



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
20.07.2022 Bulletin 2022/29

(51) International Patent Classification (IPC):
B65D 50/04 ^(2006.01) **B65D 5/38** ^(2006.01)

(21) Application number: **22151466.4**

(52) Cooperative Patent Classification (CPC):
B65D 50/046; B65D 5/38

(22) Date of filing: **13.01.2022**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

• **Rondo AG**
4123 Allschwil (CH)

(72) Inventor: **BARTH, Michael**
4123 Allschwil (CH)

(74) Representative: **Jarrett, Daniel Phillip**
Kilburn & Strode LLP
Lacon London
84 Theobalds Road
London WC1X 8NL (GB)

(30) Priority: **14.01.2021 US 202163137590 P**

(71) Applicants:
• **Westcann Processors Inc.**
Vancouver BC V6C 2T5 (CA)

(54) **CHILD-RESISTANT PACKAGING FOR REGULATED PRODUCTS**

(57) A child-resistant package (10) for a regulated product, the package comprising: a housing (20) having an open end, a plurality of release tabs (22) formed in a wall thereof, and a locking edge defined on an inside surface thereof; and an insert (30) for containing the regulated product slidably received through the open end of the housing, the insert having: an openable end for accessing the regulated product, the openable end openable when the insert is at least partially removed from the housing (20); and a locking tab positioned on an outside surface of the insert (30) having a plurality of ends that are each aligned with one of the plurality of release tabs (22), the locking tab biased such that each of the plurality of ends contact the locking edge when attempting to slide the insert out of the housing without depressing the plurality of release tabs.

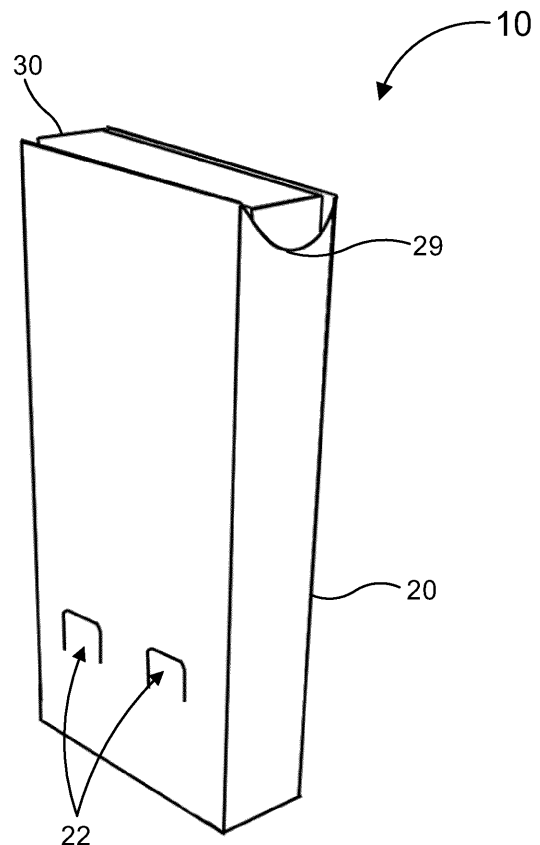


FIG. 2

Description

TECHNICAL FIELD

[0001] The present disclosure generally relates to product packaging. More specifically, the present disclosure relates to child-resistant packaging for storing regulated products therein.

BACKGROUND

[0002] Regulated products are generally required to be sold and stored in child-resistant packaging so that children cannot access the contents therein.

[0003] For example, cannabis is becoming legal for recreational and medicinal use in an increasing number of countries around the world. In these countries, cannabis is commonly commercially available in the form of pre-rolled joints (or "pre-rolls"), similar in form to cigarettes. Pre-rolls are convenient in that a user does not need to roll their own joint in order to smoke cannabis.

[0004] Pre-rolls are generally sold individually or in groups of two to ten. Individually sold pre-rolls are typically packaged in plastic tubes having a child-resistant lid, similar to those used for prescription pill bottles. Groups of pre-rolls, however, are typically sold in packaging similar to that used for cigarettes - i.e. a pack in which a plurality of pre-rolls may be stored.

[0005] As a result, the child-resistant features used for the pre-roll packages are considerably different from those used for the individually sold pre-rolls. For example, the pre-roll packages may be outfitted with child-resistant features that are single-use in that, once the packaging is opened, the child-resistant feature will no longer function (e.g. the package may be perforated such that the top may be torn off). Alternatively, some pre-roll packages include a plastic insert having tabs that extend out of apertures formed in the package that may be depressed in order to allow the plastic insert to be removed. However, such configurations complicate manufacturing, as multiple types of materials are required to produce a single package. Further, after multiple uses, the plastic insert may become permanently deformed, making it difficult even for adults to remove the insert from the package.

[0006] Thus, there exists a need for child-resistant packaging for regulated products that is easy to manufacture and capable of being opened multiple times without affecting the usability thereof.

SUMMARY

[0007] The present disclosure recognizes that there are problems with existing child-resistant packaging for regulated products, including those for containing cannabis products.

[0008] In one aspect, the present disclosure relates to a child-resistant package for a regulated product, the

package comprising: a housing having an open end, a plurality of release tabs formed in a wall thereof, and a locking edge defined on an inside surface thereof; and an insert for containing the regulated product slidably received through the open end of the housing, the insert having: an openable end for accessing the regulated product, the openable end openable when the insert is at least partially removed from the housing; and a locking tab positioned on an outside surface of the insert having a plurality of ends that are each aligned with one of the plurality of release tabs, the locking tab biased such that each of the plurality of ends contact the locking edge when sliding the insert out of the housing without depressing the plurality of release tabs.

[0009] In another aspect, the present disclosure relates to use of the child-resistant package described herein for storing a regulated product. The regulated product may comprise one or more cannabis products.

[0010] Other aspects and features of the methods of the present disclosure will become apparent to those ordinarily skilled in the art upon review of the following description of specific embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] These and other features of the present disclosure will become more apparent in the following detailed description in which reference is made to the appended drawings. The appended drawings illustrate one or more embodiments of the present disclosure by way of example only and are not to be construed as limiting the scope of the present disclosure.

FIG. 1 shows a front perspective view of a closed child-resistant package according to an embodiment of the present disclosure.

FIG. 2 shows a back perspective view of the child-resistant package shown in **FIG. 1**.

FIG. 3 shows a plan view of an inside of a housing of a child-resistant package according to an embodiment of the present disclosure.

FIG. 4 shows a back perspective view of an insert of a child-resistant package according to an embodiment of the present disclosure.

FIG. 5 shows a front perspective view of an open child-resistant package according to an embodiment of the present disclosure.

FIG. 6 shows a plan view of a housing blank for a child-resistant package according to an embodiment of the present disclosure.

FIG. 7 shows a plan view of an insert blank for a child-resistant package according to an embodiment

of the present disclosure.

FIG. 8 shows a plan view of an insert blank for a child-resistant package according to an embodiment of the present disclosure.

FIG. 9 shows a plan view of a housing blank for a child-resistant package according to an embodiment of the present disclosure.

