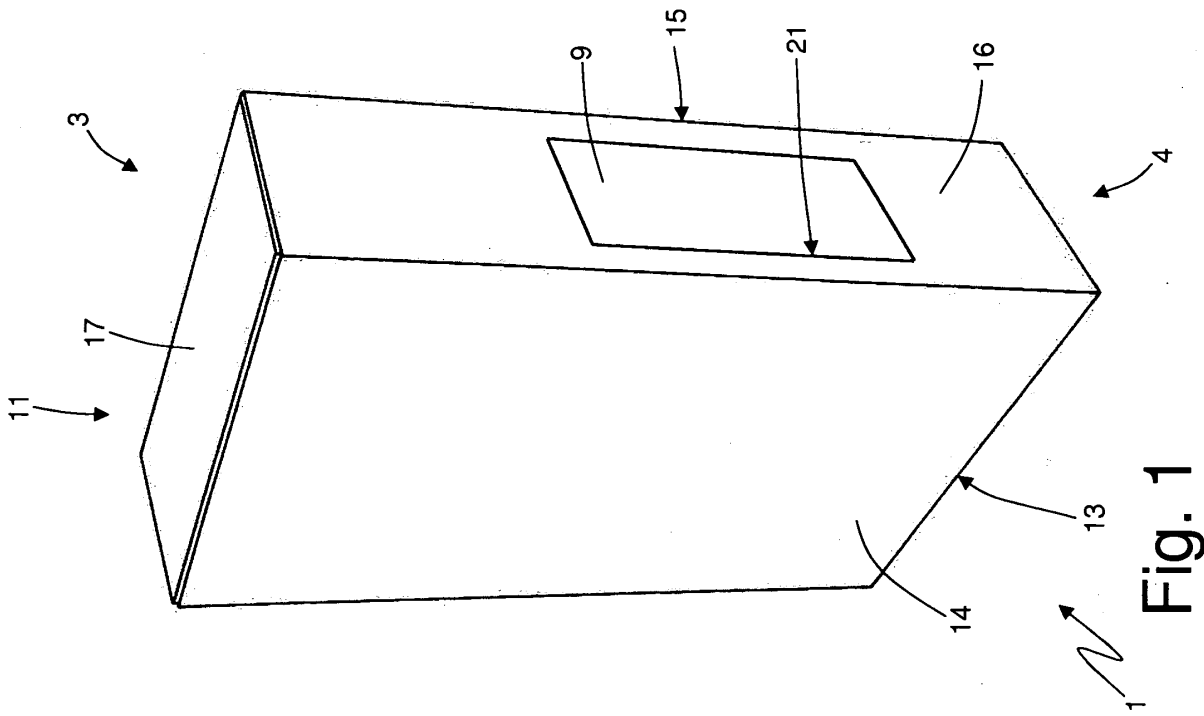


Fig. 1

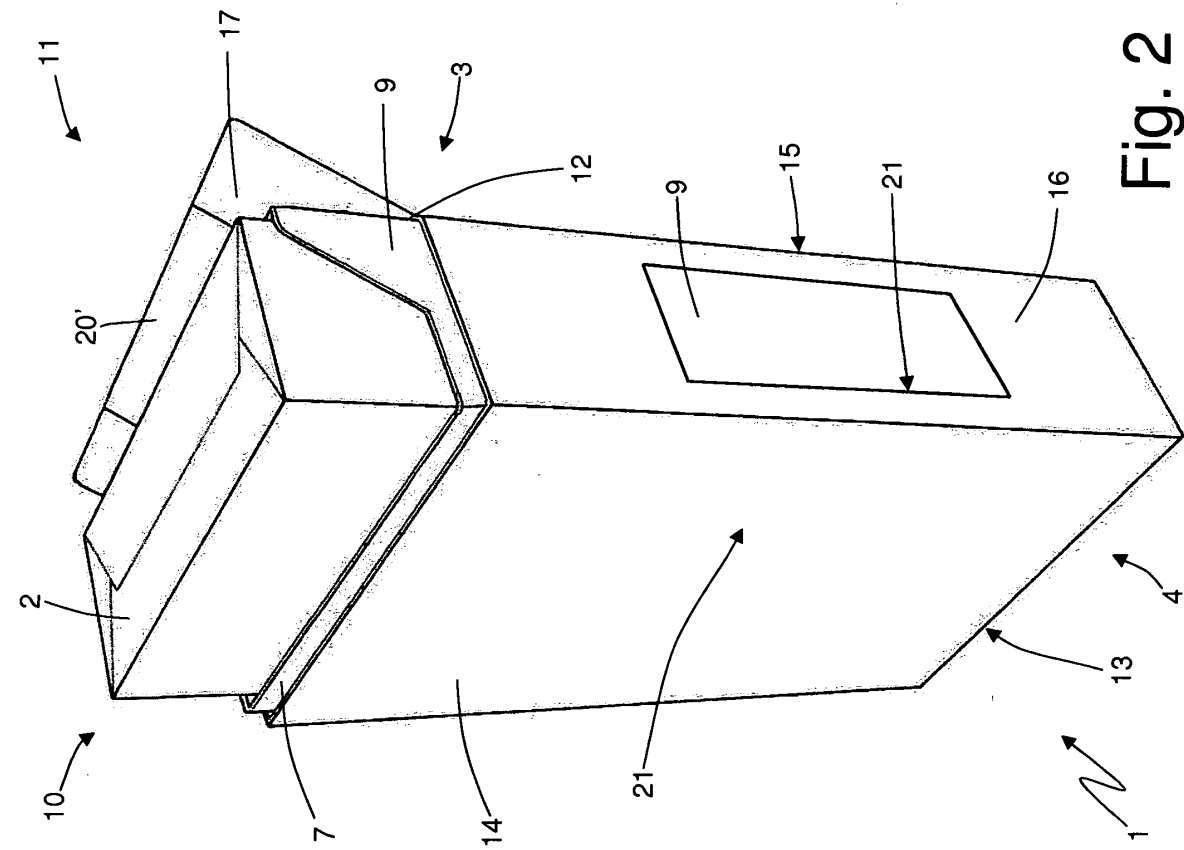


