

(57) **Abrégé(suite)/Abstract(continued):**

is substantially aligned with a third access opening (20) provided in the outer shell (4) such that the second compartment (40) of the inner slide (6) is accessible through the second and third (20) access openings. The inner slide (6) may be slidable within the outer shell (4) between the closed position and the open position via an intermediate position in which the interior of one of the first (38) and second (40) compartments is inaccessible and the interior of the other of the first (38) and second (40) compartments is accessible.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
8 April 2010 (08.04.2010)(10) International Publication Number
WO 2010/037529 A1

(51) International Patent Classification:

B65D 5/38 (2006.01) *B65D 5/72* (2006.01)

(21) International Application Number:

PCT/EP2009/007012

(22) International Filing Date:

29 September 2009 (29.09.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

08253191.4 30 September 2008 (30.09.2008) EP

(71) Applicant (for all designated States except US): **PHILIP MORRIS PRODUCTS S.A.** [CH/CH]; 3, quai Jeanrenaud, CH-2000 Neuchâtel (CH).(72) Inventors: **BOURGOIN, Philippe**; Chemin du Crépon 12B, CH-1040 Echallens (CH). **BENKÖ, Peter**; Hangstrasse 18a, CH-4654 Lostorf (CH). **NÜTZI, Roger**; Länggasse 34, CH-4624 Härkingen (CH). **SAMULEWICZ, Aleksandra**; Chemin de Montéclard 26, CH-1066 Epalinges (CH).(74) Agent: **MILLBURN, Julie Elizabeth**; Reddie & Grose, 16 Theobalds Road, London, Wc1x 8pl (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: DUAL COMPARTMENT SLIDE AND SHELL CONTAINER

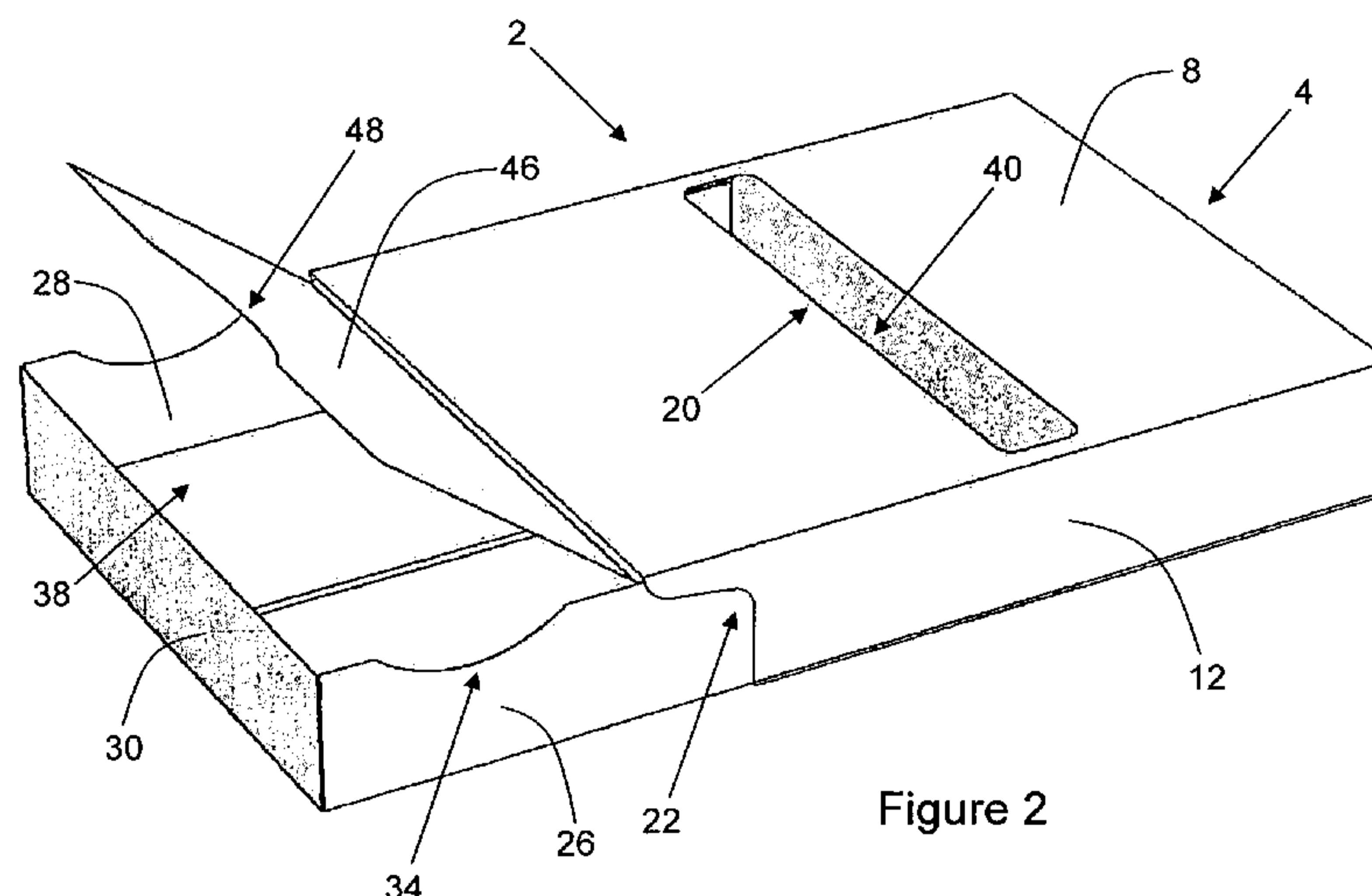


Figure 2

(57) Abstract: A multi-compartment slide and shell container (2) comprises: an outer shell (4); and an inner slide (6) having a first compartment (38) with a first access opening and a second compartment (40) with a second access opening. The inner slide (6) is slidable within the outer shell (4) between a closed position in which the first and second access openings are occluded by the outer shell (4) such that the interiors of the first (38) and second (40) compartments are inaccessible and an open position in which the interiors of the first (38) and second (40) compartments are both accessible. In the open position, the second access opening of the inner slide (6) is substantially aligned with a third access opening (20) provided in the outer shell (4) such that the second compartment (40) of the inner slide (6) is accessible through the second and third (20) access openings. The inner slide (6) may be slidable within the outer shell (4) between the closed position and the open position via an intermediate position in which the interior of one of the first (38) and second (40) compartments is inaccessible and the interior of the other of the first (38) and second (40) compartments is accessible.

DUAL COMPARTMENT SLIDE AND SHELL CONTAINER

The present invention relates to a slide and shell container comprising at least two compartments, which finds particular application as a container for smoking articles and other
5 consumer goods.

It is known to package consumer goods in containers comprising an outer shell and an inner slide or tray in which the consumer goods are housed and which is slidable within the outer shell. To remove consumer goods from such containers, a consumer slides the inner slide from an initial position within the outer shell to an open position in which the inner slide
10 projects outwardly from the outer shell, in order to partially expose an open end or side of the inner slide through which the consumer goods housed therein may then be removed.

US-A-2,058,710 discloses a combined ash and cigarette container comprising an outer casing sleeve open at its ends and an inner drawer slidable within the casing sleeve. The drawer is divided into a cigarette compartment and a relatively small ash compartment. To gain
15 access to the cigarette compartment, a consumer slides the drawer in one direction until the cigarette compartment projects outwardly through one end of the casing sleeve. To gain access to the ash compartment, a consumer slides the drawer in the opposite direction until the ash compartment projects outwardly through the other end of the outer casing sleeve. It is not possible for a consumer to gain access to the contents of both the cigarette compartment and
20 the ash compartment of the container of US-A-2,058,710 simultaneously.

EP-A-0 059 915 discloses a container for cigarettes comprising an open-ended, outer casing and two abutting inner containers disposed end-to-end within the casing. It is not possible for a consumer to gain access to the contents of both of the inner containers of the container of EP-A-0 059 915 simultaneously without completely removing at least one of the
25 inner containers from the outer casing thereof.

The exterior surfaces of one or more of the outer casing and inner drawer or two inner compartments of containers of the type disclosed in US-A-2,058,710 and EP-A-0 059 915 may be printed or otherwise embellished to enable a consumer to distinguish between the two inner compartments or the opposed ends of the outer casing or inner drawer. While this may reduce
30 the risk of a consumer mistakenly moving the inner drawer or two inner containers in the wrong direction, and so accessing the contents of the 'wrong' compartment or inner container, it will also disadvantageously reduce the external surface area of the outer casing or inner drawer or two inner containers or both that is available to carry other advertising, promotional or product information.

35 According to the present invention there is provided a dual compartment slide and shell container comprising: an outer shell; and an inner slide having a first compartment with a first

access opening and a second compartment with a second access opening, which is slidable within the outer shell between a closed position in which the first and second access openings are occluded by the outer shell such that the interiors of the first and second compartments are inaccessible and an open position in which the interiors of the first and second compartments
5 are both accessible. In the open position, the second access opening of the inner slide is substantially aligned with a third access opening provided in the outer shell such that the second compartment of the inner slide is accessible through the second and third access openings.

In dual compartment slide and shell containers according to the invention, the first and
10 second compartments of the inner slide are both accessible in the open position. In contrast to the slide and shell containers disclosed in US-A-2,058,710 and EP-A-0 059 915, a consumer cannot mistakenly access the contents of one of the two compartments of the inner slide, rather than the contents of the other of the two compartments of the inner slide, by moving the inner slide in the wrong direction. This is particularly advantageous where the contents of the first
15 and second compartments of the inner slide of dual compartment slide and shell containers according to the invention are different. However, it is also advantageous where one of the first and second compartments of the inner slide is empty and the other is still at least partially filled, as it reduces the likelihood of a consumer mistakenly accessing the empty compartment.

The term "access opening" refers to any opening through which the interior of the first or
20 second compartment of the inner slide is accessible in the open position. The first, second and third access openings may be the same or different. In particular, the first and second access openings may be open faces of the first and second compartments of the inner slide.

In a preferred embodiment, at least a portion of the first access opening of the first
25 compartment of the inner slide projects outwardly from the outer shell through an open end thereof in the open position such that the interior of the first compartment of the inner slide is accessible through the first access opening.

To facilitate access to the interior of the first compartment through the first access
30 opening, a portion of the first compartment that projects outwardly from the outer shell in the open position may be hingedly connected to the remainder of the inner slide for pivotal movement relative thereto.

Preferably, at least one cut-out or notch is provided along a free edge of the open end of
the outer shell. More preferably, a pair of opposed cut-outs or notches are provided along
opposed free edges of the open end of the outer shell. In use, a consumer may
advantageously hold the outer shell with one hand and grasp the inner slide through the one or
35 more cut-outs provided along the free edges of the open end of the outer shell with their other hand in order to slide the inner slide from the closed position to the open position.

Alternatively or in addition to the provision of at least one cut-out along a free edge of the open end of the outer shell, an aperture or window may be provided in a wall of the outer shell opposed to the open end thereof in order to facilitate movement of the inner slide from the closed position to the open position by the consumer. The aperture provided in the wall of the outer shell opposed to the open end thereof may extend into an adjacent wall of the outer shell opposed to the third access opening.

In use, a consumer may push the inner slide through the aperture provided in the wall of the outer shell in order to slide the inner slide from the closed position to the open position. The provision of an aperture or window in a wall of the outer shell opposed to the open end thereof advantageously allows a consumer to open slide and shell containers according to the invention using one hand.

Preferably, the inner slide comprises a first compartment cover, which in the closed position covers the first access opening and which in the open position is moveable to a position in which at least the portion of the first access opening projecting outwardly from the outer shell is uncovered. More preferably, the inner slide comprises a first compartment cover including a hinged flap, which in the open position is pivotable to a position in which at least the portion of the first access opening projecting outwardly from the outer shell is uncovered.

In an alternative embodiment of the invention, the first access opening of the first compartment of the inner slide is substantially aligned with a fourth access opening provided in the outer shell thereof in the open position such that the first compartment of the inner slide is accessible through the first and fourth access openings. In this alternative embodiment, the inner slide may also further comprise a first compartment cover, which in the closed position covers the first access opening and which in the open position is moveable to a position in which at least a portion of the first access opening is uncovered. More preferably, the inner slide comprises a first compartment cover including a hinged flap, which in the open position is pivotable to a position in which at least a portion of the first access opening is uncovered.

Where the inner slide further comprises a first compartment cover including a hinged flap, preferably at least one cut-out or notch is provided along a free edge of the hinged flap to facilitate pivoting of the flap by a consumer in the open position. The inclusion of a first compartment cover advantageously provides additional surface areas on which manufacturer or brand logos, trade marks, slogans and other consumer information and indicia may be displayed. For example, the inner slide may comprise a first compartment cover including a hinged flap wherein at least one of the inner and outer surfaces of the flap is printed, embossed, debossed or otherwise embellished (for example, using labels or stickers) with consumer information.

Preferably, the inner slide comprises a second compartment cover, which in the closed

position covers the second access opening and which in the open position is moveable to a position in which at least a portion of the second access opening is uncovered. More preferably, the inner slide comprises a second compartment cover including a hinged flap, which in the open position is pivotable to a position in which at least a portion of the second access opening is uncovered. Preferably, at least one cut-out or notch is provided along a free edge of the hinged flap to facilitate pivoting of the flap by a consumer in the open position. The inclusion of a second compartment cover advantageously provides additional surface areas on which manufacturer or brand logos, trade marks, slogans and other consumer information and indicia may be displayed. For example, the inner slide may comprise a second compartment cover including a hinged flap wherein at least one of the inner and outer surfaces of the flap is printed, embossed, debossed or otherwise embellished (for example, using labels or stickers) with consumer information.

In a preferred embodiment, the inner slide comprises a first compartment cover and a second compartment cover. However, it will be appreciated that dual compartment slide and shell containers according to the invention may have an inner slide comprising only one of a first compartment cover and a second compartment cover.

The inner slide may be slidable within the outer shell between the closed position and the open position via at least one intermediate position in which the interior of one of the first and second compartments is inaccessible and the interior of the other of the first and second compartments is accessible. For example, the inner slide may be slidable within the outer shell between the closed position and the open position via an intermediate position in which only one of the first and second access openings is occluded by the outer shell such that the interior of one of the first and second compartments is inaccessible and the interior of the other of the first and second compartments is accessible.

Preferably, the inner slide is slidable within the outer shell between the closed position and the open position via an intermediate position in which the interior of the second compartment is inaccessible and the interior of the first compartment is accessible. More preferably, the inner slide is slidable within the outer shell between the closed position and the open position via an intermediate position in which the second access opening is occluded by the outer shell such that the interior of the second compartment is inaccessible and in which at least a portion of the first access opening projects outwardly from the outer shell through an open end thereof such that the interior of the first compartment of the inner slide is accessible through the first access opening.

Preferably, the container comprises retention means for preventing removal of the inner slide from the outer shell. For example, the container may comprise one or more flaps, tabs or other mechanical retention means for preventing removal of the inner slide from the outer shell.

Preferably, the retention means restricts or substantially prevents slidable movement of the inner slide beyond the open position. The retention means may comprise a first retention means on the outer shell and a second retention means on the inner slide that in use cooperate to prevent slidable movement of the inner slide beyond the open position. For example, the retention means may comprise at least one hinged flap on the outer shell and at least one fixed projection on the inner slide that in use cooperate to prevent slidable movement of the inner slide beyond the open position.

In a preferred embodiment, the retention means define at least one intermediate position between the closed position and the open position, in which the interior of one of the first and second compartments is inaccessible and the interior of the other of the first and second compartments is accessible.