DETAILED DESCRIPTION

[0012] The present disclosure generally relates to child-resistant packaging and, in particular, to child-resistant packaging for a regulated product. The child-resistant packages of the present disclosure afford a number of advantages over conventional packages. For example, the child-resistant packages may be used multiple times without affecting their usability. As described above, some conventional child-resistant packages, such as those having a plastic insert defining deformable tabs, may become permanently deformed after multiple uses, which may make it more difficult to access the regulated product contained therein or, in some cases, may make it so that a child can easily slide the insert out of the package.

[0013] Another advantage of the child-resistant packages of the present disclosure is that they may be manufactured with relative ease. In more detail, the child-resistant packages may be formed of a simple two-piece construction. As well, each piece of the two-piece construction may advantageously be formed of the same material. Such configurations significantly simplify the manufacturing process, which may greatly reduce the costs associated with the production of the child-resistant packages. As well, due to the simplicity of production, the manufacturing processes may be readily upscaled to industrially relevant levels, meaning that the child-resistant packages of the present disclosure are not limited to smaller-scale applications (e.g. craft cannabis products). In contrast, as described above, conventional child-resistant packaging for regulated products may comprise multiple pieces that are each formed of a different material, which complicates the manufacturing process significantly.

[0014] Yet another advantage of child-resistant packages of the present disclosure is that they may be biodegradable. As discussed above, conventional child-resistant packaging may include one or more plastic components. Unfortunately, in the same manner as cigarette packs, product packaging for regulated products such as cannabis products is often not disposed of properly. Thus, a package that is biodegradable may be particularly advantageous, as, in the event that it is not properly disposed of, it will at least degrade over time without having any potentially environmentally harmful components such as plastics, metals, and the like remain.

[0015] Reference will now be made in detail to exem-

plary embodiments of the disclosure, wherein numerals refer to like components, examples of which are illustrated in the accompanying drawings that further show exemplary embodiments, without limitation.

[0016] In some embodiments, the present disclosure relates to a child-resistant package for a regulated product, the package comprising: a housing having an open end, a plurality of release tabs formed in a wall thereof, and a locking edge defined on an inside surface thereof; and an insert for containing the regulated product slidably received through the open end of the housing, the insert having: an openable end for accessing the regulated product, the openable end openable when the insert is at least partially removed from the housing; and a locking tab positioned on an outside surface of the insert having a plurality of ends that are each aligned with one of the plurality of release tabs, the locking tab biased such that each of the plurality of ends contact the locking edge when sliding the insert out of the housing without depressing the plurality of release tabs.

[0017] As used herein, "regulated product" refers to a consumer product that is regulated in some capacity by a government agency. Examples of regulated products include tobacco products, cannabis products, pharmaceuticals, and the like.

[0018] As used herein, "child-resistant package" or "child-resistant packaging" means a packaging product that is configured to be difficult for children to open but readily openable by adults to reduce the likelihood that children may access the contents contained therein.

[0019] As used herein, "housing" refers to a component of the child-resistant package that slidably receives the insert therein. The housing has a body with at least one open end, through which the insert is slidably received. The body of the housing may be any suitable shape such as, for example, a rectangular prism. In such configurations, the body may have a front wall and a back wall that are larger than the sidewalls thereof.

[0020] The housing also has a locking edge defined on an inside surface of its body. As used herein, "locking edge" refers to a feature of the housing used to prevent the insert from being removed once received therein. The locking edge extends from the inside surface of the housing such that the locking tab of the insert can contact it when a user attempts to remove the insert from the housing, thereby stopping the insert from moving any further. As will be discussed below, the locking edge may be formed using a number of configurations.

[0021] The housing also has a plurality of release tabs formed in a wall thereof. As used herein, "release tabs" refer to portions of the body of the housing that may be depressed to, in turn, depress the ends of a locking tab of the insert to thereby allow the insert to be removed from the housing (e.g. by pulling the insert out of the housing). The release tabs may be formed by cutting the tabs into the body of the housing, for example. Alternatively, the release tabs may be formed in the wall of the housing by marking them thereon. The release tabs are

aligned with the ends of the locking tab of the insert such that depressing the release tabs depresses the ends of the locking tab, as will be described below. The release tabs are also positioned close enough to the locking edge that the locking tab cannot return to its initial position before passing the locking edge when a user attempts to remove the insert from the housing while depressing the release tabs.

[0022] As used herein, "insert" refers to a component of the child-resistant package that is configured to contain therein the regulated product and to be slidably received within the housing. The insert has a body with an openable end for accessing the regulated product contained therein when the insert is at least partially removed from the housing. That is, the openable end is not openable when it is positioned within the housing. The body of the insert is generally the same shape as the housing so that it may be readily received therein and so that the locking tab of the insert may be easily aligned with the release tabs of the housing.

[0023] In some embodiments, the insert also has a locking tab positioned on an outside surface thereof. As described above, the locking tab has a plurality of ends and is biased such that its ends will abut the locking edge when attempting to pull the insert out of the housing without depressing the release tabs, thus preventing the insert from being removed. The ends of the locking tab are aligned with the release tabs of the housing such that depressing the release tabs also depresses the ends of the locking tab. Because of the bias, after the locking tab has been moved away from the release tabs (e.g. while removing the insert from the housing) or after the release tabs are no longer depressed, it will return to its initial position. Further, as will be discussed below, the locking tab is generally arranged such that it does not prevent the insert from being slid into the housing.

[0024] Thus, in operation, depressing the release tabs of the housing depresses the ends of the locking tab such that they do not contact the locking edge when pulling the insert out of the housing, thereby allowing the insert to be removed. The insert may then be slid back into the housing, at which point the locking tab will return to its initial position to render the package child-resistant.

[0025] Referring now to **FIG. 1**, there is shown an example of a child-resistant package **10** for a regulated product according to an embodiment of the present disclosure. The child-resistant package **10** comprises a housing **20** and an insert **30** slidably received within the housing **20**.

[0026] The housing **20** has an open end through which the insert **30** is slidably received. The open end of the housing **20** may have cut-outs **29** formed therein to facilitate the removal of the insert **30** from the housing **20** by exposing a portion of the insert **30** for a user to grip while pulling the insert **30** out of the housing **20**. The cut-outs **29** may be formed in the sidewalls of the housing **20**, as shown in **FIG. 1**. In another embodiment, the cut-outs **29** may be formed in the front and back walls of the

housing **20**. In some embodiments, the cut-outs **29** may be formed in a combination of front, back, or sidewalls of the housing **20**. Further, in the illustrated embodiment, the cut-outs **29** are curvilinear, but other shapes are possible and are contemplated. For example, in some embodiments, the cut-outs **29** may be generally square-shaped.

[0027] As shown in **FIG. 2**, the housing **20** also has a plurality of release tabs **22** formed in a wall thereof. In the illustrated embodiment, the plurality of release tabs **22** comprises two tabs; however, other numbers of release tabs **22** may be used if so desired. For example, in some embodiments, the housing **20** may comprise one or more additional release tabs (not shown) in another side thereof, such as a sidewall. As described above, the plurality of release tabs **22** may be formed by cutting them into the housing **20**, as shown in **FIG. 2**. In such embodiments, the cut portion of the housing **20** that defines the release tabs **22** is depressible into the housing **20**, while the uncut portions provide a slight bias away from the insert **30** so that the release tabs do not remain depressed after use. Alternatively, as described above, the release tabs **22** may otherwise be marked on the housing **20** but not cut into the housing **20**. The marked release tabs **22** indicate the portions of the housing **20** for a user to depress.