Fig. 2

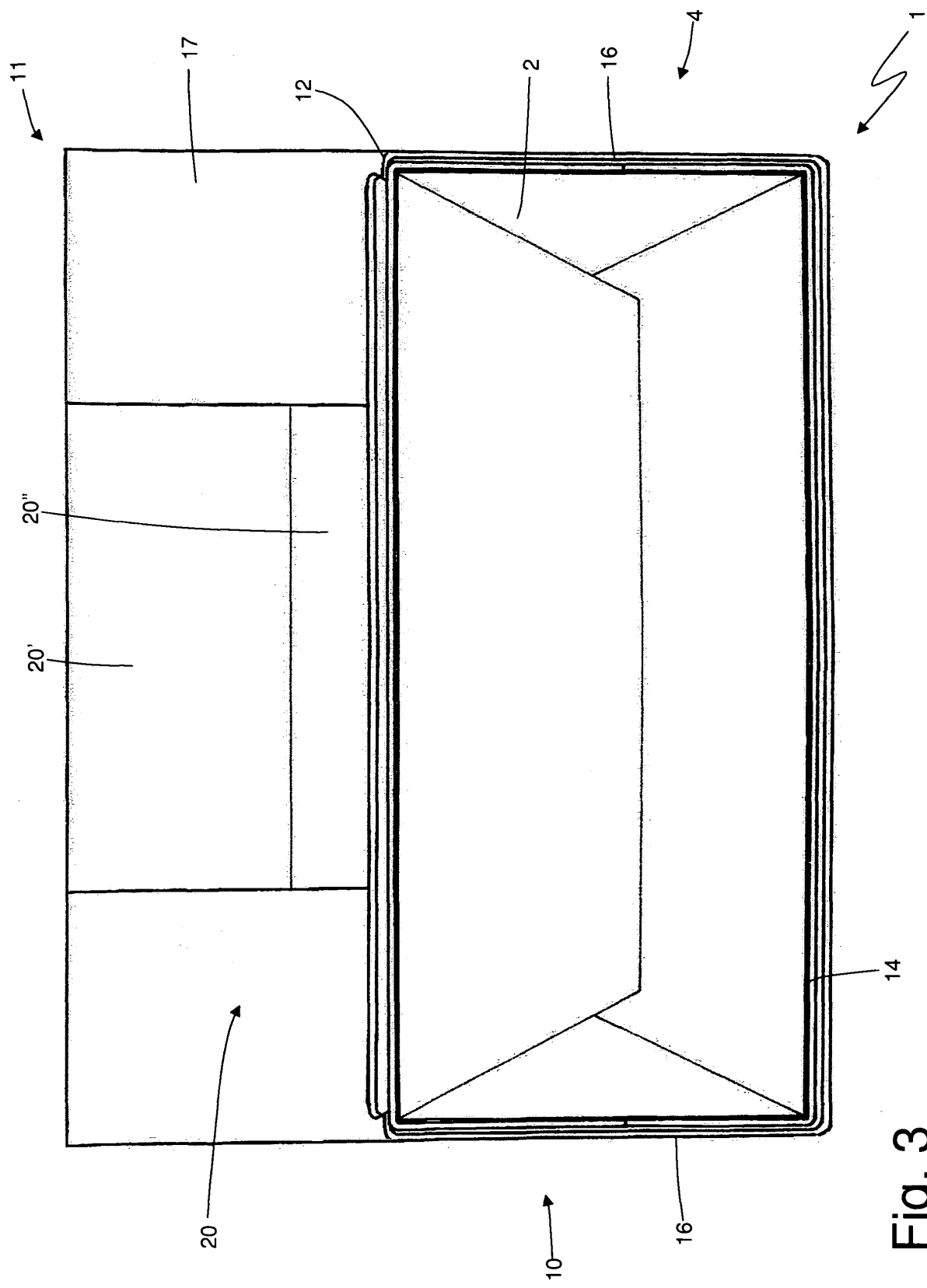


Fig. 3