Preferably, the first compartment and the second compartment of the inner slide are separated from one another by a partition that substantially prevents cross-contamination between the contents of the first and second compartments during normal use of the container. This is particularly desirable where the first and second compartments of the inner slide either contain different consumer goods or one of the first and second compartments of the inner slide contains consumer goods and the other of the first and second compartments of the inner slide is a waste compartment, as described in more detail below.

The first compartment and the second compartment of the inner slide may be separated from one another by an integral or non-integral partition.

The first and second access openings of the first and second compartments of the inner slide may be of the same or different dimensions. The second access opening of second compartment of the inner slide and the third access opening in the outer shell may also be of the same or different dimensions. Preferably, the second access opening is of substantially the same dimensions as or larger than the third access opening.

Where in the open position, the first access opening of the first compartment of the inner slide is aligned with a fourth access opening provided in the outer shell, the first access opening and the fourth access opening may be of the same or different dimensions. Preferably the first access opening is of substantially the same dimensions as or larger than the fourth access opening.

The first and second compartments of the inner slide may be of the same or different size. Preferably, the first and second compartments of the inner slide are of different size. More preferably, the first compartment of the inner slide is larger than the second compartment thereof. Where the first compartment of the inner slide is larger than the second compartment thereof (*i.e.* where dual compartment slide and shell containers according to the invention comprise an inner slide with a major first compartment and a minor second compartment), the

first access opening of the first compartment is preferably larger than the second access opening of the second compartment.

Dual compartment slide and shell containers according to the invention may be used as packages for a variety of consumer goods. In a particularly preferred embodiment, at least one of the first and second compartments of the inner slide is used to package smoking articles. Dual compartment slide and shell containers according to the invention may be advantageously used to package smoking articles including, but not limited to, conventional lit-end cigarettes, cigars or cigarillos, heated smoking articles comprising a combustible fuel element or heat source and an aerosol-generating substrate (for example cigarettes of the type disclosed in US-A-4,714,082) and smoking articles for use with electrical smoking systems (for example cigarettes of the type disclosed in US-A-5,692,525).

The first and second compartments of the inner slide may contain the same or different consumer goods. In one preferred embodiment, the first and second compartments of the inner slide contain different consumer goods. For example, one of the first and second compartments may contain a plurality of smoking articles and the other of the first and second compartments may contain a plurality of matches, a lighter or another ignition device.

In another preferred embodiment, one of the first and second compartments of the inner slide contains a plurality of consumer goods and the other of the first and second compartments of the inner slide is a 'waste compartment'. In this embodiment, the first and second compartments of the inner slide both being accessible in the open position may advantageously provide a visual reminder or prompt to a consumer to empty the waste compartment. Preferably, the first compartment of the inner slide contains a plurality of consumer goods and the second compartment of the inner slide is a waste compartment.

The waste compartment may be used to contain waste materials arising from the use of some or all of the consumer goods contained in the other compartment of the inner slide. For example, through an appropriate choice of the dimensions thereof, the waste compartment may be used to contain waste materials arising from the use of all of the consumer goods contained in the other compartment of the inner slide and may be discarded with the remainder of the dual compartment slide and shell container when all of the consumer goods contained in the other compartment have been used. Alternatively, the waste compartment may be used to temporarily contain waste materials arising from the use of only a limited number of the consumer goods contained in the other compartment of the inner slide until the waste materials can be transferred to a more permanent waste receptacle. Examples of waste materials that may be placed in the waste compartment include, but are not limited to, discarded wrappers and other packaging and the remains of used consumer goods.

Where one of the first and second compartments of the inner slide contains a plurality of

consumer goods and the other of the first and second compartments of the inner slide is a waste compartment, the inner slide preferably comprises a cover, which in the closed position covers the access opening of the compartment that contains the plurality of consumer goods and which in the open position is moveable to a position in which at least a portion of the access opening of the compartment that contains the plurality of consumer goods is uncovered. For example, where the first compartment of the inner slide contains a plurality of consumer goods and the second compartment of the inner slide is a waste compartment, the inner slide preferably comprises a first compartment cover, which in the closed position covers the first access opening and which in the open position is moveable to a position in which at least a portion of the first access opening is uncovered, as previously described above.

The inclusion of a cover advantageously helps to ensure that any consumer goods remaining within the compartment are retained within the inner slide during emptying of the waste compartment thereof. For example, with the inner slide in the open position, by maintaining the cover in a position covering the access opening of the compartment that contains the plurality of consumer goods, a consumer may turn the dual slide and shell container upside down in order to empty the waste compartment of the inner slide without loss of any consumer goods remaining therein.

In a preferred embodiment, one of the first and second compartments of the inner slide contains a plurality of smoking articles and the other of the first and second compartments of the inner slide is a waste compartment for receiving one or more of ashes and butts arising from use of some or all of the smoking articles. For example, one of the first and second compartments may contain a plurality of heated smoking articles comprising a combustible fuel element or heat source and an aerosol-generating substrate or a plurality of smoking articles for use with electrical smoking systems and the other of the first and second compartments may be a waste compartment capable of containing one or more of the smoking articles after use. In contrast to conventional lit-end cigarettes, the length of heated smoking articles comprising a combustible fuel element or heat source and an aerosol-generating substrate and the length of smoking articles for use with electrical smoking systems does not decrease significantly during smoking.

In a particularly preferred embodiment, the inner slide comprises a major first compartment for containing a plurality of smoking articles or other consumer goods and a minor second compartment for temporarily containing waste material from the use of a limited number of the plurality of smoking articles or other consumer goods. For example, the first compartment of the inner slide may contain twenty heated smoking articles comprising a combustible fuel element or heat source and an aerosol-generating substrate and the second compartment of the inner slide may be a waste compartment capable of containing two 'used' heated smoking

articles.

Where one of the first and second compartments of the inner slide is a waste compartment intended to receive one or more used smoking articles, the waste compartment may be at least partially formed from one or more single or multi-layer heat resistant materials, one or more single or multi-layer heat conductive materials, one or more single or multi-layer heat insulative materials or a combination thereof. Suitable materials include, but are not limited to: heat resistant boards, such as fireproof board, laminated board and foil stamped board; metals, such as aluminium and copper; alloys, such as steel; heat resistant plastics, such as polyamides and polycarbonates; graphite and combinations thereof. For example, the waste compartment may be at least partially formed from aluminium laminated board having an aluminium thickness of between about 5 μm and about 50 μm . In a preferred embodiment, the waste compartment is at least partially formed from an aluminium board having an aluminium thickness of between about 5 μm and about 50 μm .

Alternatively or in addition, the waste compartment may be at least partially coated or lined with one or more heat resistant materials, one or more heat conductive materials, one or more heat insulative materials or a combination thereof. For example, the waste compartment may be at least partially lined with aluminium foil or a heat resistant varnish or ink other surface treatment may be applied to at least a portion of the interior thereof.

One or more heat resistant materials, one or more heat conductive materials, one or more heat insulative materials or a combination thereof may be applied to the interior of the waste compartment in any suitable manner. For example, one or more heat resistant varnishes, inks or other materials may be applied to at least a portion of the interior of the waste compartment using printing technologies such as gravure, offset, silk-screen or flexographic printing; one or more heat resistant coatings, adhesives or other materials may be applied to at least a portion of the interior of the waste compartment using spraying, painting or brushing technologies; one or more heat conductive foils or other materials may be applied to at least a portion of the interior of the waste compartment using heat transfer or hot foil technology; one or more heat resistant fibres, such as glass, stone or carbon fibres may be applied to at least a portion of the interior of the waste compartment using flocking technology; one or more heat resistant papers or foils, such as ceramic fiber or graphite foil, may be applied to at least a portion of the interior of the waste compartment using lamination technology; or any combination thereof.

At least partially forming, coating or lining the waste compartment from or with one or more heat resistant materials, one or more heat conductive materials, one or more heat insulative materials or a combination thereof advantageously helps to ensure that, in use, the external surface temperature of the dual compartment slide and shell container does not

increase beyond a predetermined acceptable level due to heat generated by used smoking articles placed within the waste compartment during extinguishment thereof. This is particularly beneficial where the waste compartment of the inner slide of the dual compartment slide and shell container according to the invention is intended to receive one or more used heated smoking articles comprising a combustible heat source or fuel element and an aerosol-generating substrate.

Where one of the first and second compartments of the inner slide is a waste compartment intended to receive one or more of used heated smoking articles comprising a combustible fuel element or heat source and an aerosol-generating substrate, the structure and composition of the waste compartment is preferably such that, in use, the external surface temperature of the dual compartment slide and shell container does not exceed about 60 °C, more preferably about 50 °C, most preferably about 40 °C.

The waste compartment may be at least partially formed, coated or lined with one or more materials that perform a single function selected from the group consisting of heat resistance, heat conduction and heat insulation. For instance, the waste compartment may be at least partially formed, coated or lined with a material comprising multiple layers, each of which performs a single function selected from the group consisting of heat resistance, heat conduction and heat insulation. For example, the waste compartment may be at least partially formed, coated or lined with a multi-layer material comprising a first layer of heat resistant material, a second layer of heat conductive material and a third layer of heat insulative material.

Alternatively or in addition, the waste compartment may be at least partially formed, coated or lined with one or more materials that perform two functions selected from the group consisting of heat resistance, heat conduction and heat insulation. For instance, the waste compartment may be at least partially formed, coated or lined with one or more materials that are heat resistant and heat conductive, such as, for example, aluminium. For example, the waste compartment may be at least partially formed, coated or lined with a multi-layer material comprising a first layer of heat resistant and heat conductive material and a second layer of heat insulative material.

In yet further embodiments, the waste compartment may be at least partially formed, coated or lined with one or more materials that are heat resistant, heat conductive and heat insulative, such as, for example, graphite foil.

At least partially forming, coating or lining the waste compartment from or with one or more heat resistant materials, advantageously helps to protect the container from heat damage.

At least partially forming, coating or lining the waste compartment from or with one or more heat conductive materials, advantageously helps to reduce or prevent localised build up of heat within the waste compartment, which may result in high localised external surface

temperatures of the container. Furthermore, by dissipating heat generated by the combustible heat sources or fuel elements thereof, the one or more heat conductive materials advantageously assist in extinguishing used heated smoking articles placed within the waste compartment.

5 At least partially forming, coating or lining the waste compartment from or with one or more heat insulative materials advantageously reduces or prevents heat transfer from used heated smoking articles placed within the waste compartment to the external surface of the container.

10 Where one of the first and second compartments of the inner slide is a waste compartment, the inner slide may advantageously comprise a waste compartment cover, which in the closed position covers the access opening of the waste compartment and which in the open position is moveable to a position in which at least a portion of the access opening of the waste compartment is uncovered. For example, where the second compartment of the inner slide is a waste compartment, the inner slide preferably comprises a second compartment
15 cover, which in the closed position covers the second access opening and which in the open position is moveable to a position in which at least a portion of the second access opening is uncovered, as previously described above.

The waste compartment and the waste compartment cover may be formed from the same or different materials. Preferably, the waste compartment and the waste compartment
20 cover are formed from the same or similar material or materials.

The inclusion of a waste compartment cover is particularly preferred where one of the first and second compartments of the inner slide is a waste compartment intended to receive one or more used smoking articles. In such embodiments, the waste compartment cover reduces the amount of oxygen that can enter the waste compartment in the closed position, and
25 so advantageously helps to extinguish used smoking articles placed therein more quickly. This is particularly beneficial where the waste compartment of the inner slide is intended to receive used heated smoking articles comprising a combustible heat source or fuel element and an aerosol-generating substrate.

30 Where one of the first and second compartments of the inner slide is a waste compartment intended to receive one or more used smoking articles, the waste compartment cover may be advantageously at least partially formed from one or more single or multi-layer heat resistant materials, one or more single or multi-layer heat conductive materials, one or more single or multi-layer heat insulative materials or a combination thereof.

35 Alternatively or in addition, the waste compartment cover may be at least partially coated or lined with one or more heat resistant materials, one or more heat conductive materials, one or more heat insulative materials or a combination thereof.

Suitable heat resistant, heat conductive and heat insulative materials from or with which the waste compartment cover may be at least partially formed, coated or lined include those previously described above for the waste compartment.

As previously described above, partially forming, coating or lining the waste compartment cover from or with one or more heat resistant materials, one or more heat conductive materials, one or more heat insulative materials or a combination thereof may advantageously help to protect the container from heat damage, help to reduce or prevent localised build up of heat within the waste compartment, help to dissipate heat generated by the used smoking articles placed in the waste compartment, help to reduce or prevent heat transfer from used smoking articles placed within the waste compartment to the external surface of the container, or a combination thereof. This is particularly beneficial where the waste compartment is intended to receive used heated smoking articles comprising a combustible heat source or fuel element and an aerosol-generating substrate.

A thermal indicator comprising at least one reversible thermochromic material may be provided on the outer surface of the waste compartment cover. Alternatively or in addition, a thermal indicator comprising at least one reversible thermochromic material may be provided on the outer surface of a portion of the outer shell that overlies the waste compartment in the closed position. Throughout the specification, the term 'reversible thermochromic material' is used to denote any material that undergoes a reversible visible colour change in response to temperatures above a pre-determined switching temperature.

In use, by means of the reversible visible colour change of the at least one thermochromic material, the thermal indicator on one or both of the waste compartment cover and the outer shell advantageously provides a visual indication to a consumer of changes in temperature within the waste compartment. The provision of a thermal indicator on one or both of the waste compartment cover and the outer shell is particularly preferred where the waste compartment is intended to receive used heated smoking articles comprising a combustible heat source or fuel element and an aerosol-generating substrate.

To enable a consumer to view a thermal indicator provided on the waste compartment cover when the inner slide is in the closed position, one or more apertures or windows may be provided in a portion of the outer shell that overlies the waste compartment cover in the closed position. For example, where the second compartment of the inner slide is a waste compartment, one or more apertures or windows may be advantageously provided in a portion of the outer shell that overlies the second compartment cover and second access opening in the closed position.

The thermal indicator may comprise at least one thermochromic material that undergoes a reversible visible colour change from a coloured state to a substantially colourless state when

heated above a predetermined switching temperature. In this case, the at least one reversible thermochromic material reverts back to the coloured state from the substantially colourless state when the temperature falls below the predetermined switching temperature.

Alternatively or in addition, the thermal indicator may comprise at least one thermochromic material that undergoes a reversible visible colour change from a first coloured state to a second coloured state when heated above a predetermined switching temperature. In this case, the at least one reversible thermochromic material reverts back to the first coloured state from the second colourless state when the temperature falls below the predetermined switching temperature.

In addition to at least one thermochromic material, the thermal indicator may further comprise at least one non-thermochromic coloured material. The thermal indicator may be formed by applying the at least one thermochromic material and the at least one non-thermochromic coloured material separately or in combination to one or both of the waste compartment cover and the outer shell.

For example, the thermal indicator may comprise one or more dots, lines, symbols, logos, words or other indicia formed by applying a thermochromic material comprising a mixture of one or more thermochromic pigments or dyes and one or more non-thermochromic pigments or dyes to one or both of the waste compartment cover and the outer shell.

Alternatively or in addition, the thermal indicator may comprise one or more dots, lines, symbols, logos, words or other indicia formed by applying a base layer of non-thermochromic coloured material to the outer surface of one or both of the waste compartment cover and the outer shell and then applying an outer layer of thermochromic material onto the base layer of non-thermochromic coloured material.

For example, the thermal indicator may comprise one or more indicia formed from a non-thermochromic coloured material that are covered by a layer of thermochromic material that undergoes a reversible visible colour change from a coloured state to a substantially colourless state when heated above a predetermined switching temperature. At temperatures below the switching temperature only the layer of thermochromic material is visible. However, at temperatures above the switching temperature, the one or more indicia of non-thermochromic material covered by the layer of thermochromic material are revealed.