[0028] The release tabs **22** may be shaped in order to facilitate their pressing by the fingers of a user. That is, the release tabs **22** may be dimensioned large enough so that they are easy to depress by adult fingers. For example, in some embodiments, the release tabs **22** may have a width of about 7.5 mm to about 15 mm. In some embodiments, the release tabs **22** have a length of about 5.0 mm to about 10 mm. Further, it is noted that, while the release tabs **22** are a generally rounded shape in the illustrated embodiment, other shapes are possible and are contemplated. In some embodiments, the release tabs **22** may be generally squared.

[0029] Further, in the embodiment illustrated in **FIG. 2**, the release tabs **22** are generally horizontally aligned. However, other arrangements are possible and are contemplated. For example, in some embodiments, the release tabs **22** may be aligned generally vertically, diagonally, etc.

[0030] The housing **20** also comprises a locking edge **24**, as shown in **FIG. 3**. As described above, the locking edge **24** provides a surface for a locking tab **32** of the insert **30** (see **FIG. 4**) to abut in order to prevent the insert **30** from being removed from the housing **20**. In some embodiments, the locking edge **24** may be a piece of material adhered to the inside surface of the housing **20**. In another embodiment, the locking edge **24** may be formed by cutting a section of housing **20** and bending the section downwardly into the housing **20** such that it may abut the locking tab **32** of the insert **30** when attempting to slide the insert out of the housing **20**. In the illustrated embodiment, the locking edge **24** is defined by an inner panel **26**. In some embodiments, the inner

panel **26** is a separate piece of material adhered to the housing **20**. In a particular embodiment, the inner panel **26** is a portion of the housing **20** folded and adhered to an inside surface thereof.

[0031] In some embodiments, the inner panel **26** has a recess **28** formed therein that defines an additional locking edge **24a**. The additional locking edge **24a** may prevent the insert **30** from being completely removable from the housing **20**. In more detail, in operation, when the insert **30** is being slid out of the housing **20**, the locking tab **32** will return to its initial position as it moves away from the depressed release tabs **22**, at which point the locking tab **32** is capable of contacting the additional locking edge **24a**. As shown in **FIG. 3**, the locking edge **24a** is positioned above the locking edge **24**. Thus, after the locking tab **32** returns to its initial position, the locking tab **32** will then abut the additional locking edge **24a**, thereby preventing the insert **30** from being further removed from the housing **20**. As will be discussed below, due to the arrangement of the locking tab **32**, it may be slid back out of the recess **28** without abutting another edge thereof, thereby allowing the insert **30** to be easily pushed back into the housing **20**. Such embodiments may be beneficial, as a user is prevented from completely removing and subsequently losing the insert **30**, which may affect the child-resistance of the package **10**.

[0032] It is noted that, while in the illustrated embodiment the recess **28** has a generally rectangular shape, any shape is possible so long as the recess **28** still defines the additional locking edge **24a**.

[0033] In general, the locking edge **24** and, if present, the locking edge **24a** have a height that allows the locking tab **32** to contact them when not depressed by the release tabs **22**. In some embodiments, the locking edges **24**, **24a** may have about a height of about 0.1 mm to about 1 mm. As well, it is noted that, while the illustrated embodiment shows the locking edges **24**, **24a** extending across a majority of width of the housing **20**, such a configuration is not required. Rather, the locking edges **24**, **24a** may be functional as long as they extend along enough of the width of the housing **20** that they are contactable by each end of the locking tab **32**.

[0034] Further, as discussed above, in some embodiments, the locking edge **24** is positioned close enough to the release tabs **22** that the locking tab **32** cannot return to its initial position before passing thereover when a user attempts to remove the insert **30** while depressing the release tabs **22**. In some embodiments, the locking edge **24** is positioned about 0.1 mm to about 3 mm away from the release tabs **22**.

[0035] Referring now to **FIG. 4**, there is shown a perspective back view of the insert **30** completely removed from the housing **20** according to an embodiment of the present disclosure. The insert **30** has an openable end **36** for accessing the regulated product contained therein. As discussed above, the openable end **36** is only openable when the insert **30** is at least partially removed from the housing **20**, as shown in **FIG. 5**. The openable end

36 may be hingedly openable, as in the illustrated embodiment, in which the openable end **36** hinges away from the body of the insert **30** to allow access to the contents thereof. In such embodiments, if the insert **30** is not at least partially removed from the housing **20**, the openable end **36** cannot open, as a portion of the openable end **36** abuts an inside surface of the housing **20**, thereby preventing it from hinging open.

[0036] As discussed above, the insert **30** also has the locking tab **32** positioned on an outside surface thereof. The locking tab **32**, if not depressed via the release tabs **22**, prevents the insert **30** from being slidably removed from the housing **20**. In more detail, the locking tab **32** comprises a plurality of ends **34** and is biased such that, when not depressed by the release tabs **22**, the plurality of ends **34** will contact the locking edge **24** when attempting to slide the insert **30** out of the housing **20**, thereby preventing the insert **30** from being removed from the housing **20**. As shown in **FIG. 4**, the biasing of the locking tab **32** may result in the locking tab **32** being angled towards the top of the insert **30** such that it forms an acute angle with the wall of the insert **30**. Such configurations may be beneficial, as the insert **30** may be easily slid back into the housing **20** without the locking tab **32** abutting features of the housing **20** such as the recess **28** to prevent the receiving of the insert **30**.

[0037] The number of ends **34** of the locking tab **32** may correspond to the number of release tabs **22**. In more detail, in some embodiments, in use, each release tab **22** depresses an end **34** so that the locking tab **32** may pass below the locking edge **24** when the insert is being slid out of the housing **20**. However, in other embodiments, one release tab **22** may be configured to depress more than one end **34** of the locking tab **32**. Thus, it follows that the locking tab **32** is positioned on the insert **30** such that each end **34** thereof is aligned with a release tab **22** so that they may be depressed thereby.

[0038] In some embodiments, the locking tab **32** is formed of a separate piece of material that is adhered to the insert **30**. In another embodiment, the locking tab **32** is formed from the same piece of material as the insert **30** (e.g. cut into the insert **30** in the same manner as the release tabs **22** and the housing **20** described above) and folded upwards towards the top of the insert **30** so that the locking tab **32** is biased to abut the locking edge **24** when the insert **30** is being removed from the housing **20**. Such a configuration is used in the embodiment illustrated in **FIG. 4** and beneficially allows the insert **30** to be formed of only a single piece of material.