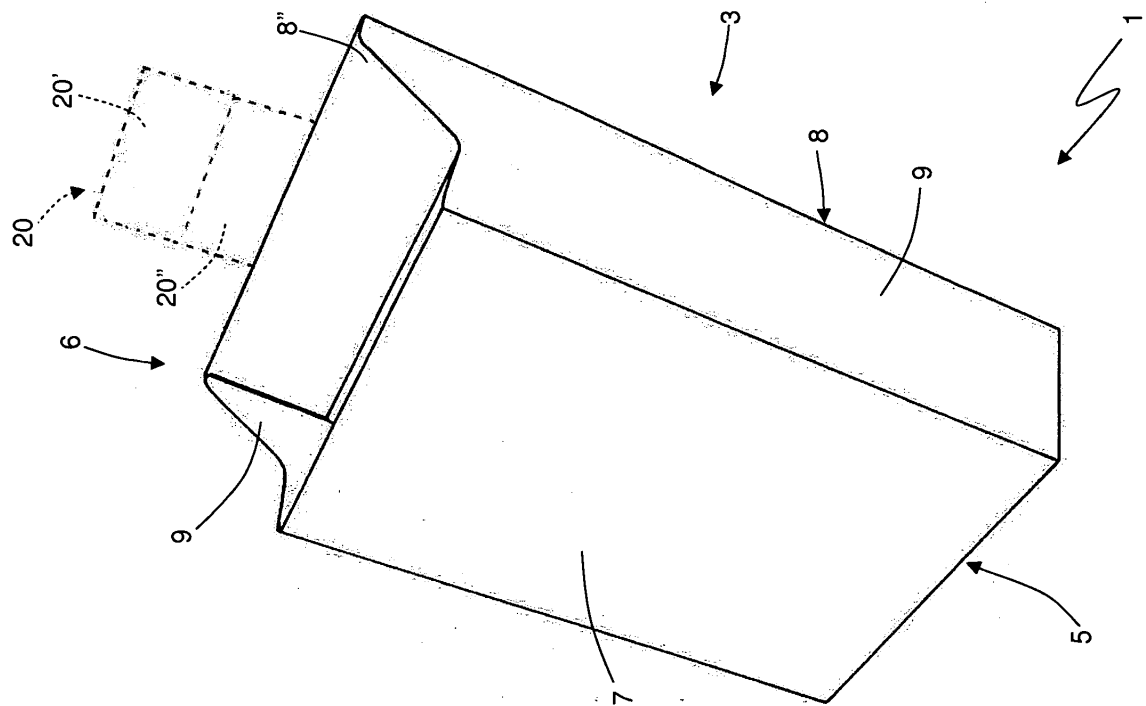


Fig. 5

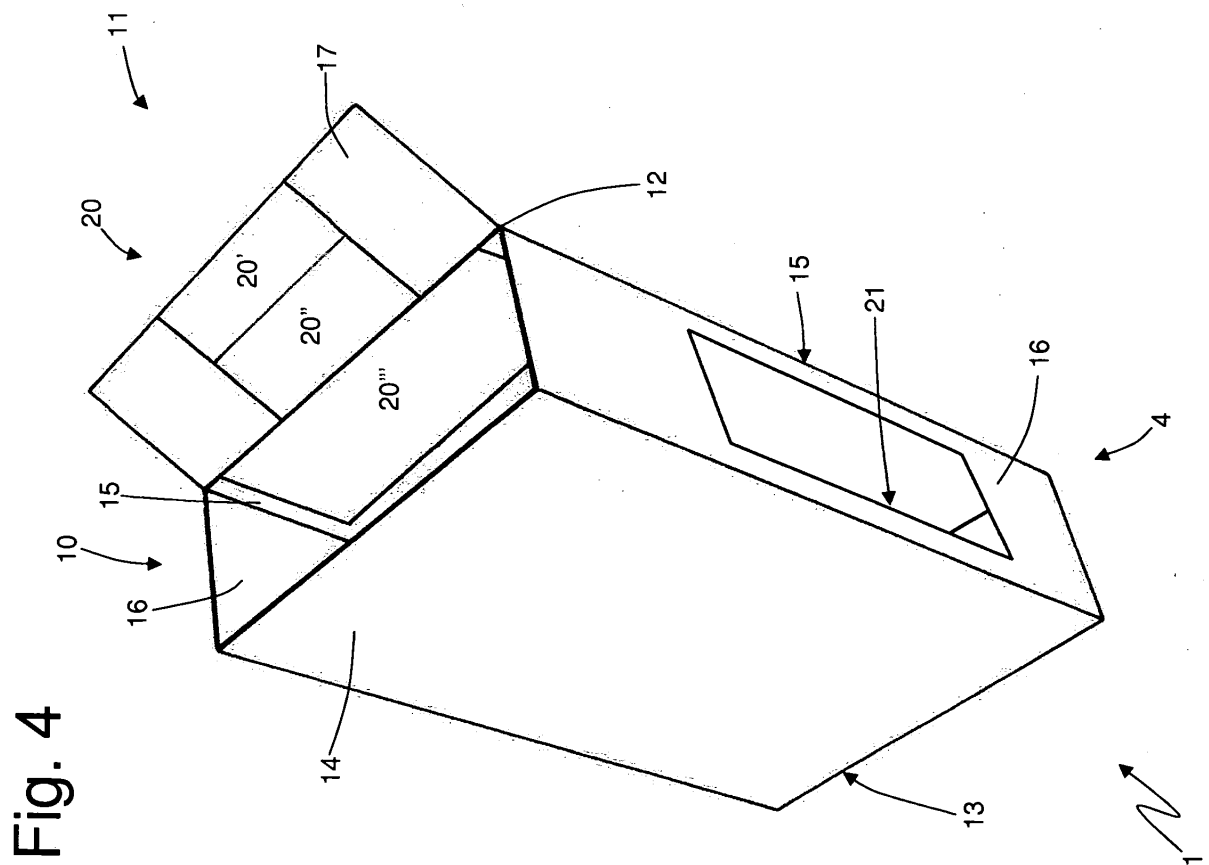