Thermochromic materials suitable for use in the thermal indicator are commercially available in a variety of formulations including, but not limited to, powders, inks, paints and other coating compositions. Micro-encapsulated leuco dyes that undergo a reversible visible colour change when heated above a predetermined switching temperature suitable for use in the thermal indicator are commercially available under the brand name Live colors from Gem'innov

in Gemenos, France and under the brand names ChromaZone® and Thermostar® from Thermographic Measurements Ltd in Honiton, England.

In a preferred embodiment, the at least one thermochromic material comprises one or more thermochromic dyes, one or more thermochromic pigments or a combination thereof dispersed in a liquid carrier or vehicle. More preferably, the thermal indicator comprises at least one thermochromic ink.

The thermal indicator may be formed by applying the at least one thermochromic material to the waste compartment cover in any suitable manner. For example, the at least one thermochromic material may be adhered, brushed, coated, stamped or otherwise applied or affixed to one or both of the waste compartment cover and the outer shell. Preferably, the at least one thermochromic material is printed on one or both of the waste compartment cover and the outer shell.

Through an appropriate choice of the at least one reversible thermochromic material, the thermal indicator may provide one or more desired visual indications to a consumer at one or more desired temperatures. For instance, to provide a visual indication to a consumer of when used smoking articles within the waste compartment have been extinguished and may be disposed of, the thermal indicator may advantageously comprise one or more thermochromic materials that undergoes a reversible visible colour change from a substantially colourless state to a coloured state when the temperature of one or both of the waste compartment cover and the outer shell falls below a predetermined temperature. The thermal indicator may, for example, include one or more dots, lines, symbols, logos, words or other indicia formed from such thermochromic materials that are only visible when used smoking articles within the waste compartment are sufficiently cool to be disposed of.

For example, a thermal indicator may be formed by printing a base layer of red non-thermochromic ink on the outer surface of one or both of the waste compartment cover and the outer shell and then applying an outer layer of thermochromic material that undergoes a reversible visible colour change from blue to substantially colourless when heated above about a pre-determined temperature (for example, above about 60°C) onto the base layer of non-thermochromic coloured material. In use, when the waste compartment is empty and at ambient temperature, only the blue outer layer of thermochromic material is visible. When a used heated smoking article comprising a combustible heat source or fuel element and an aerosol-generating substrate is placed in the waste compartment, the temperature within the waste compartment may increase above the pre-determined temperature (for example, above about 60 °C) due to heat generated by the combustible heat source or fuel element prior to extinguishment of the heated smoking article. This will cause the thermochromic material to undergo a reversible visible colour change from blue to substantially colourless, and so reveal

the base layer of red non-thermochromic material. Once the combustible heat source or fuel element has been extinguished, the temperature within the waste compartment will gradually decrease to below the pre-determined temperature (for example, to below about 60 °C) causing the thermochromic material to change back from substantially colourless to blue. The
5 “reappearance” of the blue outer layer of thermochromic material advantageously indicates to a consumer that the used heated smoking article in the waste compartment has been successfully extinguished and can be disposed of. Alternatively or in addition, the “reappearance” of the blue outer layer of thermochromic material advantageously indicates to a consumer that a further used heated smoking article may be placed in the waste compartment
10 in order to be extinguished.

If desired, a fire extinguishing substance may be advantageously provided in the waste compartment to assist in extinguishing used smoking articles placed therein. For example, a fire extinguishing substance may be provided on at least a portion of the inner surface of the waste compartment. Alternatively or in addition, the waste compartment may be partially filled
15 with a fire-extinguishing substance. The inclusion of a fire extinguishing substance in the waste compartment to assist in extinguishing used smoking articles placed therein after smoking is particularly advantageous where the plurality of smoking articles contained in the other compartment of the inner slide of the dual compartment slide and shell container according to the invention are heated smoking articles comprising a combustible heat source or fuel element.

20 The waste compartment may include any suitable fire extinguishing substance. For example, the fire extinguishing substance may comprise one or more water-containing or water-based pastes or gels, one or more clay pastes, or a combination thereof.

Instead of or in addition to a fire extinguishing substance, the waste compartment may contain an extinguishing device such as, for example, a snuffer. Alternatively or in addition, a
25 snuffer or other extinguishing device may, for example, be attached to the outer shell or inner slide of the container or contained in a separate further compartment of the inner slide.

Through an appropriate choice of the dimensions thereof, the inner slide of dual compartment slide and shell containers according to the invention may contain different total numbers of smoking articles. For example, the inner slide may contain a total of between ten
30 and twenty smoking articles. Alternatively or in addition, the inner slide of dual compartment slide and shell containers according to the invention may contain smoking articles of different dimensions (for example, smoking articles of different length or different circumference). For example, the inner slide may contain smoking articles with lengths of between about 60 mm and about 120 mm and diameters of between about 4 mm and about 9 mm.

35 Where both the first compartment and the second compartment of the inner slide contain smoking articles, through an appropriate choice of the dimensions thereof, the first and second

compartments may contain the same or different numbers of smoking articles. For example, each of the first and second compartments of the inner slide may contain between 5 and 10 smoking articles. Alternatively or in addition, the first and second compartments of the inner slide may contain smoking articles of the same or different types (for example, smoking articles with different dimensions, filters, tobacco blends, flavours, total particulate matter delivery and nicotine delivery).

Smoking articles contained in the inner slide of dual compartment slide and shell containers according to the invention may be wrapped in an inner liner of, for example, metal foil or metallised paper in a conventional manner.

The combustible heat sources or fuel elements of heated smoking articles can be sensitive to humidity intake. Where the inner slide of dual compartment slide and shell containers according to the invention contains such heated smoking articles, the heated smoking articles are preferably wrapped in an inner liner formed from a flexible humidity barrier material. Suitable flexible barrier materials include, but are not limited to: polymeric materials, such as oriented polypropylene (OPP); metallized polymeric materials, such as metallized OPP; and laminated polymeric films, such as polypropylene/aluminium/polypropylene laminated film. To provide humidity protection and easy access to the heated smoking articles, the inner liner formed from the flexible humidity barrier material preferably comprises a resealable label.

The outer shell and inner slide of containers according to the invention may be formed from any suitable materials including, but not limited to, cardboard, paperboard, plastic, metal or combinations thereof. The outer shell and inner slide may be formed from the same or different materials. Preferably, the outer shell and inner slide are formed from folded laminar blanks, for example from folded laminar cardboard blanks.

The outer shell may be formed from a single folded laminar blank or from two or more separate folded laminar blanks. Preferably, the outer shell is formed from a single folded laminar blank.

The inner slide may be formed from a single folded laminar blank or from two or more separate folded laminar blanks. Where one of the first and second compartments of the inner slide contains a plurality of smoking articles and the other of the first and second compartments of the inner slide is a waste compartment intended to receive one or more used smoking articles, the first and second compartment of the inner slide are advantageously formed from separate folded laminar blanks. Formation of the first and second compartments from separate laminar blanks allows the compartment containing the plurality of smoking articles and the waste compartment to be formed from different material or materials. For example, the compartment containing the plurality of smoking articles may be formed from a single folded laminar cardboard blank and the waste compartment may be at least partial formed, coated or

lined from or with one or more heat conductive and heat resistant materials as previously described above. This is particularly preferred where one of the first and second compartments of the inner slide contains a plurality of heated smoking articles comprising a combustible heat source or fuel element and an aerosol-generating substrate and the other of the first and second compartments of the inner slide is a waste compartment intended to receive and extinguish one or more used heated articles.

Containers according to the invention may be overwrapped in a known manner with any suitable known material or combination of materials including, but not limited to, cellophane, polymeric films of, for example, polyethylene or polypropylene, metallised polymeric films and laminated polymeric films. Containers according to the invention may be overwrapped with overwrappers including one or more tear tapes. The one or more tear tapes may extend in a transverse or longitudinal direction around the perimeter of the container.

The exterior and interior surfaces of the outer shell and inner slide may be printed, embossed, debossed or otherwise embellished (for example, using labels or stickers) with manufacturer or brand logos, trade marks, slogans and other consumer information and indicia.

The interior and exterior surfaces of the first and second compartments of the inner slide may be printed or otherwise embellished in the same or a different manner. For example, where the first and second compartments contain different consumer goods, the interior surfaces of the first and second compartments may advantageously be printed in a different manner to emphasise that different consumer goods are contained therein. In addition, where one of the first and second compartments of the inner slide contains a plurality of consumer goods and the other of the first and second compartments of the inner slide is a waste compartment, the waste compartment may advantageously be printed or otherwise embellished in a different manner to the remainder of the container in order to highlight its function and so discourage littering. For example, the interior surfaces of the waste compartment may be a different colour to the remainder of the container.

In contrast to the slide and shell containers disclosed in US-A-2,058,710 and EP-A-0 059 915, the first and second compartments of the inner slide of dual compartment slide and shell containers according to the invention are both accessible in the open position. This reduces or eliminates the need to print or otherwise embellish the exterior surfaces of the outer shell and inner slide in order to reduce the likelihood of the consumer mistakenly accessing the 'wrong' compartment, and so advantageously maximises the external surface area of the inner slide and outer shell available to carry advertising, promotional or product information.

The outer shell and inner slide of may be substantially rectangular parallelepipedal in shape, with right-angled longitudinal and right-angled transverse edges. Alternatively, the outer shell and inner slide may comprise one or more rounded longitudinal edges, rounded transverse

edges, bevelled longitudinal edges, bevelled transverse edges or combinations thereof. For example, by scoring in a known manner laminar blanks from which the outer shell and the inner slide of the container are erected, a "rounded-corner" multi-compartment slide and shell container according to the invention may be produced.

5 Preferably, the internal dimensions of the outer shell are substantially the same as the external dimensions of the inner slide, so that inner surfaces of the outer shell overlie and abut the outer surfaces of the inner slide in the closed position. In use, frictional forces generated between the outer surfaces of the inner slide and the abutting inner surfaces of the outer shell resist slidable movement of the inner slide between the closed position and the open position.
10 This advantageously prevents opening and closing of the container without the application of a positive force by the consumer.

Dual compartment slide and shell containers according to the invention may further comprise an aroma release system. The aroma release system may release an aroma upon opening of the dual compartment slide and shell container or upon closing of the dual
15 compartment slide and shell container or upon both opening and closing of the dual compartment slide and shell container. Throughout the specification, the term "aroma" is used to mean any substance capable of producing an olfactory sensation and includes, but is not limited, to scents, fragrances, perfumes, deodorants and flavourants. Preferably, the aroma produces both a gustatory and an olfactory sensation.

20 Suitable aroma release systems for inclusion in dual compartment slide and shell containers according to the invention are known in the art and described in, for example, WO-A2-2007/029120 and WO-A2-2007/026260.

Where the internal dimensions of the outer shell are substantially the same as the external dimensions of the inner slide, dual compartment slide and shell containers according to
25 the invention may advantageously comprise an aroma release system that releases an aroma upon both opening and closing of the pack as a result of frictional contact between the outer surfaces of the inner slide and the abutting inner surfaces of the outer shell. For example, the aroma release system may be formed by printing or otherwise applying one or more microencapsulated flavourants to at least one outer surface of the inner slide, at least one inner
30 surfaces of the outer shell or a combination thereof.

Alternatively or in addition, dual compartment slide and shell containers according to the invention may comprise other known aroma release systems including, but not limited to: "tear
tape" aroma release systems, such as those described in WO-A2-2007/026260 and US-A-4,717,017, in which an aroma is released upon removal of a tear tape included in the
35 overwrapper of the container; "peel and sniff" aroma release systems, in which an aroma is released by a consumer physically separating two strips of film, paper or other material between

which one or more microencapsulated flavourants have been deposited; and "scratch and sniff" aroma release systems, in which an aroma is released by a consumer scratching or rubbing paper, film or other material to which one or more micro-encapsulated flavourants have been applied.

- 5 The aroma release system may release any suitable aroma. Examples of suitable aromas include, but are not limited to, menthol, tobacco, spearmint and peppermint.

The invention will be further described, by way of example only, with reference to the accompanying drawings in which:

10 Figure 1 shows a perspective view of an empty multi-compartment slide and shell container according to a first embodiment of the invention with the inner slide in a closed position;

Figure 2 shows a perspective view of the container of Figure 1 in an open position;

Figure 3 shows a plan view of a laminar cardboard blank for forming the outer shell of the containers of Figures 1 and 2 and 7;

15 Figure 4 shows a plan view of a first laminar cardboard blank for forming a first part of the inner slide of the container of Figures 1 and 2;

Figure 5 shows a plan view of a second laminar cardboard blank for forming a second part of the inner slide of the container of Figures 1 and 2;

20 Figure 6 shows perspective views of the first and second parts of the inner slide of the container of Figures 1 and 2 formed by the blanks shown in Figures 4 and 5, respectively.

Figure 7 shows a perspective view of an empty multi-compartment slide and shell container according to a second embodiment of the invention in an open position;

Figure 8 shows a plan view of a first laminar cardboard blank for forming a first part of the inner slide of the container of Figure 7;

25 Figure 9 shows a plan view of a second laminar cardboard blank for forming a second part of the inner slide of the container of Figure 7; and

Figure 10 shows perspective views of the first and second parts of the inner slide of the container of Figure 7 formed by the blanks shown in Figures 8 and 9, respectively.

30 The slide and shell container 2 according to the first embodiment of the invention shown in Figures 1 and 2 is rectangular parallelepipedal in shape and comprises an outer shell 4 and an inner slide 6 within the outer shell 4.

35 The outer shell 4 has a front wall 8 and an opposed rear wall 10, a left side wall 12 and an opposed right side wall 14 and a bottom wall 16. The walls 8, 10, 12, 14, 16 of the outer shell 4 define a cup-shaped receptacle with an open upper rectangular end face 18 defined by the upper transverse free edges of the front wall 8, rear wall 10, left side wall 12 and right side wall 12, within which the inner slide 6 is inserted. A pair of opposed cut-outs 22 are provided at

the upper end of the outer shell 4 along the free edges of the left 12 and right 14 side walls thereof.

The terms "front", "rear", "top", "bottom", "upper" and "lower" are used to describe the relative positions of components of the container 2 according to the first embodiment of the invention when the container is held in an upright position with the open end face 18 of the outer shell 4 thereof at the top of the container 2. In the following description of the container 2 according to the first embodiment of the invention, these terms are used irrespective of the actual orientation of the container 2 or outer shell 4 or inner slide 6 thereof shown in Figures 1 to 6.

10 The inner slide 6 of the container 2 shown in Figures 1 and 2 has a rear wall 24, a left side wall 26 and an opposed right side wall 28, a top wall 30 and an opposed bottom wall 32. The walls 24, 26, 28, 30, 32 of the inner slide 6 define a tray that is slidable longitudinally within the outer shell 4 between the closed position, shown in Figure 1, and the open position, shown in Figure 2. As shown in Figure 2, a pair of opposed cut-outs 34 are provided along the longitudinal free edges of the left 12 and right 14 side walls of the inner slide 6 proximate the top wall 30 thereof.

An integral transverse partition 36 extends between the left 26 and right 28 side walls of the inner slide 6 proximate the bottom wall 32 thereof. The partition 36 divides the interior of the inner slide 6 into a major first compartment 38, which extends in a longitudinal direction 6 from the partition 36 to the top wall 30 of the inner slide 6, and a minor second compartment 40, which extends in a longitudinal direction from the partition 36 to the bottom wall 32 of the inner slide 6. The open front faces of the first 38 and second 40 compartments of the inner slide 6 act as first and second access openings, respectively, through which the interiors of the first 38 and second 40 compartments may be accessed in the open position.