[0039] Further, as shown in **FIG. 4**, the ends **34** of the locking tab **32** may be spaced away from each other. Such configurations may be beneficial, as depressing only one of the ends **34** will not result in the entire locking tab **32** being depressed, which may increase the child-resistance of the package **10**. Further, as shown in the embodiment illustrated in **FIG. 4**, the ends **34** of the locking tab **32** may be generally square with a curvilinear edge bridging the two ends **34**. However, the ends **34**

may be any other suitable shape, so long as they have sufficient surface area to be depressed by the release tabs **22**.

[0040] In a further embodiment, the insert **30** may define two or more internal compartments **38** for containing multiple regulated products separately therein, as shown in **FIG. 5**. The compartments **38** may be defined by a separate piece of material positioned in the insert **30**. Alternatively, the compartments **38** may be defined by a portion of the insert **30** folded into itself. Such configurations may be beneficial, as the compartments **38** and insert **30** may be formed using only a single piece of material. Further, it is noted that, while the embodiment illustrated in **FIG. 4** has two internal compartments **38** defined within the insert **30**, there may be 3, 4, 5, 6, or more internal compartments **38** defined within the insert **30**, if so desired.

[0041] In some embodiments, each of the housing **20** and the insert **30** may each be independently formed of a paperboard material. In some embodiments, each of the housing **20** and the insert **30** may be coated with a cellophane. Thus, as previously described herein, the housing **20** and the insert **30**, and, as a result, the package **10**, may be biodegradable.

[0042] In another embodiment, the housing **20**, the insert **30**, or a combination thereof may be reinforced with a reinforcement material such as a foil, a plastic, or the like. In such embodiments, the reinforcement material may be a biodegradable plastic. Suitable biodegradable plastics include polylactic acids (PLAs), polyhydroxyalkanoates (PHAs), complexed starches, and the like.

[0043] Further, as previously described herein, the housing **20** and the insert **30** may be formed of a single piece of material such that the resulting package **10** has a simple two-piece construction. In some embodiments, each of the housing **20** and the insert **30** may be formed of a single piece of paperboard material that has been folded to form the components thereof. **FIG. 6** and **FIG. 7** show, respectively, examples of non-constructed paperboard blanks of the housing **20** and the insert **30**. As used herein, "blanks" refer to pieces of material that have been cut such that they can be subsequently folded into a selected component. The blanks may be cut into appropriate shapes using any suitable industrial equipment, such as a die. In **FIG. 6** and **FIG. 7**, the blanks may be folded along the dashed lines to form the housing **20** and the insert **30**. Folded portions may be adjoined using any suitable industrial adhesive such as a hot-melt glue or a cold glue. It is noted that features such as the release tabs **22** and the locking tab **32** that may be cut into the housing **20** or insert **30** may be marked on the blanks and cut into the respective components after folding or, alternatively, may be cut into the blanks prior to folding.

[0044] **FIG. 7** also illustrates an optional inner frame **40**. The inner frame **40** may be a separate piece that is adherable into the insert **30** to provide additional structural support thereto. In some embodiments, the inner frame **40** may also define one or more of the internal

compartments **38**. Further, the inner frame **40** may comprise one or more tabs **42** for maintaining the openable end **36** in a closed position after pulling the insert **30** out of the housing **20**. In more detail, the one or more tabs **42** may be formed in the inner frame **40** along portions that are to be folded to define the edges thereof, as shown in **FIG. 7**. After folding, the one or more tabs **42** will extend out beyond the now-defined edge such that they are capable of contacting an inner portion of the openable end **36** when in a closed position to thereby maintain the openable end **36** in the closed position via a friction fit.

[0045] It is noted that while **FIG. 6** and **FIG. 7** each show only one example of blanks for forming the housing **20** and insert **30**, other configurations of blanks are possible and are contemplated. For example, **FIG. 8** shows another example of a blank for forming the insert **30** and **FIG. 9** shows another example of a blank for forming the housing **20**. As described above, the blanks may be folded along the dashed lines to form the housing **20** and the insert **30**. Folded portions may be then adjoined using any suitable industrial adhesive. Further, it is noted that, in the embodiment illustrated in **FIG. 8**, there is no separate inner frame **40**. Rather, the features of the inner frame **40** may be integrated into the blank, as evidenced by the one or more tabs **42**.

[0046] In the present disclosure, all terms referred to in singular form are meant to encompass plural forms of the same. Likewise, all terms referred to in plural form are meant to encompass singular forms of the same. Unless defined otherwise, all technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this disclosure pertains.

[0047] As used herein, the term "about" refers to an approximately $\pm 10\%$ variation from a given value. It is to be understood that such a variation is always included in any given value provided herein, whether or not it is specifically referred to.

[0048] It should be understood that the compositions and methods are described in terms of "comprising," "containing," or "including" various components or steps, the compositions and methods can also "consist essentially of" or "consist of" the various components and steps. Moreover, the indefinite articles "a" or "an," as used in the claims, are defined herein to mean one or more than one of the element that it introduces.

[0049] For the sake of brevity, only certain ranges are explicitly disclosed herein. However, ranges from any lower limit may be combined with any upper limit to recite a range not explicitly recited, as well as, ranges from any lower limit may be combined with any other lower limit to recite a range not explicitly recited, in the same way, ranges from any upper limit may be combined with any other upper limit to recite a range not explicitly recited. Additionally, whenever a numerical range with a lower limit and an upper limit is disclosed, any number and any included range falling within the range are specifically disclosed. In particular, every range of values (of the form,

"from about a to about b," or, equivalently, "from approximately a to b," or, equivalently, "from approximately a-b") disclosed herein is to be understood to set forth every number and range encompassed within the broader range of values even if not explicitly recited. Thus, every point or individual value may serve as its own lower or upper limit combined with any other point or individual value or any other lower or upper limit, to recite a range not explicitly recited.

[0050] Therefore, the present disclosure is well adapted to attain the ends and advantages mentioned as well as those that are inherent therein. The particular embodiments disclosed above are illustrative only, as the present disclosure may be modified and practiced in different but equivalent manners apparent to those skilled in the art having the benefit of the teachings herein. Although individual embodiments are discussed, the disclosure covers all combinations of all those embodiments. Furthermore, no limitations are intended to the details of construction or design herein shown, other than as described in the claims below. Also, the terms in the claims have their plain, ordinary meaning unless otherwise explicitly and clearly defined by the patentee. It is therefore evident that the particular illustrative embodiments disclosed above may be altered or modified and all such variations are considered within the scope and spirit of the present disclosure. If there is any conflict in the usages of a word or term in this specification and one or more patent(s) or other documents that may be incorporated herein by reference, the definitions that are consistent with this specification should be adopted.

[0051] Many obvious variations of the embodiments set out herein will suggest themselves to those skilled in the art in light of the present disclosure. Such obvious variations are within the full intended scope of the appended claims.

Claims

1. A child-resistant package for a regulated product, the package comprising:

a housing having an open end, a plurality of release tabs formed in a wall thereof, and a locking edge defined on an inside surface thereof; and an insert for containing the regulated product slidably received through the open end of the housing, the insert having:

an openable end for accessing the regulated product, the openable end openable when the insert is at least partially removed from the housing; and

a locking tab positioned on an outside surface of the insert having a plurality of ends that are each aligned with one of the plurality of release tabs, the locking tab biased such

that each of the plurality of ends contact the locking edge when sliding the insert out of the housing without depressing the plurality of release tabs.