Fig. 4

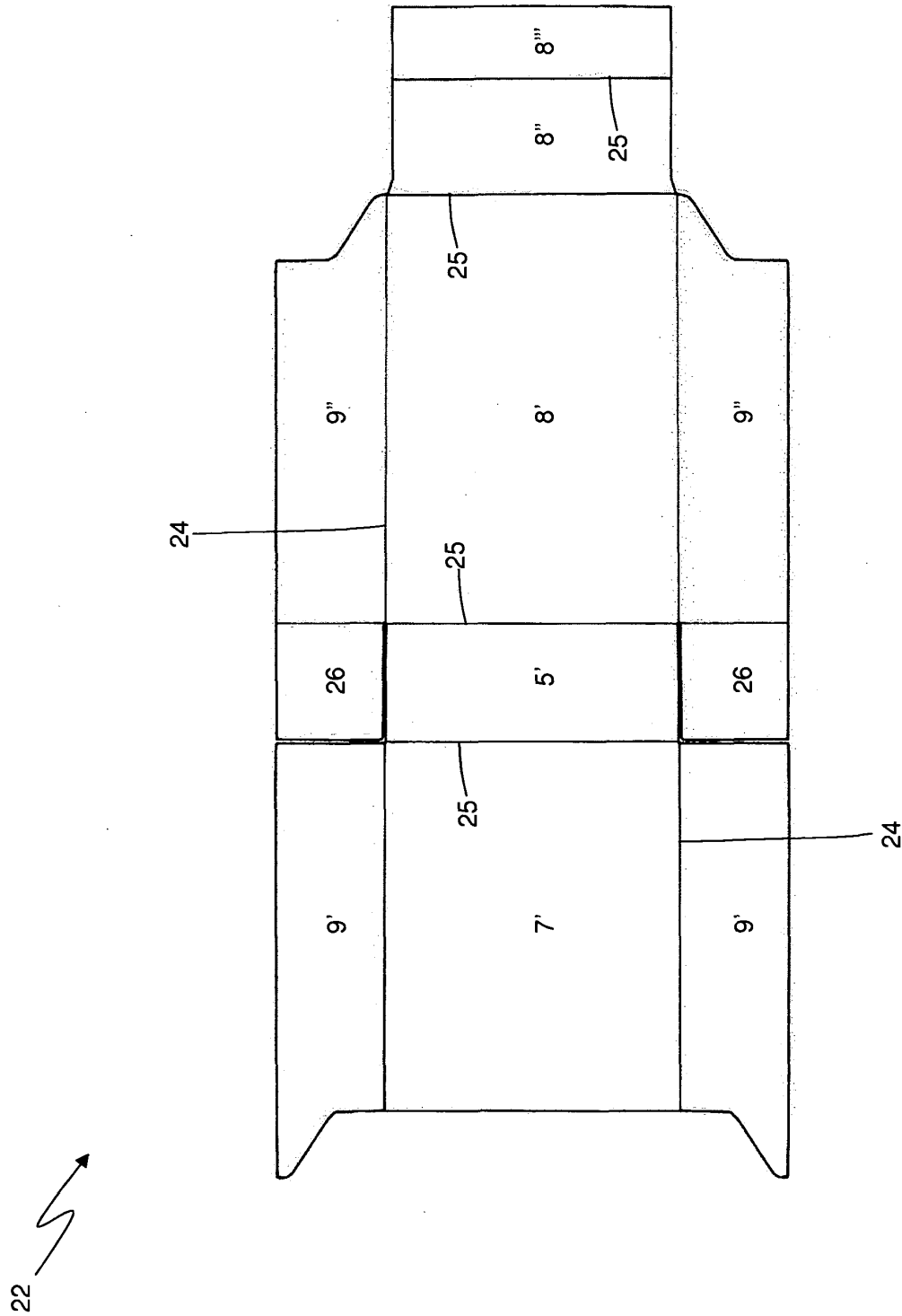


Fig. 6

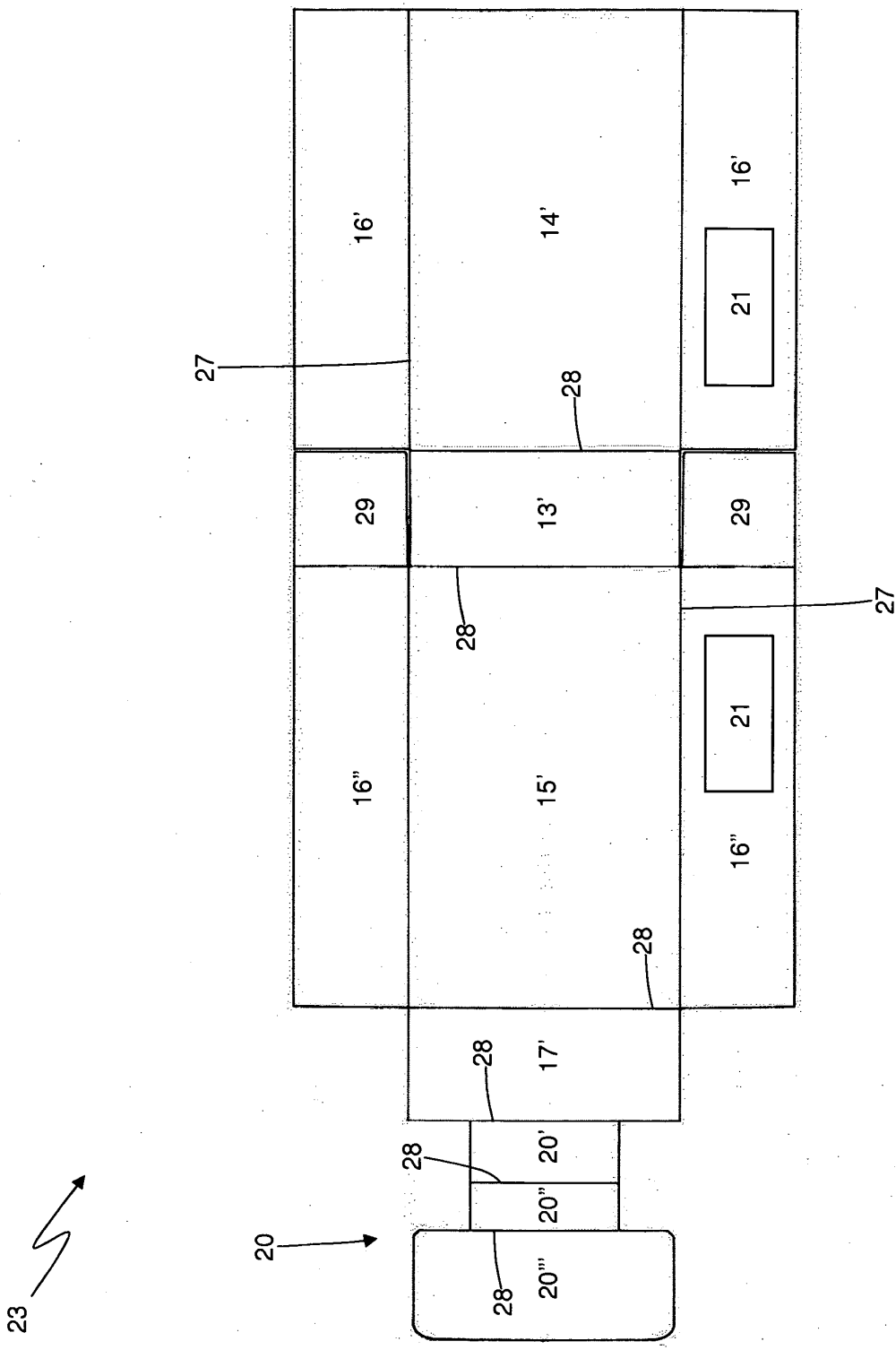