25 A separate first compartment cover 42 parallel to the rear wall 24 of the inner slide 6 extends from the partition 36 to the top wall 30 of the inner slide 6. The first compartment cover 42 has a first cover section 44, which is affixed to the partition 36, and a second cover section 46, which is connected to the first cover section along a transverse hinge line. As shown in Figure 2, a central cut-out 48 is provided along the transverse free edge of the second cover section 46 of the first compartment cover 42 adjacent the top wall 30 of the inner slide 6.

30 In the closed position shown in Figure 1, the inner slide 6 is contained within the outer shell 4 with the front wall 8, rear wall 10, left side wall 12, right side wall 14 and bottom wall 16 of the outer shell 4 adjacent to and overlying the first compartment cover 42, rear wall 24, left side wall 26, right side wall 28 and bottom wall 32, respectively, of the inner slide 6. As shown in Figure 1, the first 44 and second 46 cover sections of the first compartment cover 42, which extend across the front face of the first compartment 38 of the inner slide 6, and the open front

face of the second compartment 40 of the inner slide 6 are covered by the front wall 8 of the outer shell 4 in the closed position. Consequently, the interiors of the first 38 and second 40 compartments of the inner slide 6 are both inaccessible in the closed position shown in Figure 1.

5 In the open position shown in Figure 2, the bottom wall 32 of the inner slide 6 is spaced apart from the bottom wall 16 of the outer shell 4 and the portion of the first compartment 38 of the inner slide 6 covered by the second cover section 46 of the first compartment cover 42 projects outwardly from the outer shell 4 through the open upper end 18 thereof. As shown in Figure 2, the relative position of the inner slide 6 and outer shell 4 in the open position is such
10 that the open front face of the second compartment 40 of the inner slide 6 is substantially aligned with a third elongate access opening 20 provided in the front wall 8 of the outer shell 4. As shown in Figures 1 and 2, the third access opening 20 extends across the front wall 8 of the outer shell towards the left 12 and right 14 side walls thereof.

With the container 2 in the open position shown in Figure 2, the consumer may access
15 the interior of the first compartment 38 of the inner slide 6 by pivoting the second cover section 46 of the first compartment cover 42 about the hinge line separating it from the first cover section 46 thereof and may also access the interior of the second compartment 40 of the inner slide 6 through the third access opening 20 provided in the front wall 8 of the outer shell 4.

Consequently, the interiors of the first 38 and second 40 compartments of the inner slide
20 6 are both accessible in the open position shown in Figure 2.

In use, with the inner slide 6 in the closed position shown in Figure 2, the consumer holds the outer shell 4 of the container 2 in one hand and with the thumb and forefinger of their other hand grasps the left 26 and right 28 side walls of the inner slide 6 through the opposed cut-outs 22 provided in the left 12 and right 14 side walls of the outer shell 4. To open the
25 container 2, the consumer pulls the inner slide 6 outwardly away from the outer shell 6 through the open upper end 18 thereof, in the direction shown by the block arrow in Figure 1, in order to slide the inner slide 6 relative to the outer shell 4 from the closed position shown in Figure 1 to the open position shown in Figure 2 and so align the open front face of the second compartment 40 of the inner slide 6 with the third access opening 20 in the front wall 8 of the outer shell 4.

30 If desired, alternatively or in addition to the pair of opposed cut-outs 22 provided along the transverse free edges of the left 12 and right 14 side walls thereof, an aperture (not shown) may be provided in the bottom wall 16 of the outer shell 4 through which, in use, a consumer may push on the bottom wall 32 of the inner slide 6 in order to open the container 2.

The transverse external cross-section of the inner slide 6 of the container 2 according to
35 the first embodiment of the invention is substantially equal to the transverse internal cross-section of the outer shell 4 thereof so that during opening and closing of the container 2,

frictional forces generated between the outer surface of the inner slide 6 and the inner surface of the outer shell 4 prevent slidable movement of the inner slide 6 relative to the outer shell 4 until a positive force is applied by the consumer.

As described further below, the container 2 further comprises retention means for preventing slidable movement of the inner slide 6 relative to the outer shell 4 beyond the open position shown in Figure 2. Once the container 2 is in the open position shown in Figure 2, the consumer grasps the second cover section 46 of the first compartment cover 42 extending across the front face of the first compartment 38 of the inner slide 6 and pivots it rearwardly to access smoking articles or other consumer goods (not shown) contained in the first compartment 38. The cut-out provided along the transverse free edge of the second cover section 46 of the first compartment cover 42 facilitates the pivotal movement of the second cover section 46 of the first compartment cover 42 by the consumer. In use, the opposed cut-outs 34 provided along the longitudinal free edges of the left 26 and right 28 side walls of the inner slide 6 then facilitate the removal of consumer goods (not shown) contained in the first compartment 38 of the inner slide 6 from the container 2.

A one-piece laminar cardboard blank from which the outer shell 4 of the container 2 of Figures 1 and 2 may be formed is shown in Figure 3. One-piece laminar cardboard blanks from which the first compartment 38, second compartment 40 and partition 36 and the first compartment cover 42 of the inner slide 6 of the container 2 of Figures 1 and 2 may be formed are shown in Figures 4 and 5, respectively.

Corresponding reference numerals are used in Figures 3, 4 and 5 for elements of the blanks that are similar or related to elements of the outer shell 4 and inner slide 6 of the container 2 of Figures 1 and 2 previously described. The blanks includes various panels, flaps and tabs (labelled in bold in Figure 3, 4 and 5) that, when folded about appropriate score lines (shown by broken lines in Figures 3, 4 and 5) and affixed with adhesive (shown by areas of cross hatching in Figures 3 and 4) in a conventional manner, form the outer shell 4 and inner slide 6 of the container 2 shown in Figures 1 and 2. Throughout the specification, the term score line is used to indicate a line formed by, for example, creasing, scoring, perforating, embossing or otherwise compressing, cutting or weakening the blank.

The blank shown in Figure 3 for forming the outer shell 4 of the container 2 shown in Figures 1 and 2 has a front wall panel 8, a rear wall panel 10, a left side wall panel 12, an inner right side wall panel 14a, an outer right side wall panel 14b, an inner bottom wall panel 16a and an outer bottom wall panel 16b, which when the blank is folded form the corresponding walls of the outer shell 4. As shown in Figure 3, the blank further comprises a pair of lower closure tabs 50 and a pair of upper retention flaps 52, which are connected to the lower and upper edges, respectively, of the left side wall panel 12 and the outer right side wall panel 14b along score

lines, and a pair of upper reinforcement flaps 54, which are connected to the upper edges of the front 8 and rear 10 wall panels along score lines.

To form the outer shell 4, the upper reinforcement flaps 54 are folded through 180 degrees and affixed to the inner surface of the front wall panel 8 and rear wall panel 10. The front 8, rear 10, left side 12, inner right side 14a and outer right side 14b wall panels are then folded to form an open ended hollow sleeve and the outer right side wall panel 14b affixed to the inner right side wall panel 14a. The inner bottom wall panel 16a, outer bottom wall panel 16b and lower closure flaps 50 are then folded through 90 degrees and affixed to one another in a known manner to close the lower end of the hollow sleeve and so form the bottom of the outer shell 4. Finally, the upper retention flaps 52 are folded through 180 degrees so that they rest against the inner surface of the left side wall panel 12 and the outer right side wall panel 14b in the formed outer shell 4.

The fold lines formed between the upper reinforcement flaps 54 and upper retention flaps 52 and the front 8 and rear 10 wall panels and the left 12 and outer right 14b side wall panels of the blank advantageously provide neat, dull free edges to the front wall 8, rear wall 10, left side wall 12 and right side wall 14, respectively, of the formed outer shell 4 of the container 2.

The blank shown in Figure 4 for forming the first compartment 38, second compartment 40 and partition 36 of the inner slide 6 of the container 2 shown in Figures 1 and 2 has a rear wall panel 24, inner 26a and outer 26b left side wall panels, inner 28a and outer 28b right side wall panels, inner 30a and outer 30b top wall panels, and inner 32a and outer 32b bottom wall panels, which when the blank is folded form the corresponding walls of the inner slide 6.

As shown in Figure 4, the blank also includes a pair of lower closure tabs 56, which are connected to the opposed side edges of the outer bottom wall panel 32b along score lines, a pair of upper closure tabs 58, which are connected to the upper edges of the outer left 26b and outer right 28b side wall panels along score lines, and a pair of rear wall reinforcement flaps 60, which are connected to the longitudinal edges of the inner left 26a and inner right 28a side wall panels distant from the outer left 26b and outer right 28b side wall panels along score lines.

The blank further comprises a partition bottom wall panel 62, a partition front wall panel 64 and a pair of opposed partition side flaps 66 connected to the sides of the partition bottom wall panel 62 along score lines, which when the blank is folded form the partition 36 in the inner slide 6 that divides the interior thereof into a major first compartment 38 and a minor second compartment 40. As shown in Figure 4, the partition bottom wall panel 62 is connected to the inner bottom wall panel 32a of the blank via a connection panel 68, which during erection of the blank is folded so that it overlies the rear wall 24 of the inner slide 6 in the second compartment 40 thereof and which spaces the partition 36 from the bottom wall 32 of the inner slide 6.

The various panels, tabs and flaps of the blank shown in Figure 4 are folded and affixed to one another to form the first compartment 38, second compartment 40 and partition 36 of the inner slide 6 of the container 2 according to the first embodiment of the invention shown in Figures 1 and 2. During erection of the blank the opposed partition side wall flaps 66 are affixed to the inner surface of the inner left 26a and inner right 28a side wall panels. This ensures that the first 38 and second 40 compartments of the inner slide 6 of the container 2 are isolated from one another and thereby advantageously reduces or prevents cross-contamination between the contents of the first 38 and second 40 compartments of the inner slide 6 during use of the container 2. This is particularly desirable in embodiments of the invention where the first compartment 38 of the inner slide 6 of the container contains a plurality of consumer goods, such as for example smoking articles, and the second compartment 40 of the inner slide 6 is a waste compartment for containing the remains of one or more of the consumer goods after use, such as for example the butts of one or more used smoking articles.

Inclusion of the opposed partition side wall flaps 66 together with the inner bottom wall panel 32a, partition bottom wall panel 62 and connection panel 68 also advantageously enables both the inner surfaces of the second compartment 40 of the inner slide 6 and the outer surfaces of the inner slide 6 to be printed by printing only one side of the blank shown in Figure 4 *i.e.* without the need for recto-verso printing of the blank.

The fold lines formed between the inner 26a and outer 26b left side wall panels and the inner 28a and outer 28b right side wall panels, between the inner 30a and outer 30b top wall panels and between the inner 32a and outer 32b bottom wall panels of the blank advantageously provide neat, dull free edges to the left side wall 26, right side wall 28, top wall 30 and bottom wall 32, respectively, of the formed inner slide 6 of the container 2.

The rear wall reinforcement flaps 60, which during erection of the blank are folded so that they overlie the rear wall 24 of the inner slide 6 in the first compartment 38, advantageously provide additional surface area that may be printed with, for example, information concerning the composition or use of consumer goods contained in the first compartment of the inner slide 6 of the container 2. Inclusion of the rear wall reinforcement flaps 60 together with the inner left side wall panel 26a, inner right side wall panel 28a and inner top wall panel 30a advantageously enables the inner surfaces of the rear wall 24, left side wall 26, right side wall 28 and top wall 30 of the first compartment 38 of the inner slide 6 and the outer surfaces of the inner slide 6 to be printed by printing only one side of the blank shown in Figure 4 *i.e.* without the need for recto-verso printing of the blank. In the absence of, for example, the rear wall reinforcement flaps 60 it would be necessary to print both sides of the blank shown in Figure 4 in order to provide printing on the inner surface of the rear wall 24 of the inner slide 6 and on the outer surfaces of one or more of the rear 24, left side 26, right side 28, top 30 and bottom 32 walls of the inner

slide 6.

In the container 2 shown in Figures 1 and 2, the rear wall reinforcement flaps 60 are of the same dimensions and are each approximately half the width of the rear wall 24 of the inner slide 6, so that in the formed inner slide 6 the longitudinal free edges of the rear wall reinforcement flaps 60 abut one another. However, it will be appreciated that containers according to the invention may have inner slides with one or more rear wall reinforcement flaps of different size. For example, the inner slide may comprise a single rear wall reinforcement flap of substantially the same width as the rear wall thereof, which is connected to either an inner left side wall panel, an inner right side wall panel or an inner top wall panel of the inner slide along a score line. It will also be appreciated that containers according to the invention may comprise inner slides in which the rear wall reinforcement flaps 60 are omitted. Furthermore, to reduce the quantity of material required to form the inner slide 6 of the container 2 shown in Figures 1 and 2 and to facilitate folding of the blank shown in Figure 4, it will be appreciated that one or more of the outer left side wall panel 26b, the outer right side wall panel 28b and the outer top wall panel 30b may also be omitted.

The blank shown in Figure 5 for forming the first compartment cover 42 of the inner slide 6 has a first cover section panel 44 and a second cover section 46, which are connected along a hinge line (shown by a heavy dashed line in Figure 5), and a pair of opposed retention tabs 70, which are connected to the side edges of the first cover section panel 44 along score lines.

To form the inner slide 6 of the container 2 of Figures 1 and 2, the opposed retention tabs 70 of the blank for forming the first compartment cover 42 shown in Figure 5 are folded through 90 degrees. As shown in Figure 6, the first cover section panel 44 and the opposed retention tabs 70 of the blank for forming the first compartment cover 42 of the inner slide 6 are then affixed to the outer surfaces of the partition front wall panel 64 and left 26 and right 28 side wall panels, respectively, of the folded blank for forming the first compartment 38, second compartment 40 and partition 36 of the inner slide 6. To reduce the quantity of material required to form the inner slide 6 of the container 2, the second cover section 46 of the first compartment cover 42 of the inner slide 6 may be omitted.

The formed inner slide 6 shown in Figure 6 is then inserted into the formed outer shell 4 through the open upper end 18 thereof to form the container 2 according to the first embodiment of the invention shown in Figures 1 and 2.

It will be appreciated that the precise order in which the various panels, flaps and tabs of the one-piece laminar cardboard blanks shown in Figures 3, 4 and 5 are folded and secured to one another to form the outer shell 4 and inner slide 6 of the container 2 of Figures 1 and 2 may be varied depending upon, for example, the apparatus used to produce the container 2. It will also be appreciated that the one-piece laminar cardboard blanks shown in Figures 3, 4 and 5

may be folded manually to form the outer shell 4 and inner slide 6 of the container 2 of Figures 1 and 2 if desired.

The upper retention flaps 52 of the outer shell 4 are not affixed to the inner surface of the left side wall panel 12 and the outer right side wall panel 14b of the outer shell 4. This ensures that the opposed upper retention flaps 52 of the outer shell 4 interact with the opposed retention tabs 70 of the inner slide 6 once the inner slide 6 is inserted into the outer shell 4, as described further below. In use, as the inner slide 6 reaches the open position shown in Figure 2, the inwardly folded upper retention flaps 52 of the outer shell 4 engage the retention tabs 70 of the inner slide 6, thereby advantageously preventing further slidable movement of the inner slide 6 relative to the outer shell 4 beyond the open position. The interaction between the upper retention flaps 52 of the outer shell 4 and the retention tabs 70 of the inner slide 6 prevents removal of the inner slide 6 of the container 2 from the outer shell 4 thereof.

The slide and shell container 72 according to the second embodiment of the invention shown in 7 is of similar construction to the slide and shell container according to the first embodiment of the invention shown in Figures 1 and 2. Corresponding reference numerals are used in Figures 7, 8 and 9 for elements of the slide and shell container 72 according to the second embodiment of the invention and blanks for forming the inner slide thereof that are similar or related to elements of the slide and shell container 2 according to the first embodiment of the invention and blanks for forming the inner slide thereof shown in Figures 1, 2, 4 and 5 and previously described.