2. The child-resistant package of claim 1, wherein the housing further comprises an additional locking edge for preventing the insert from being completely removable from the housing.
3. The child-resistant package of claim 1, wherein the housing comprises an inner panel that defines the locking edge.
4. The child-resistant package of claim 3, wherein the inner panel has a recess formed therein that defines an additional locking edge for preventing the insert from being completely removable from the housing.
5. The child-resistant package of any one of claims 1 to 4, wherein the plurality of release tabs comprises two release tabs and the plurality of ends of the locking tab comprises two ends.
6. The child-resistant package of any one of claims 1 to 5, wherein the plurality of release tabs are formed in a back wall of the housing.
7. The child-resistant package of any one of claims 1 to 6, wherein the open end of housing comprises one or more cut-outs therein to grip the insert during removal.
8. The child-resistant package of any one of claims 1 to 7, wherein the insert defines two or more internal compartments for containing the regulated product therein.
9. The child-resistant package of any one of claims 1 to 8, wherein the housing is formed of a single piece of material.
10. The child-resistant package of any one of claims 1 to 9, wherein the insert is formed of a single piece of material.
11. The child-resistant package of any one of claims 1 to 10, wherein the housing and/or the insert are formed of a paperboard material.
12. The child-resistant package of any one of claims 1 to 11, wherein the housing and/or the insert are coated with a cellophane.
13. The child-resistant package of any one of claims 1 to 12, which is biodegradable.
14. Use of the child-resistant package of any one of

claims 1 to 13 for storing a regulated product.

- 15.** The use of claim 14, wherein the regulated product comprises one or more cannabis products.