Fig. 7

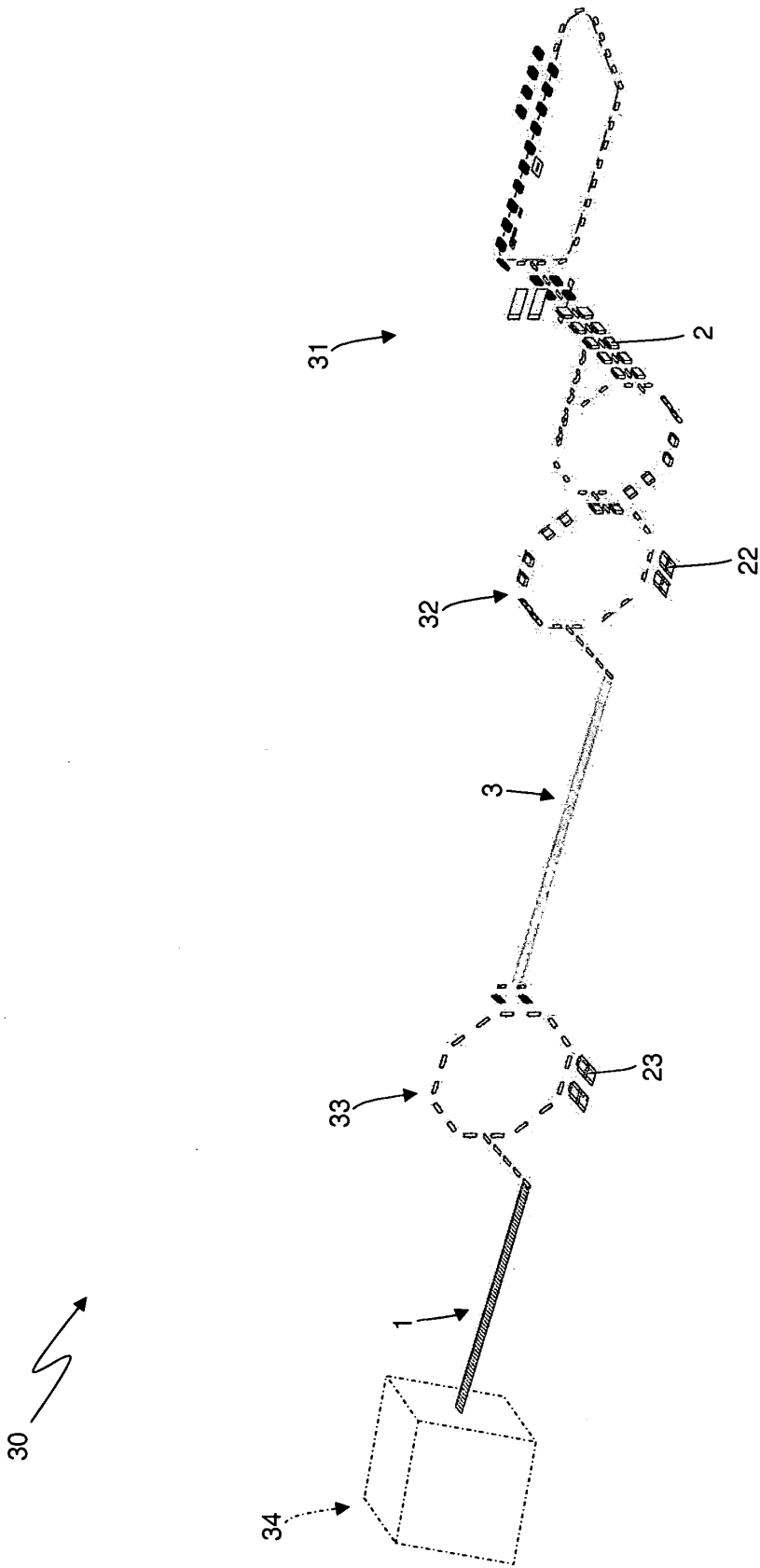


Fig. 8