The slide and shell container 72 according to the second embodiment of the invention shown in Figures 1 and 2 is rectangular parallelepipedal in shape and comprises an outer shell 4 and an inner slide 6 within the outer shell 4.

The outer shell 4 of the container 72 according to the second embodiment of the invention is identical to the outer shell 4 of the container 2 according to the first embodiment of the invention shown in Figures 1 and 2. As previously described above, the outer shell 4 has a front wall 8 and an opposed rear wall 10, a left side wall 12 and an opposed right side wall 14 and a bottom wall 16. The walls 8, 10, 12, 14, 16 of the outer shell 4 define a cup-shaped receptacle with an open upper rectangular end face 18 defined by the upper transverse free edges of the front wall 8, rear wall 10, left side wall 12 and right side wall 12, within which the inner slide 6 is inserted. A pair of opposed cut-outs 22 are provided at the upper end of the outer shell 4 along the free edges of the left 12 and right 14 side walls thereof.

The terms "front", "rear", "top", "bottom", "upper" and "lower" are used to describe the relative positions of components of the container 72 according to the second embodiment of the invention when the container is held in an upright position with the open end face 18 of the outer shell 4 thereof at the top of the container 72. In the following description of the container 72

according to the second embodiment of the invention, these terms are used irrespective of the actual orientation of the container 72 or outer shell 4 or inner slide 6 thereof shown in Figures 7 to 10.

The inner slide 6 of the container 72 shown in Figure 7 has a rear wall 24, a left side wall 26 and an opposed right side wall 28, a top wall 30 and an opposed bottom wall 32. The walls 24, 26, 28, 30, 32 of the inner slide 6 define a tray that is slidable longitudinally within the outer shell 4 between a closed position and the open position, shown in Figure 7. As shown in Figure 7, a pair of opposed cut-outs 34 are provided along the longitudinal free edges of the left 26 and right 28 side walls of the inner slide 6 proximate the top wall 30 thereof.

The inner slide 6 of the container 72 according to the second embodiment of the invention comprises a major first compartment 38 and a minor second compartment 40. The major first compartment 38 extends in a longitudinal direction 6 from the top wall 30 of the inner slide 6 to a first compartment bottom wall 62a, which extends transversely between the left 26 and right 28 side walls of the inner slide 6 proximate the bottom wall 32 thereof. The second compartment 40 extends in a longitudinal direction from a second compartment top wall 62b, which extends transversely between the left 26 and right 28 side walls of the inner slide 6 parallel and adjacent to the first compartment bottom wall 62a, to the bottom wall 32 of the inner slide 6. The open front faces of the first 38 and second 40 compartments of the inner slide 6 act as first and second access openings, respectively, through which the interiors of the first 38 and second 40 compartments may be accessed in the open position.

A first compartment cover 42 parallel to the rear wall 24 of the inner slide 6 extends from the first compartment bottom wall 62a to the top wall 30 of the inner slide 6. The first compartment cover 42 has a first cover section 44, which is connected to the first compartment bottom wall 62a along a transverse hinge line, and a second cover section 46, which is connected to the first cover section 44 along a transverse hinge line. As shown in Figure 7, a central cut-out 48 is provided along the transverse free edge of the second cover section 46 of the first compartment cover 42 adjacent the top wall 30 of the inner slide 6.

A second compartment cover 74 parallel to the rear wall 24 of the inner slide 6 is connected to the bottom wall 32 of the inner slide 6 along a transverse hinge line and extends from the bottom wall 32 of the inner slide 6 to the second compartment top wall 62b. As shown in Figure 10, a central projection or tab is provided along the transverse free edge of the second compartment cover 74 adjacent the second compartment top wall 62b.

In the closed position shown in Figure 1, the inner slide 6 of the container 72 according to the second embodiment of the invention is contained within the outer shell 4 thereof with the front wall 8, rear wall 10, left side wall 12, right side wall 14 and bottom wall 16 of the outer shell 4 adjacent to and overlying the first compartment cover 42 and second compartment cover 74,

rear wall 24, left side wall 26, right side wall 28 and bottom wall 32, respectively, of the inner slide 6. The first 44 and second 46 cover sections of the first compartment cover 42, which extend across the front face of the first compartment 38 of the inner slide 6, and the second compartment cover 74, which extends across the front face of the second compartment 40 of the inner slide 6, are covered by the front wall 8 of the outer shell 4 in the closed position. Consequently, the interiors of the first 38 and second 40 compartments of the inner slide 6 are both inaccessible in the closed position; in the closed position the container 72 according to the second embodiment of the invention is substantially identical in appearance to the container 2 according to the second embodiment of the invention shown in Figure 1.

In the open position shown in Figure 7, the bottom wall 32 of the inner slide 6 of the container 72 according to the second embodiment of the invention is spaced apart from the bottom wall 16 of the outer shell 4 thereof and the portion of the first compartment 38 of the inner slide 6 covered by the second cover section 46 of the first compartment cover 42 projects outwardly from the outer shell 4 through the open upper end 18 thereof. As shown in Figure 7, the relative position of the inner slide 6 and outer shell 4 in the open position is such that the second compartment cover 74 extending across the front face of the second compartment 40 of the inner slide 6 is substantially aligned with a third elongate access opening 20 provided in the front wall 8 of the outer shell 4. As shown in Figure 7, the third access opening 20 extends across the front wall 8 of the outer shell towards the left 12 and right 14 side walls thereof.

With the container 72 in the open position shown in Figure 7, the consumer may access the interior of the first compartment 38 of the inner slide 6 by pivoting the second cover section 46 of the first compartment cover 42 about the transverse hinge line separating it from the first cover section 44 thereof. In the open position, the consumer may also access the interior of the second compartment 40 of the inner slide 6 through the third access opening 20 provided in the front wall 8 of the outer shell 4 by pivoting the second compartment cover 74 about the transverse hinge line along which the second compartment cover 74 is connected to the bottom wall 32 of the inner slide 6.

Consequently, the interiors of the first 38 and second 40 compartments of the inner slide 6 of the container 72 according to the second embodiment of the invention are both accessible in the open position shown in Figure 7.

In use, with the inner slide 6 in the closed position, the consumer holds the outer shell 4 of the container 72 in one hand and with the thumb and forefinger of their other hand grasps the left 26 and right 28 side walls of the inner slide 6 through the opposed cut-outs 22 provided in the left 12 and right 14 side walls of the outer shell 4. To open the container 72, the consumer pulls the inner slide 6 outwardly away from the outer shell 4 through the open upper end 18 thereof in order to slide the inner slide 6 relative to the outer shell 4 from the closed position to

the open position shown in Figure 7, and so align the second compartment cover 74 extending across the front face of the second compartment 40 of the inner slide 6 with the third access opening 20 in the front wall 8 of the outer shell 4.

5 If desired, alternatively or in addition to the pair of opposed cut-outs 22 provided along the transverse free edges of the left 12 and right 14 side walls thereof, an aperture (not shown) may be provided in the bottom wall 16 of the outer shell 4 through which, in use, a consumer may push on the bottom wall 32 of the inner slide 6 in order to open the container 72.

10 As in the first embodiment of the invention, the transverse external cross-section of the inner slide 6 of the container 72 according to the second embodiment of the invention is substantially equal to the transverse internal cross-section of the outer shell 4 thereof so that during opening and closing of the container 72, frictional forces generated between the outer surface of the inner slide 6 and the inner surface of the outer shell 4 prevent slidable movement of the inner slide 6 relative to the outer shell 4 until a positive force is applied by the consumer.

15 As described further below, the container 72 further comprises retention means for preventing slidable movement of the inner slide 6 relative to the outer shell 4 beyond the open position shown in Figure 7. Once the container 72 is in the open position shown in Figure 7, the consumer grasps the second cover section 46 of the first compartment cover 42 extending across the front face of the first compartment 38 of the inner slide 6 and pivots it rearwardly to access smoking articles or other consumer goods (not shown) contained in the first
20 compartment 38. The cut-out 48 provided along the transverse free edge of the second cover section 46 of the first compartment cover 42 facilitates the pivotal movement of the second cover section 46 of the first compartment cover 42 by the consumer. In use, the opposed cut-outs 34 provided along the longitudinal free edges of the left 26 and right 28 side walls of the inner slide 6 then facilitate the removal of consumer goods (not shown) contained in the first
25 compartment 38 of the inner slide 6 from the container 2. However, it will be appreciated that depending upon, for example, the orientation of consumer goods contained in the first compartment 38, the opposed cut-outs 34 may be omitted.

30 The outer shell 4 of the container 72 of Figure 7 may be formed from the one-piece blank shown in Figure 3 in the manner previously described above. One-piece laminar cardboard blanks from which the: first compartment 38 and first compartment cover 42; and second compartment 40 and second compartment cover 74 of the inner slide 6 of the container 72 of Figure 7 may be formed are shown in Figures 8 and 9, respectively.

35 Corresponding reference numerals are used in Figures 8 and 9 for elements of the blanks that are similar or related to elements of the inner slide 6 of the container 72 of Figure 7 previously described. The blanks includes various panels, flaps and tabs (labelled in bold in Figure 8 and 9) that, when folded about appropriate score lines (shown by broken lines in

Figures 8 and 9) and affixed with adhesive (shown by areas of cross hatching in Figures 8 and 9) in a conventional manner, form the outer shell 4 and inner slide 6 of the container 72 shown in Figure 7.

The blank shown in Figure 8 for forming the first compartment 38 and first compartment
5 cover 42 of the inner slide 6 of the container 72 shown in Figure 7 has a rear wall panel 24, inner 26a and outer 26b left side wall panels, inner 28a and outer 28b right side wall panels, inner 30a and outer 30b top wall panels, which when the blank is folded form the corresponding walls of the inner slide 6. As shown in Figure 8, the blank also includes a pair of upper closure
10 tabs 58, which are connected to the upper edges of the outer left 26b and outer right 28b side wall panels along score lines.

As shown in Figure 8, the blank further comprises a first compartment bottom wall panel
15 62a, which is connected to the rear wall panel 24 of the blank via a connection panel 68a. During erection of the blank, the connection panel 68a is folded so that it overlies the rear wall 24 of the inner slide 6 and spaces the first compartment bottom wall panel 62a from the bottom edges of the rear wall 24 and the outer left 26 and right 28 side walls of the inner slide 6.

The blank also further comprises a first cover section panel 44, which is connected to
20 the first compartment bottom wall panel 62a along a transverse score line, a second cover section 46, which is connected to the first cover section panel 44 along a hinge line (shown by a heavy dashed line in Figure 8), and a pair of opposed retention tabs 70, which are connected to the side edges of the first cover section panel 44 along score lines.

The various panels, tabs and flaps of the blank shown in Figure 8 are folded and affixed
25 to one another to form the first compartment 38 and first compartment cover 42 of the inner slide 6 of the container 72 according to the second embodiment of the invention shown in Figure 7. As shown in Figure 10, during erection of the blank, the opposed retention tabs 70 of the blank are affixed to the outer surfaces of the left 26 and right 28 side walls of the inner slide 6.

The fold lines formed between the inner 26a and outer 26b left side wall panels and the
30 inner 28a and outer 28b right side wall panels and between the inner 30a and outer 30b top wall panels of the blank advantageously provide neat, dull free edges to the left side wall 26, right side wall 28 and top wall 30, respectively, of the formed inner slide 6 of the container 72. However, to reduce the quantity of material required to form the inner slide 6 of the container 72 shown in Figure 7 and to facilitate folding of the blank shown in Figure 8, it will be appreciated that one or more of the outer left side wall panel 26b, the outer right side wall panel 28b and the outer top wall panel 30b may be omitted.

35 It will also be appreciated that, if desired, the blank for forming the first compartment 38 and first compartment cover 42 of the inner slide 6 of the container 72 according to the second

embodiment of the invention may further comprise one or more rear wall reinforcement flaps connected to the inner left side wall panel 26a, inner right side wall panel 28b or inner top wall panel 30a of the inner slide 6 along score lines, as previously described above. In such embodiments, the rear wall reinforcement flaps, which during erection of the blank are folded so that they overlie the rear wall 24 of the inner slide 6 in the first compartment 38, advantageously provide additional surface area that may be printed with, for example, information concerning the composition or use of consumer goods contained in the first compartment 38 of the inner slide 6 of the container 72.

The blank shown in Figure 9 for forming the second compartment 40 and second compartment cover 74 of the inner slide 6 of the container 72 shown in Figure 7 comprises inner 62b' and outer 62b'' second compartment top wall panels, which when the blank is folded form the top wall 62b of the second compartment 40.

As shown in Figure 9, the blank further comprises a second compartment bottom wall panel 32, which is connected to the inner second compartment top wall panel 62b' via a connection panel 68b, and a second compartment cover panel 74, which is connected to the second compartment bottom wall panel 32 along a transverse score line.

When the blank is folded and affixed to the folded blank for forming the first compartment 38 and first compartment cover 42 of the inner slide 6, the second compartment bottom wall panel 32 forms the bottom wall 32 of the inner slide 6 and the connection panel 68b, which overlies the connection panel 68a of the blank for forming the first compartment 38 and first compartment cover 42 of the inner slide 6, forms the rear wall of the second compartment 40.

The blank also further comprises: inner left 76a and right 78a second compartment side wall panels, which are connected to the opposed side edges of the connection panel 68b along score lines; outer left 76b and right 78b second compartment side wall panels, which are connected to the opposed side edges of the outer second compartment top wall panel 62b'' along score lines; and a pair of lower closure tabs 80, which are connected to the opposed side edges of the outer left 76b and right 78b second compartment side wall panels.

The various panels, tabs and flaps of the blank shown in Figure 9 are folded and affixed to one another to form the second compartment 40 and second compartment cover 74 of the inner slide 6 of the container 72 according to the second embodiment of the invention shown in Figure 7. During erection of the blank, the outer second compartment top wall panel 62b'' is affixed to the outer surface of the inner second compartment top wall panel 62b' and the outer left 76b and right 78b second compartment side wall panels are affixed to the outer surfaces of the inner left 76a and right 78a second compartment side wall panels, respectively. As shown in Figure 10, the lower closure tabs 80 of the blank are also affixed to the outer surface of the

second compartment bottom wall panel 32.

As shown in Figure 10, to form the inner slide 6 of the container 72 of Figure 7, the outer surface of the outer second compartment top wall panel 62b'' of the folded blank for forming the second compartment 40 and second compartment cover 74 is then affixed to the outer surface of the first compartment bottom wall panel 62a of the folded blank for forming the first compartment 38 and first compartment cover 42 of the inner slide 6.

The formed inner slide 6 shown in Figure 10 is then inserted into the formed outer shell 4 through the open upper end 18 thereof to form the container 72 according to the second embodiment of the invention shown in Figure 7.

Formation of the first compartment 38 and first compartment cover 42 of the inner slide 6 from a first one-piece laminar blank and the second compartment 40 and second compartment cover 74 thereof from a second one-piece laminar blank, allows the first 38 and second 42 compartments of the container 72 according to the second embodiment of the invention to be formed from different material or materials. As previously described above, this is particularly advantageous where one of the first and second compartments of the inner slide contains a plurality of heated smoking articles comprising a combustible heat source or fuel element and an aerosol-generating substrate and the other of the first and second compartments of the inner slide is a waste compartment intended to receive and extinguish one or more used heated articles. In such embodiments, the compartment containing the plurality of smoking articles and the compartment cover thereof may be formed from, for example, a one-piece laminar cardboard blank and the waste compartment may be at least partial formed, coated or lined from or with one or more heat resistant materials, one or more heat resistant and heat conductive material or a combination thereof. For example, the waste compartment and waste compartment cover may be formed from a one-piece aluminium laminated board blank.