5

10

15

20

25

30

35

40

45

50

55

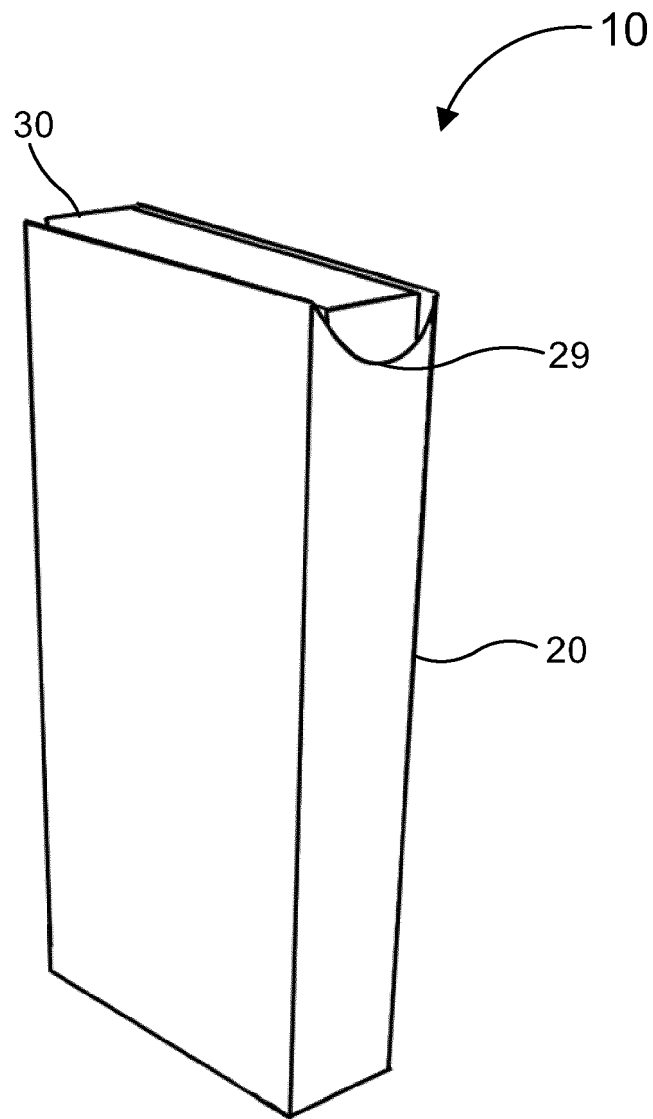


FIG. 1

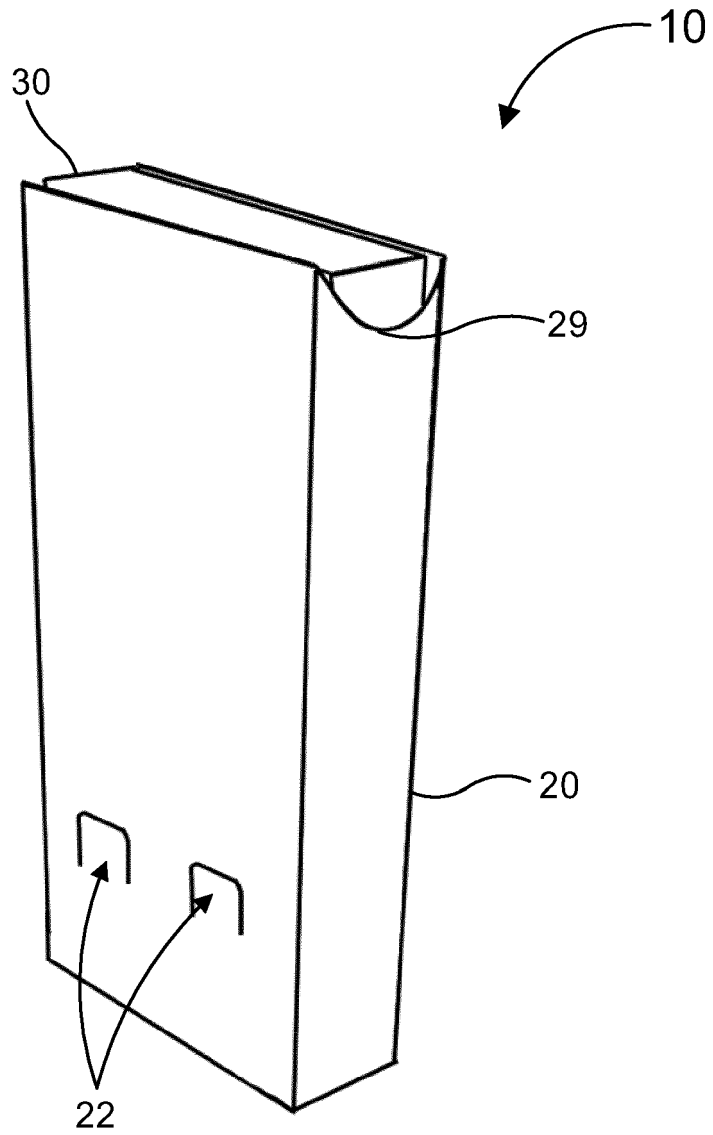


FIG. 2

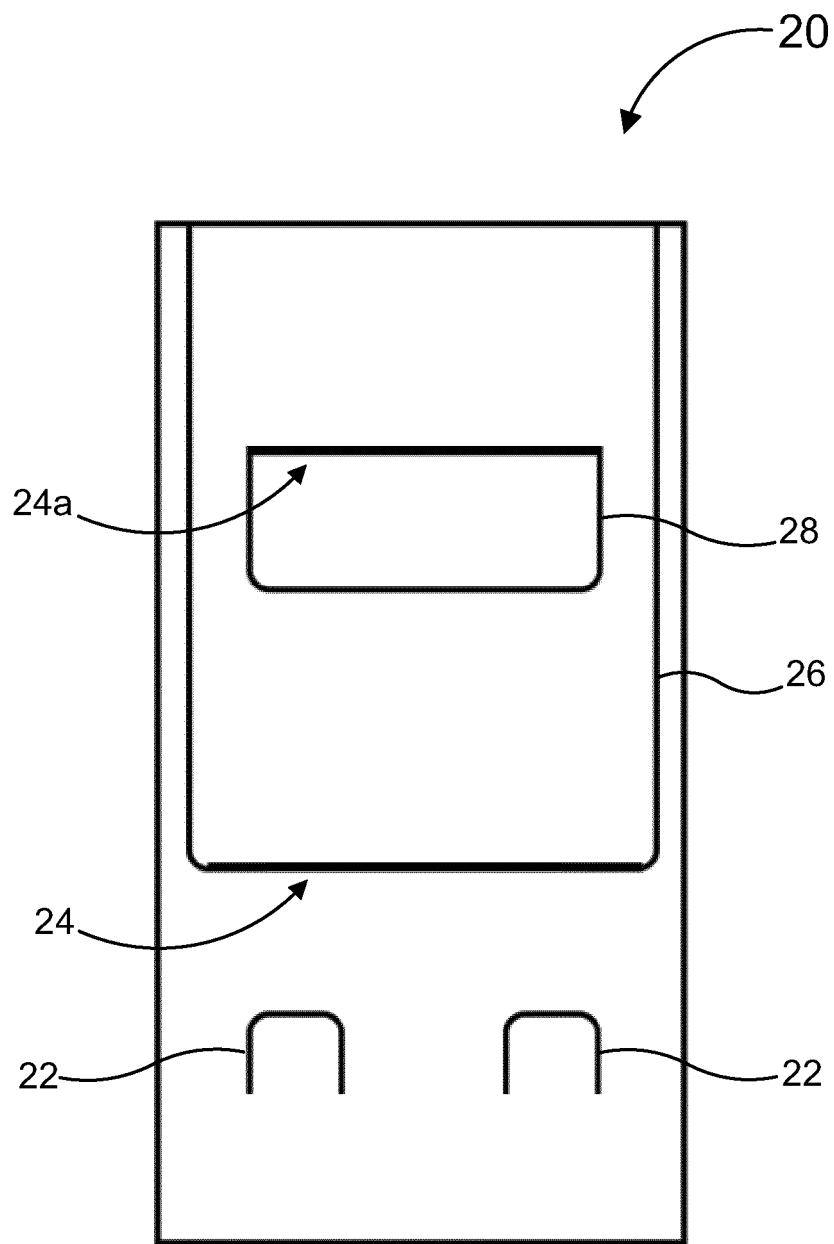


FIG. 3

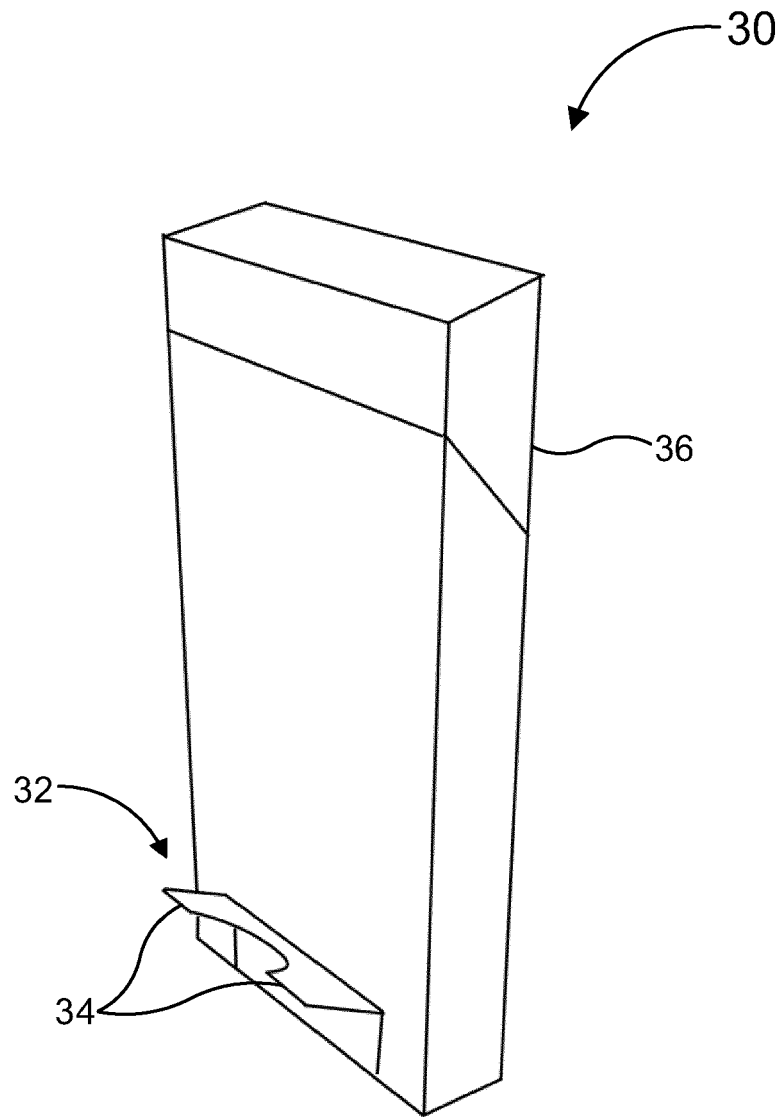


FIG. 4

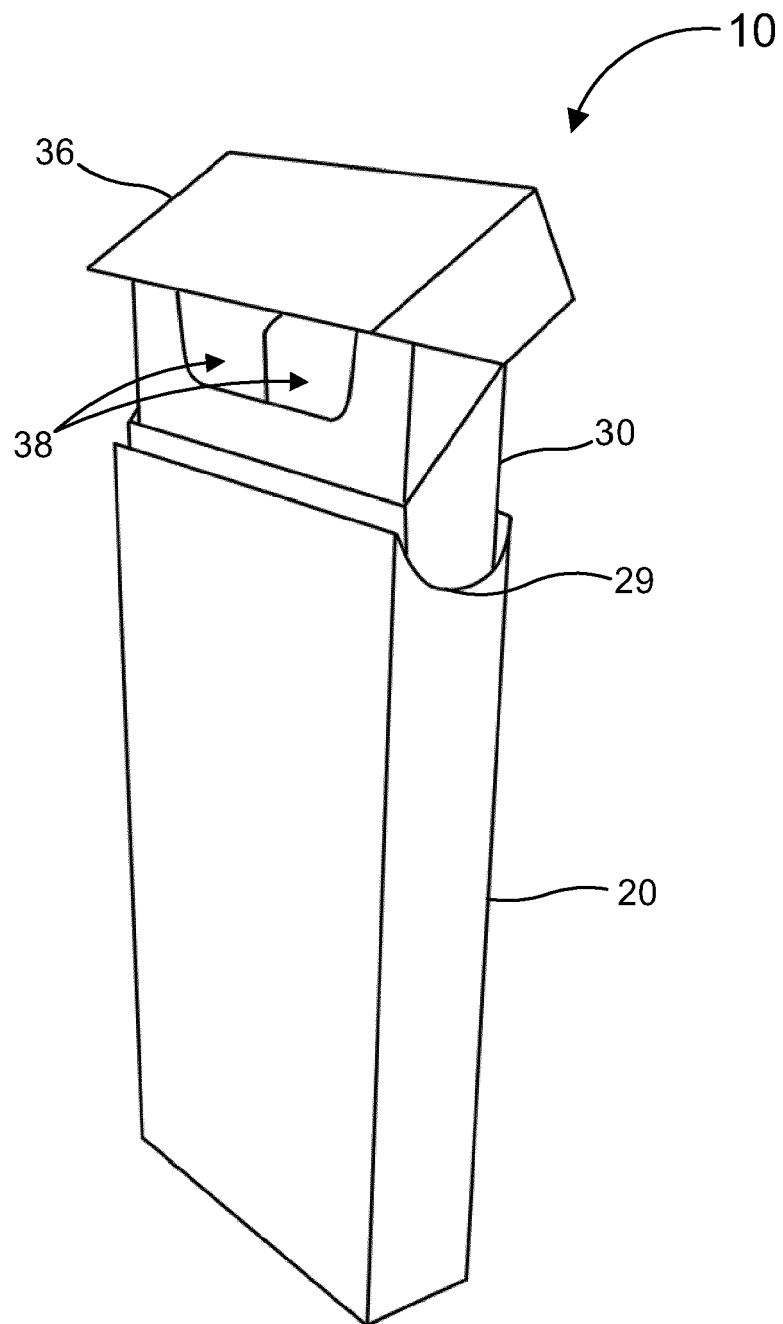


FIG. 5

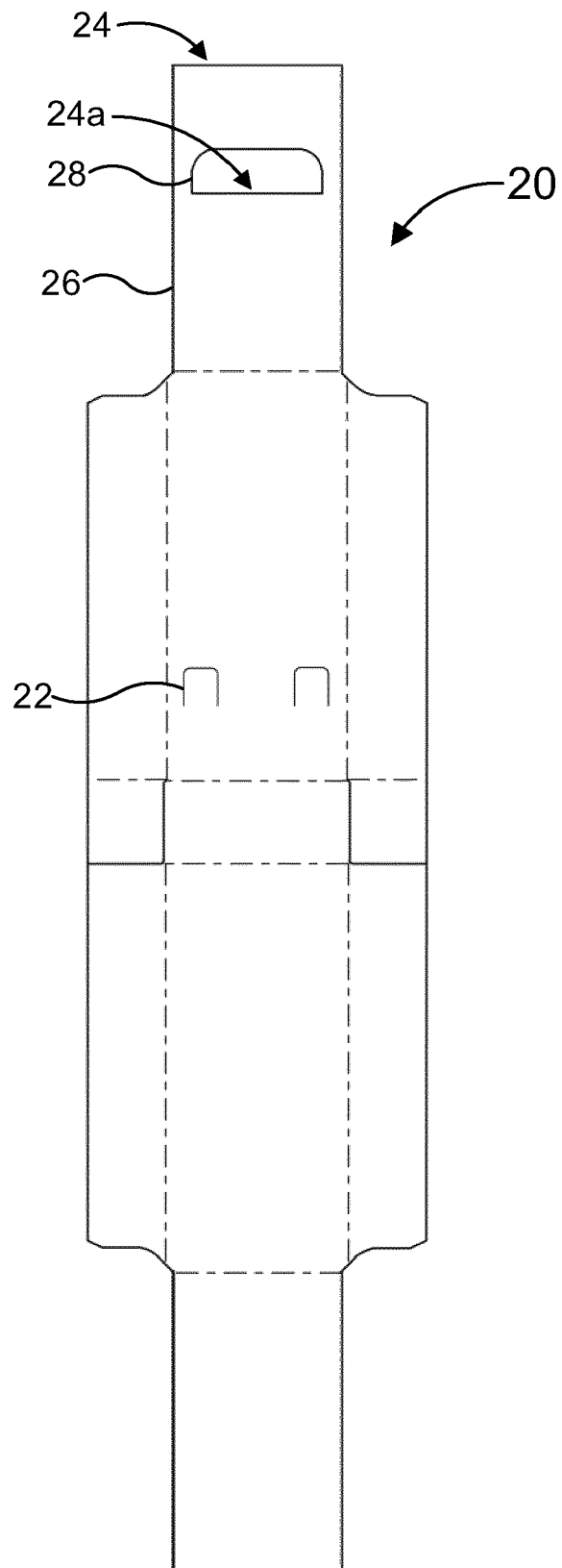


FIG. 6

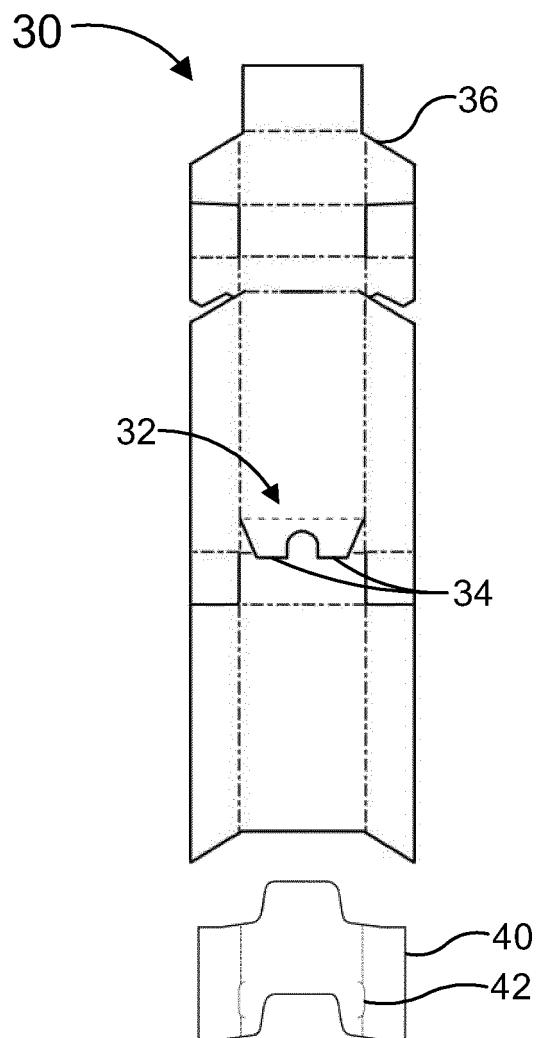


FIG. 7

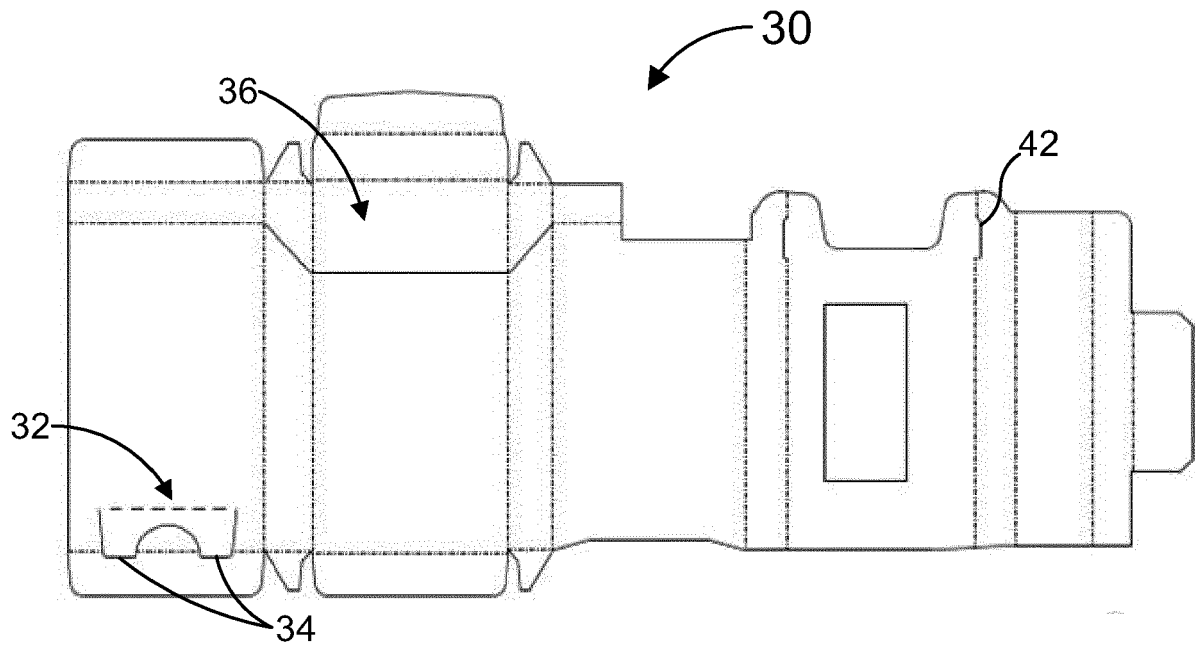


FIG. 8

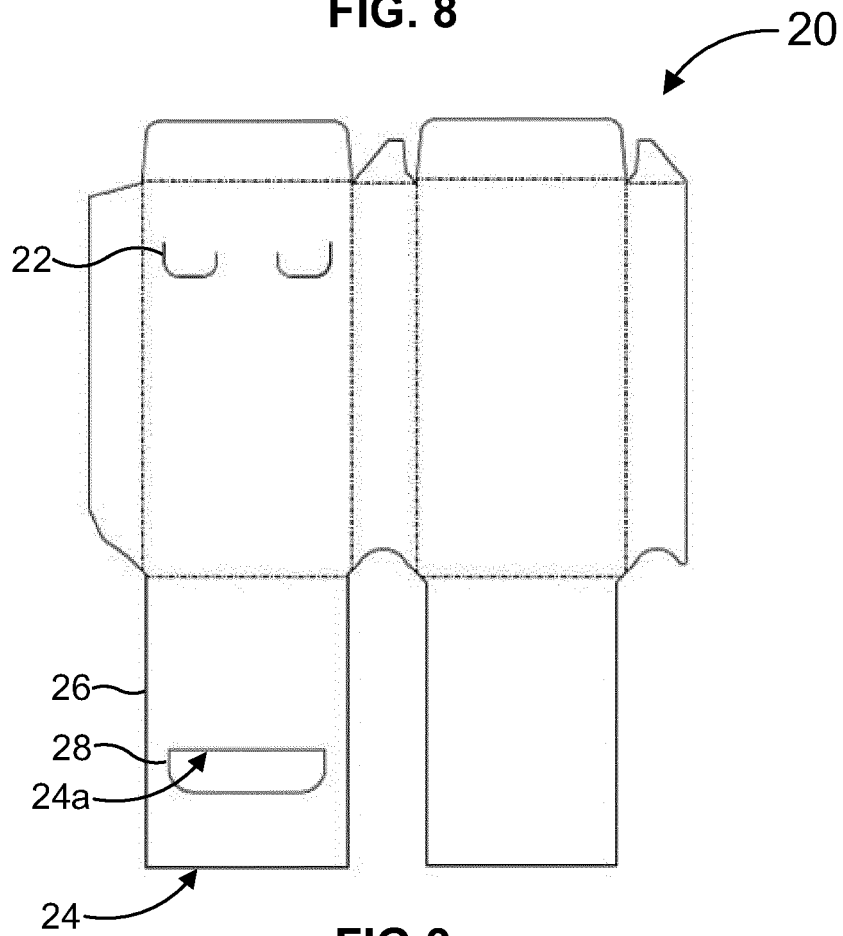


FIG. 9



EUROPEAN SEARCH REPORT

Application Number

EP 22 15 1466

5

10

15

20

25

30

35

40

45

50

55

1

EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	WO 2008/054305 A1 (STORA ENSO AB [SE]; GULLANDER KRISTINA [SE]; KNUTZ OLA [SE]) 8 May 2008 (2008-05-08) * page 1, line 6 - line 15 * * page 7, line 30 - page 15, line 19 * * figures 1-9 *	1-15	INV. B65D50/04 ADD. B65D5/38
Y	US 2020/262618 A1 (NELSON ANDREW [US]) 20 August 2020 (2020-08-20) * paragraph [0034] - paragraph [0041] * * figures 1-4 *	1-15	
Y	WO 2020/033044 A1 (DIAMOND PACKAGING [US]) 13 February 2020 (2020-02-13) * paragraph [0035] - paragraph [0040] * * figures 1-17 *	1-15	
Y	US 2008/197043 A1 (FREEZE TIMOTHY E [US] ET AL) 21 August 2008 (2008-08-21) * paragraph [0027] - paragraph [0059] * * figures 1-9 *	4, 7, 8, 12	TECHNICAL FIELDS SEARCHED (IPC)
Y	WO 2019/173749 A1 (CONTEMPO CARD COMPANY [US]) 12 September 2019 (2019-09-12) * paragraph [0024] - paragraph [0038] * * claim 23; figures 1-9 *	15	B65D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 April 2022	Examiner Fitterer, Johann
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 22 15 1466

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

05-04-2022

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2008054305 A1	08-05-2008	NONE	
US 2020262618 A1	20-08-2020	NONE	
WO 2020033044 A1	13-02-2020	CA 3102156 A1 WO 2020033044 A1	13-02-2020 13-02-2020
US 2008197043 A1	21-08-2008	NONE	
WO 2019173749 A1	12-09-2019	CA 3089497 A1 WO 2019173749 A1	12-09-2019 12-09-2019