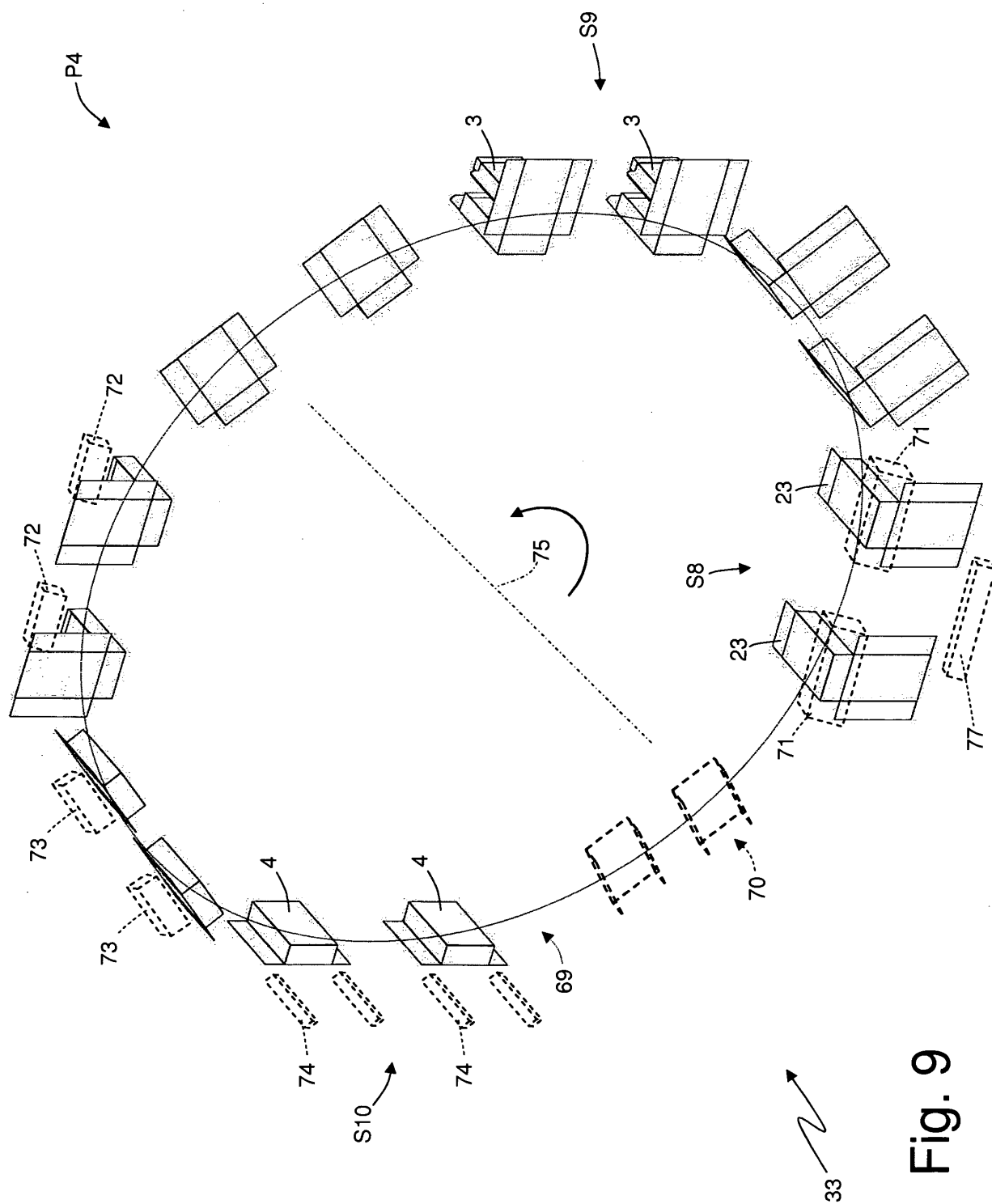


Fig. 9

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