It will be appreciated that the precise order in which the various panels, flaps and tabs of the one-piece laminar cardboard blanks shown in Figures 8 and 9 are folded and secured to one another to form the inner slide 6 of the container 72 of Figure 7 may be varied depending upon, for example, the apparatus used to produce the container 72. It will also be appreciated that the one-piece laminar cardboard blanks shown in Figures 8 and 9 may be folded manually to form the outer shell 4 and inner slide 6 of the container 72 of Figure 7 if desired.

As in the first embodiment of the invention previously described, the upper retention flaps 52 of the outer shell 4 of the container 72 according to the second embodiment of the invention are not affixed to the inner surface of the left side wall panel 12 and the outer right side wall panel 14b of the outer shell 4. This ensures that the opposed upper retention flaps 52 of the outer shell 4 interact with the opposed retention tabs 70 of the inner slide 6 once the inner slide 6 is inserted into the outer shell 4. In use, as the inner slide 6 of the container 72

according to the second embodiment of the invention reaches the open position shown in Figure 7, the inwardly folded upper retention flaps 52 of the outer shell 4 engage the retention tabs 70 of the inner slide 6, thereby advantageously preventing further slidable movement of the inner slide 6 relative to the outer shell 4 beyond the open position. The interaction between the upper retention flaps 52 of the outer shell 4 and the retention tabs 70 of the inner slide 6 prevents removal of the inner slide 6 of the container 72 from the outer shell 4 thereof.

The invention has been exemplified above with reference to containers comprising an inner slide formed from two separate one-piece laminar blanks. However, containers according to the invention may comprise an inner slide formed from a single one-piece laminar blank. For example, containers according to the invention may comprise an inner slide having first and second compartments, an integral partition and an integral first compartment cover formed from a single one-piece laminar blank. A suitable single one-piece laminar blank for forming an inner slide having first and second compartments, an integral partition and an integral first compartment cover may be formed by combining the panels and flaps of the blank shown in Figure 5 with the blank shown in Figure 4. Containers according to the invention may also comprise inner slides in which the hinged second cover section of the first compartment cover is omitted and both the first and second compartments of the inner slide have at least partially open front faces.

It will be appreciated that where the second cover section of the first compartment cover of the inner slide is omitted or the inner slide of the container is formed from a single one-piece laminar blank, one or more fixed tabs or other projections may still be provided on the inner slide that, in use, interact with one or more hinged flaps provided on the outer shell to prevent further slidable movement of the inner slide relative to the outer shell beyond the open position. For example, containers according to the invention may comprise an inner slide formed from single one-piece laminar blank similar to that shown in Figure 4 wherein, in use, the inwardly folded upper retention flaps 52 of the outer shell 4 engage the lower closure tabs 56 of the inner slide 6 to prevent further slidable movement of the inner slide 6 relative to the outer shell 4 beyond the open position.

The invention has been exemplified above with reference to containers comprising an inner slide which is slidable within the outer shell between a closed position, in which the interiors of the first and second compartments are both inaccessible, and a "fully" open position, in which the interiors of the first and second compartments are both accessible. However, containers according to the invention may comprise an inner slide which is slidable within the outer shell between a closed position and a "fully" open position via one or more intermediate "partially open" positions in which the interior of one of the first and second compartment is inaccessible and the interior of the other of the first and second compartments is accessible.

CLAIMS:

1. A dual compartment slide and shell container (2, 72) comprising:
an outer shell (4); and
5 an inner slide (6) having a first compartment (38) with a first access opening and a second compartment (40) with a second access opening, which is slidable within the outer shell (4) between a closed position in which the first and second access openings are occluded by the outer shell (4) such that the interiors of the first (38) and second (40) compartments are inaccessible and an open position in which the interiors of the first (38) and second (40)
10 compartments are both accessible,
characterised in that in the open position the second access opening of the inner slide (6) is substantially aligned with a third access opening (20) provided in the outer shell (4) such that the interior of the second compartment (40) of the inner slide (6) is accessible through the second and third (20) access openings.
15
2. A container (2, 72) according to claim 1 wherein in the open position at least a portion of the first access opening projects outwardly from the outer shell (4) through an open end (18) thereof such that the interior of the first compartment (38) of the inner slide (6) is accessible through the first access opening.
20
3. A container (2, 72) according to claim 2 wherein the inner slide further comprises a first compartment cover (42), which in the closed position covers the first access opening and which in the open position is moveable to a position in which at least the portion of the first access opening projecting outwardly from the outer shell (4) is uncovered.
25
4. A container (72) according to any of claims 1 to 3 wherein the inner slide further comprises a second compartment cover (74), which in the closed position covers the second access opening and which in the open position is moveable to a position in which at least a portion of the second access opening is uncovered.
30
5. A container (72) according to claim 4 wherein a thermal indicator comprising at least one reversible thermochromic material is provided on the second compartment cover (74).
6. A container (72) according to claims 4 or 5 wherein a thermal indicator comprising at
35 least one reversible thermochromic material is provided on a portion of the outer shell (4) that overlies the second compartment cover (74) in the closed position.

7. A container (2, 72) according to any preceding claim wherein the inner slide (6) is slidable within the outer shell (4) between the closed position and the open position via an intermediate position in which the interior of one of the first (38) and second (40) compartments is inaccessible and the interior of the other of the first (38) and second (40) compartments is accessible.
8. A container (2, 72) according to claim 8 wherein in the intermediate position the interior of the second compartment (40) is inaccessible and the interior of the first compartment (38) is accessible.
9. A container (2, 72) according to any preceding claim further comprising retention means (52, 70) for preventing removal of the inner slide (6) from the outer shell (4).
10. A container (2, 72) according to claim 9 wherein the retention means (52, 70) prevent movement of the inner slide (6) beyond the open position.
11. A container (2, 72) according to any preceding claim wherein at least one cut-out (22) is provided along a free edge of the outer shell (4).
12. A container (2, 72) according to any preceding wherein the first compartment (38) of the inner slide (6) is larger than the second compartment (40) of the inner slide (6).
13. A container (2, 72) according to any preceding claim wherein the first compartment (38) of the inner slide (6) contains a plurality of consumer goods and the second compartment (40) of the inner slide (6) is a waste compartment.
14. A container (72) according to any preceding claim wherein the first compartment (38) of the inner slide (6) and the second compartment (40) of the inner slide (6) are formed from separate folded laminar blanks.
15. A container (2, 72) according to any preceding claim wherein at least one of the first (38) and second (40) compartments of the inner slide (6) contains a plurality of smoking articles.