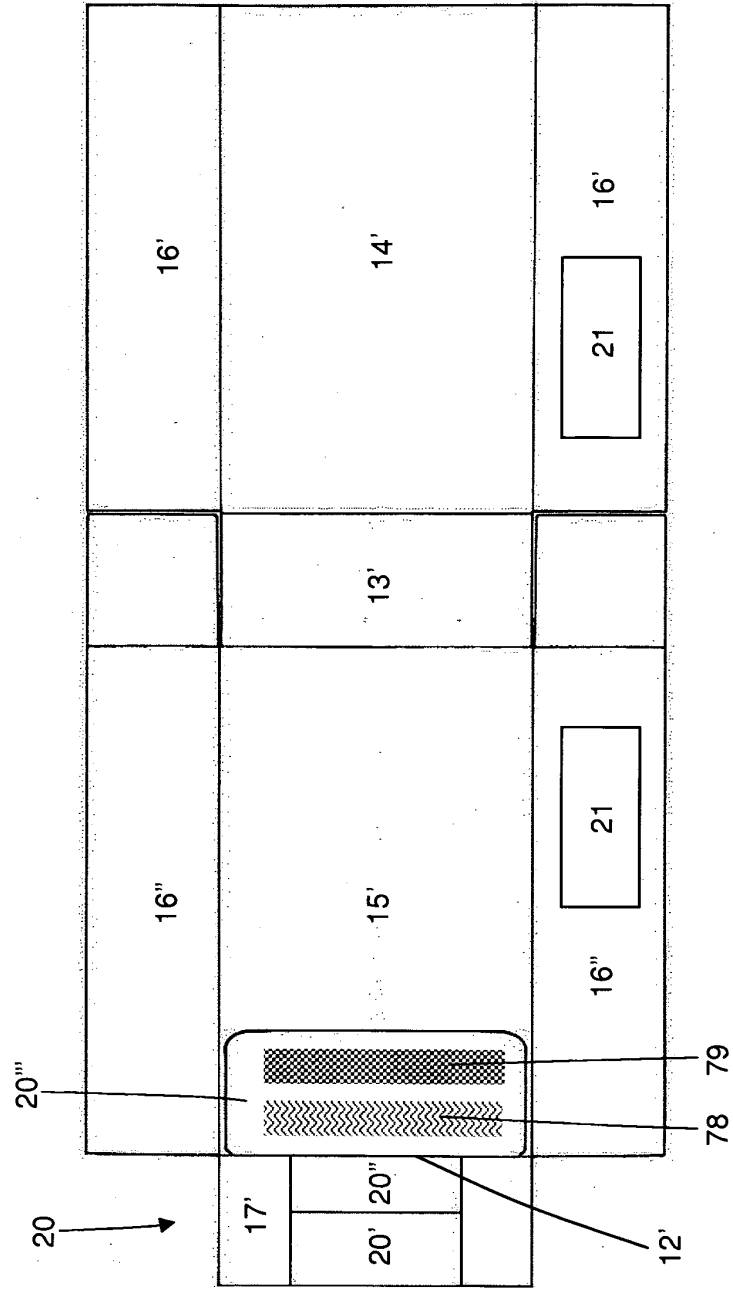


Fig. 10

REFERENCES CITED IN THE DESCRIPTION

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