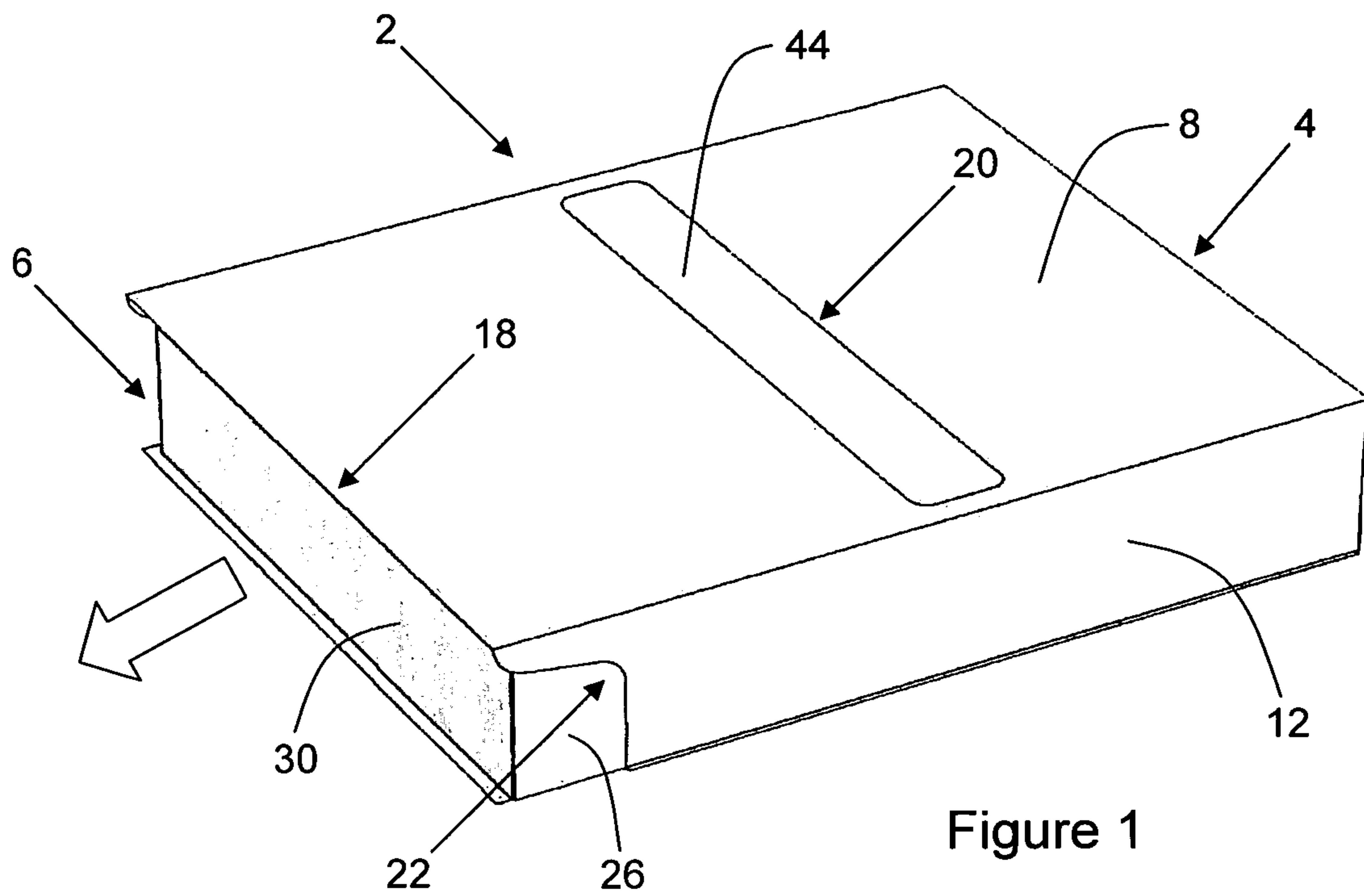


Figure 1

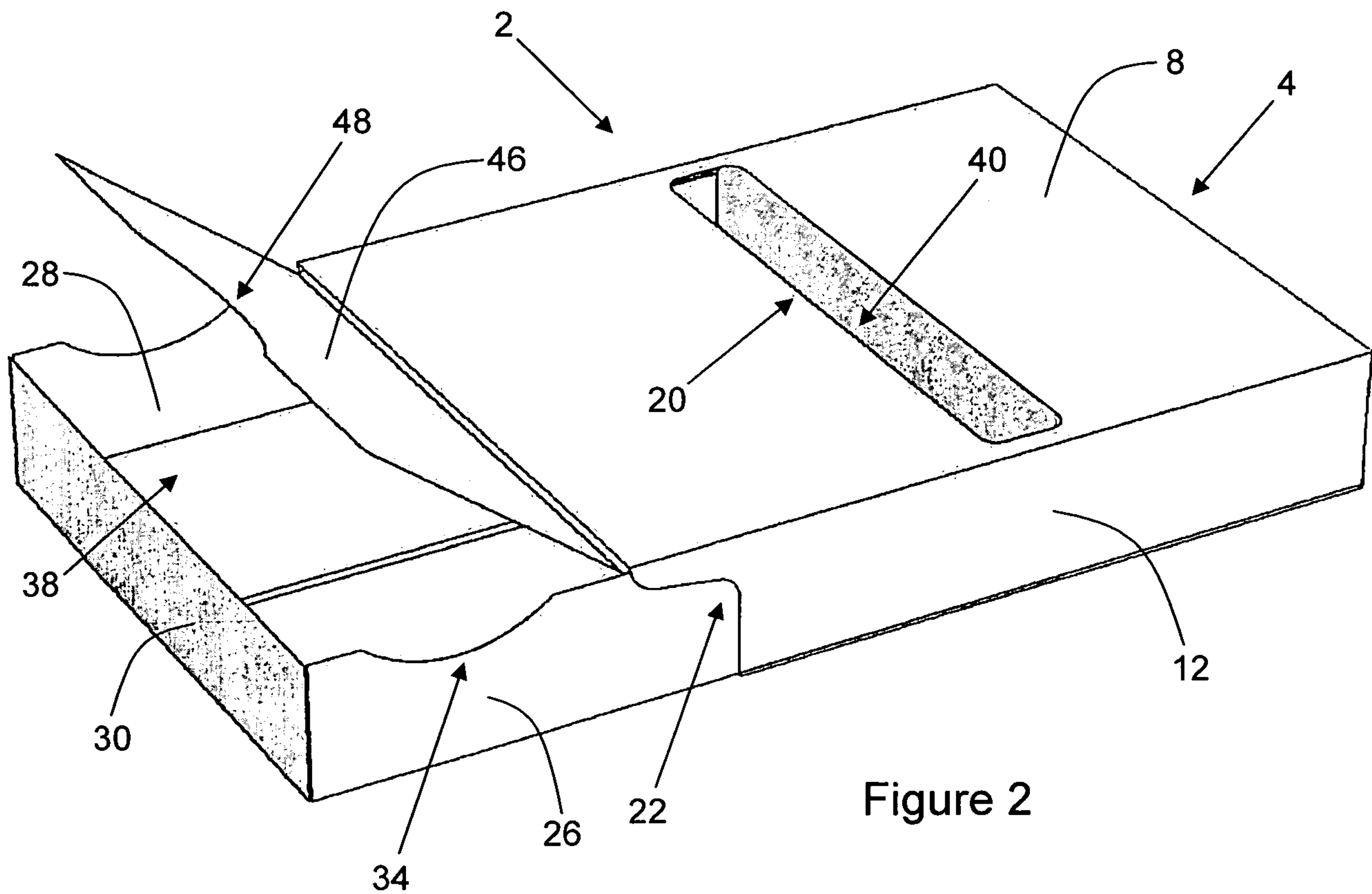


Figure 2

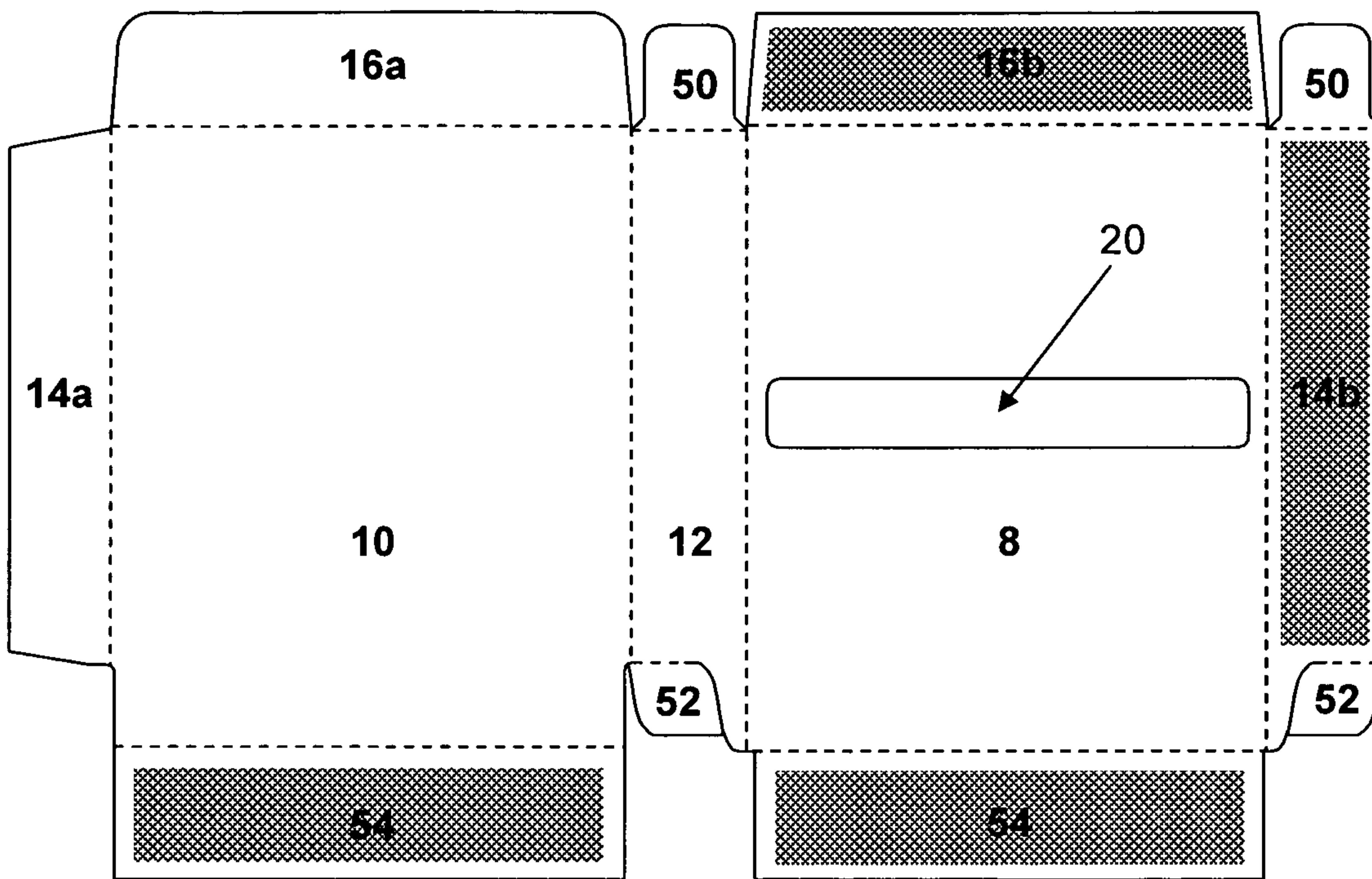


Figure 3

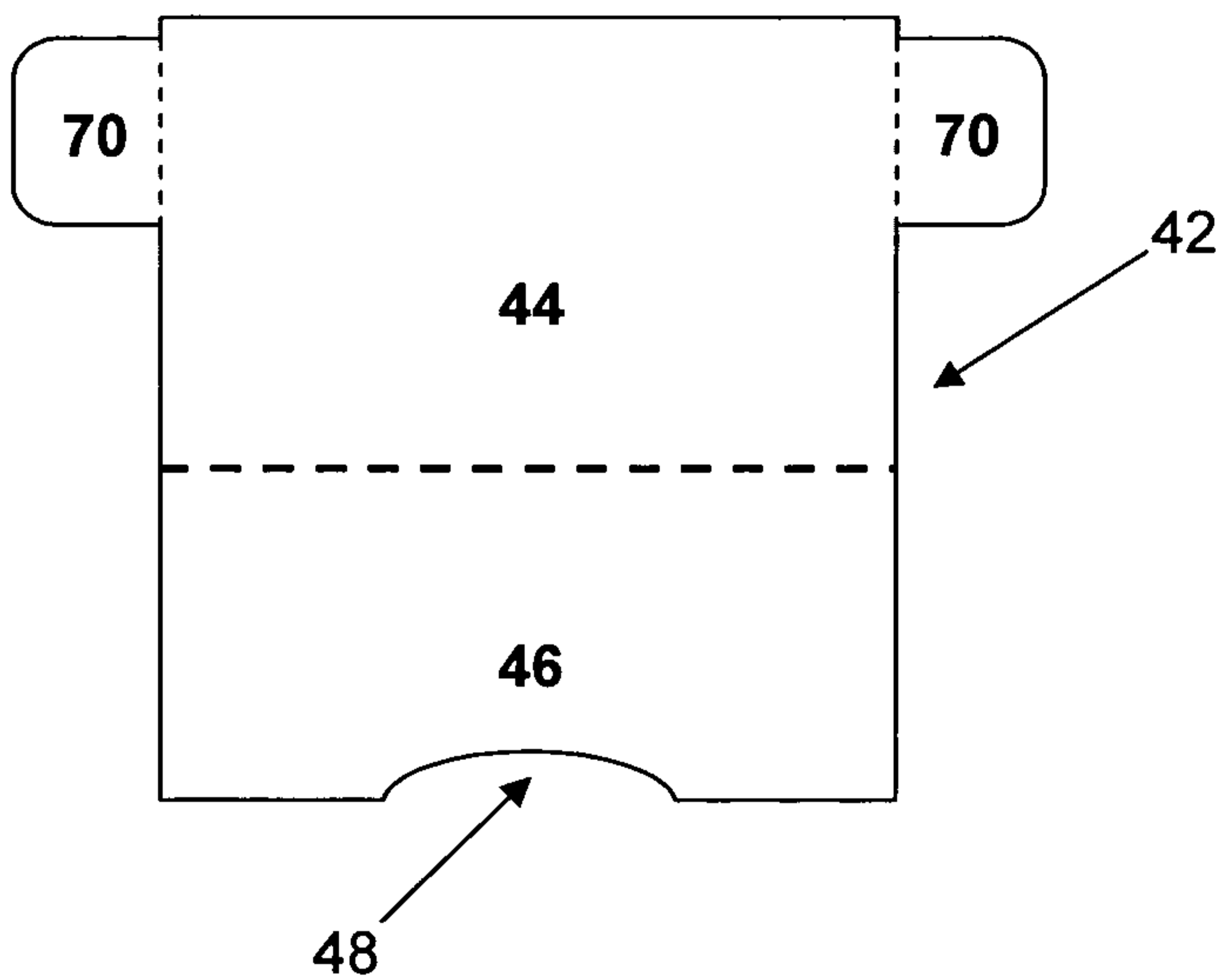


Figure 5

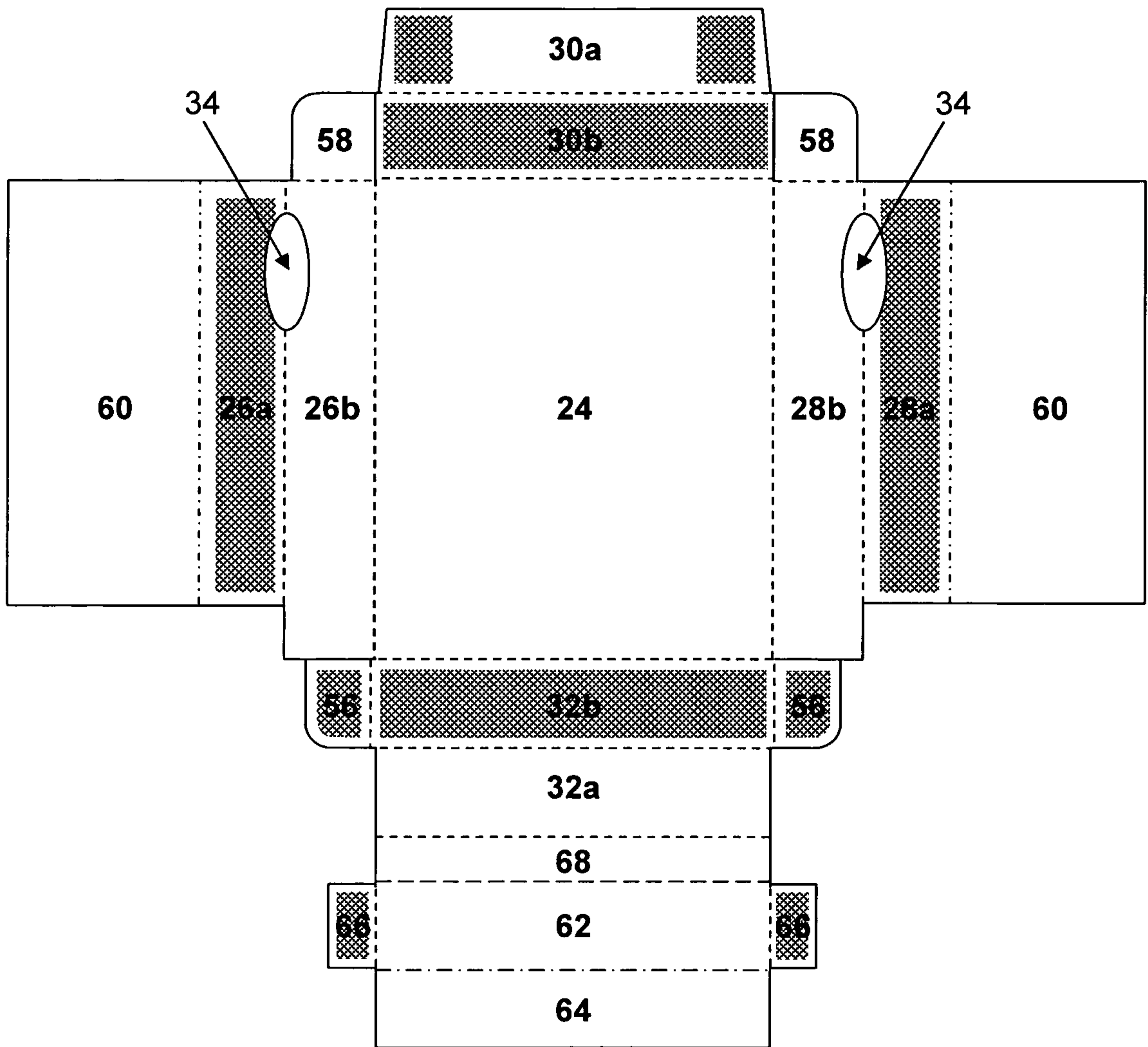


Figure 4

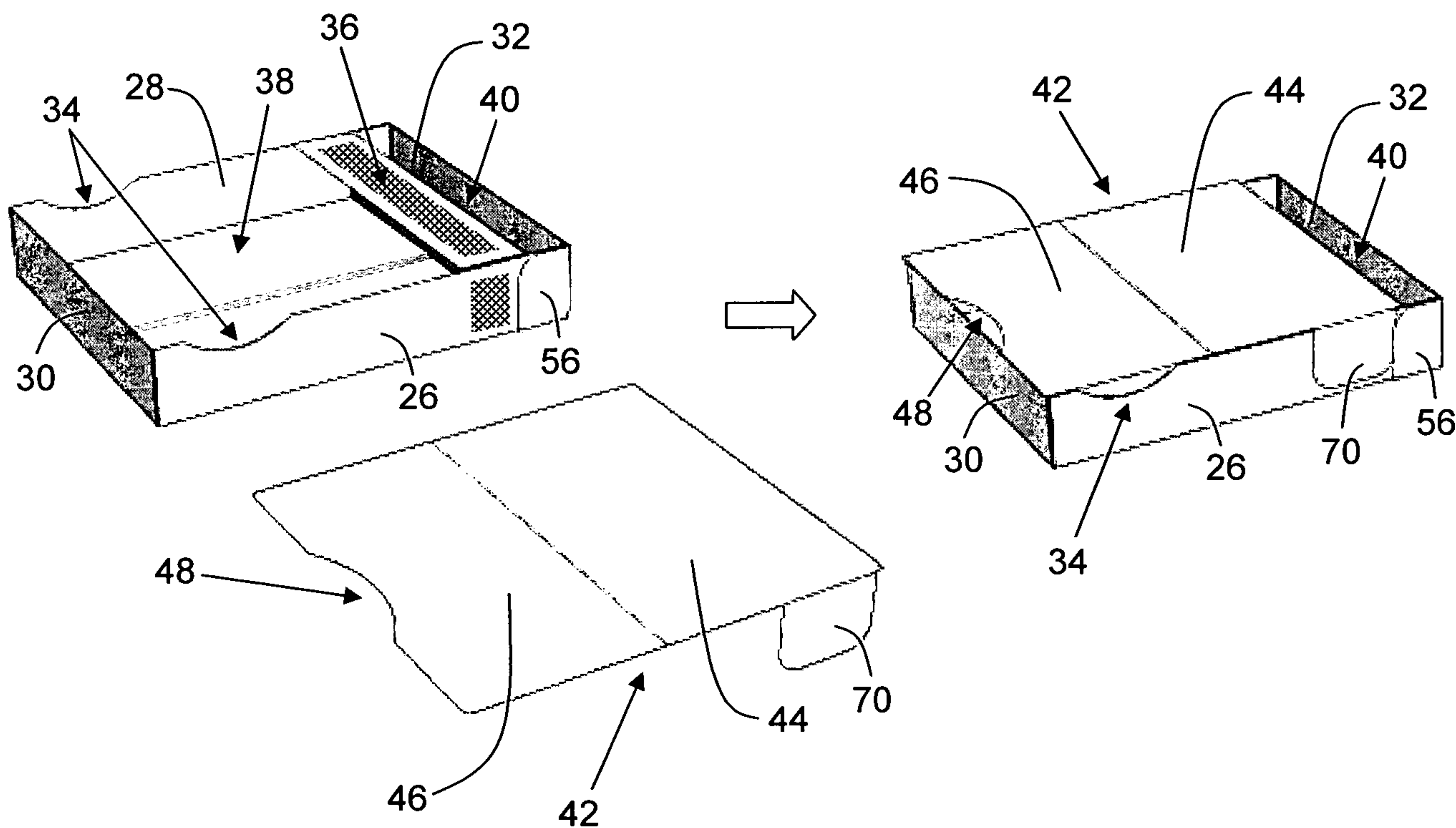


Figure 6

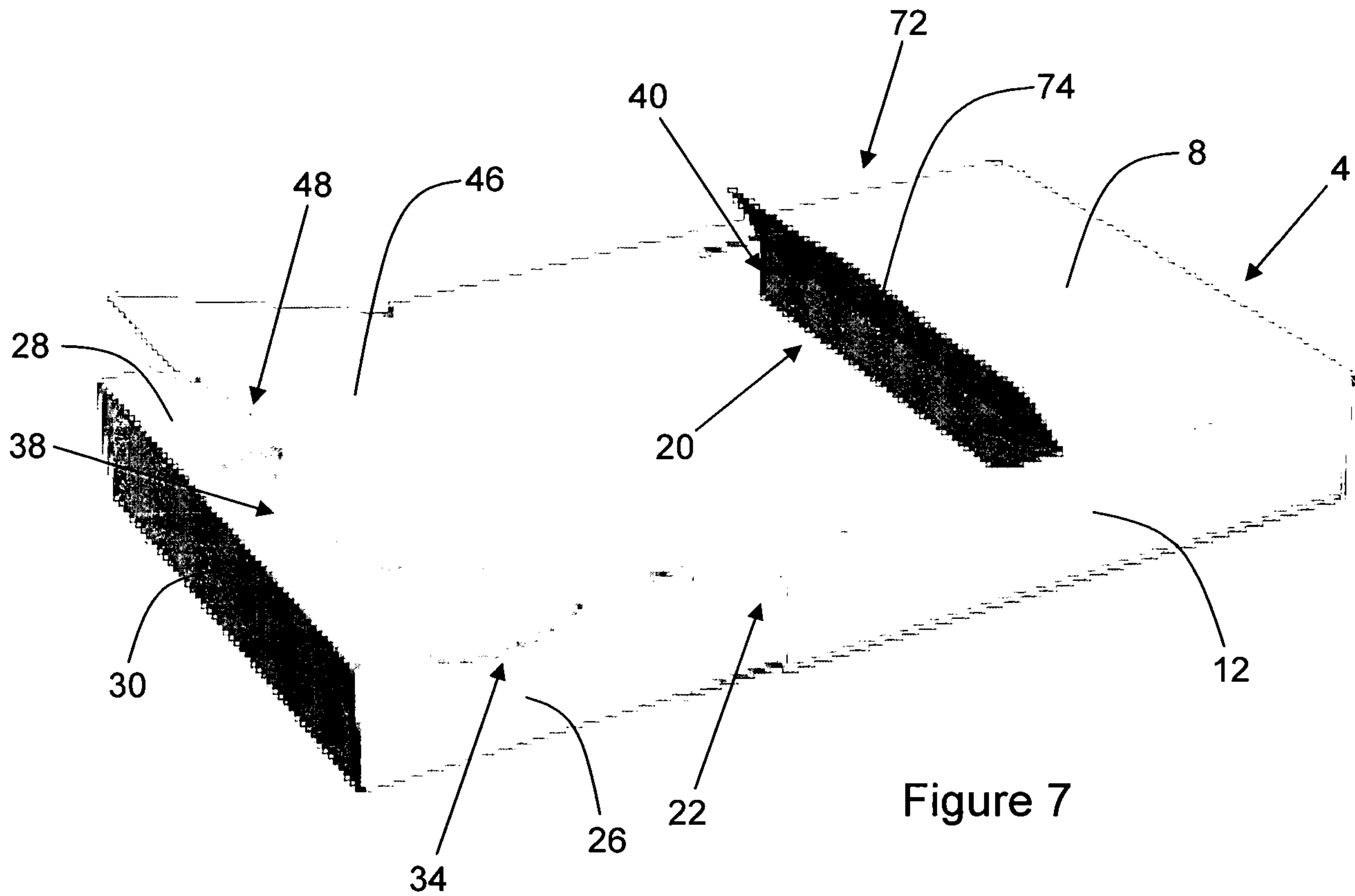


Figure 7

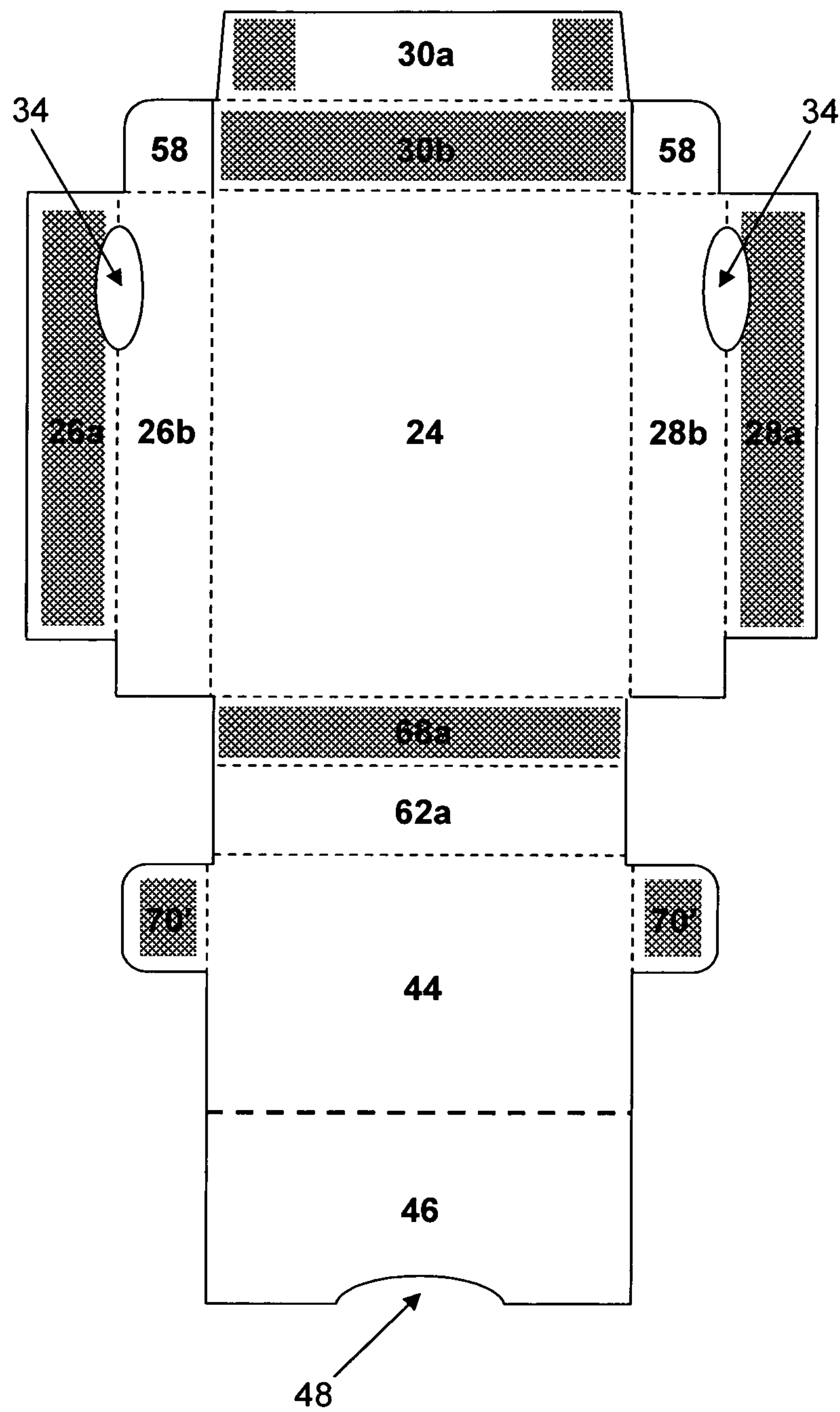


Figure 8

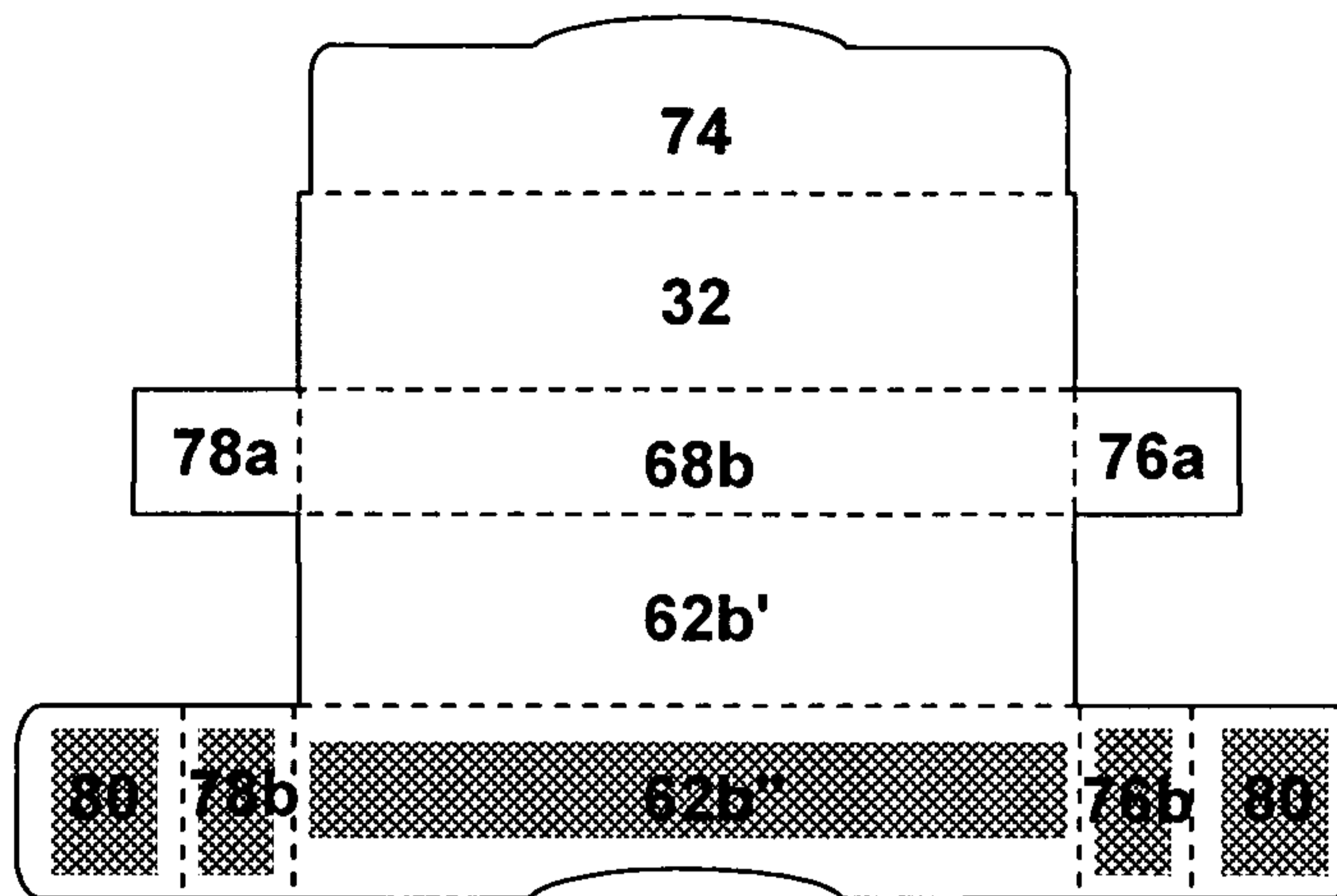


Figure 9

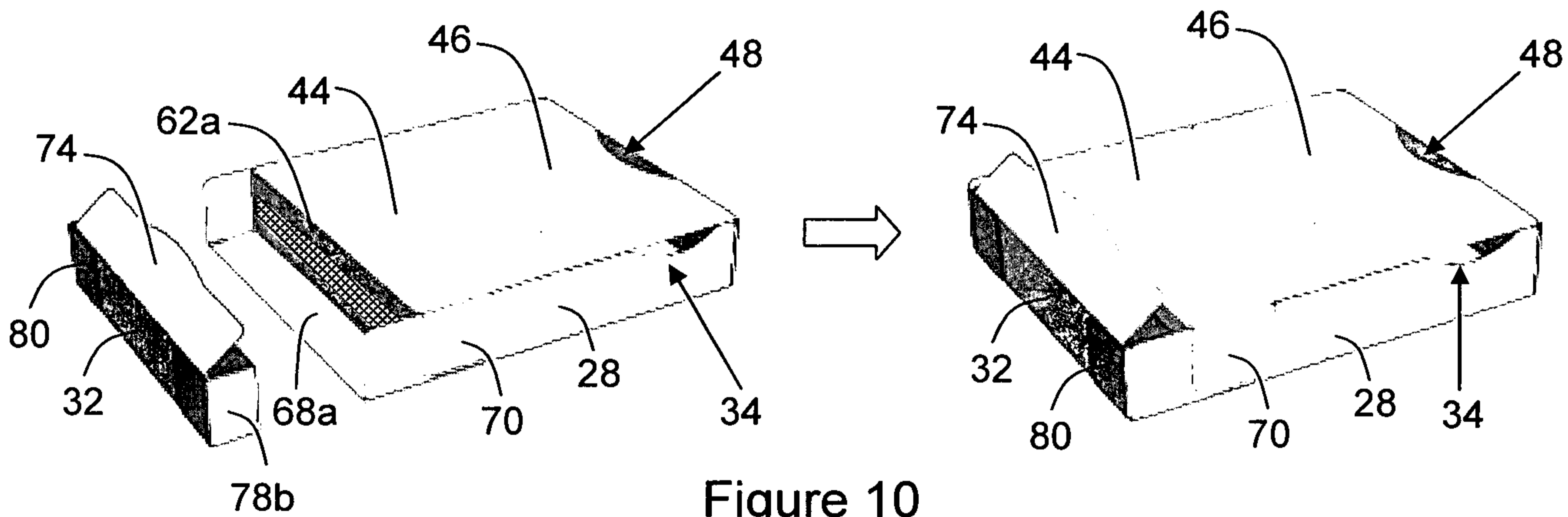


Figure 10

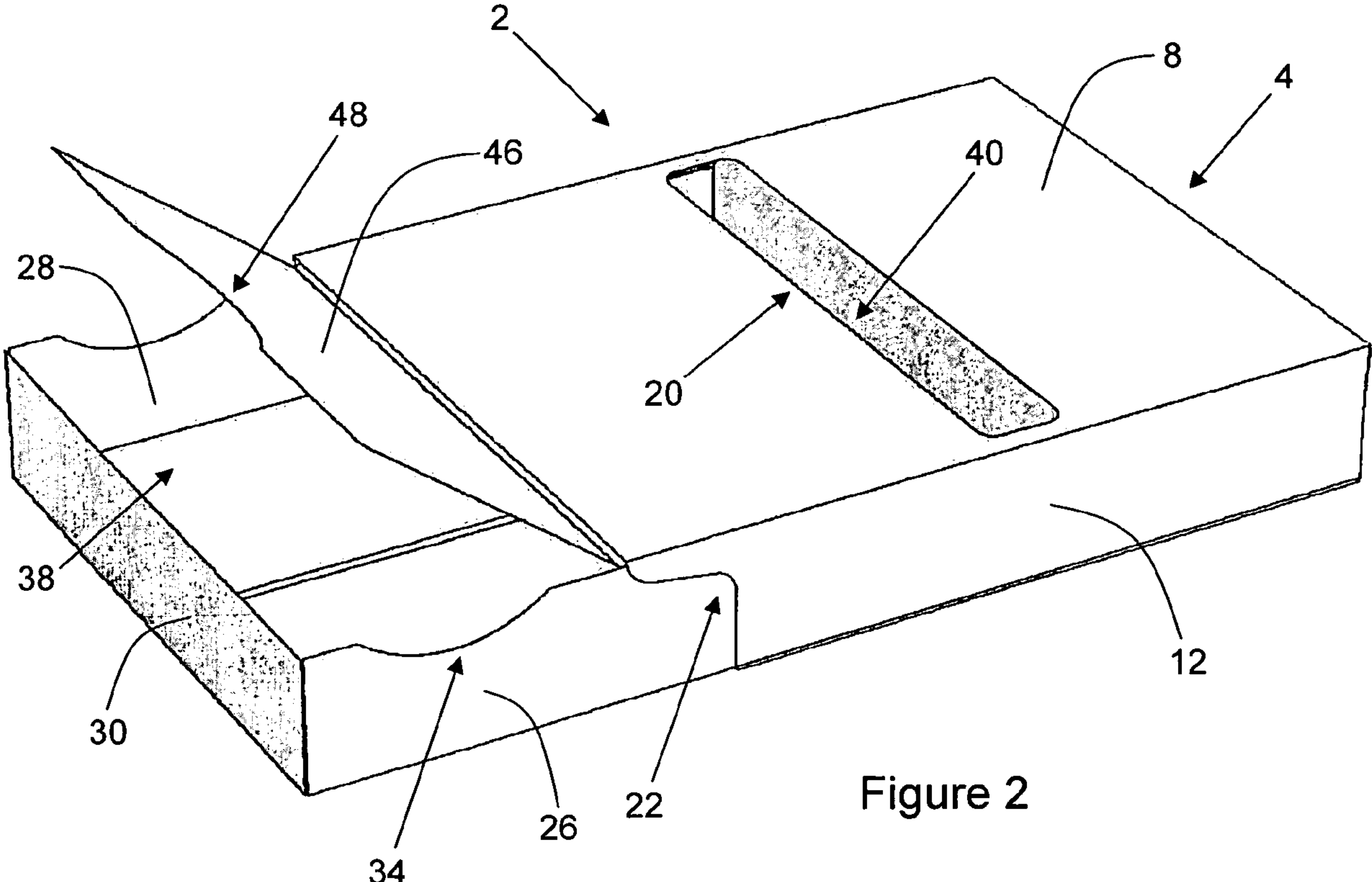


Figure 2