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(54) **IMPROVED PAPER-BASED MULTI-CARD PACKAGE**

(57) An improved paper-based, multi-card package comprises a paper-based carrier and a plurality of cards each being paper-based and having machine-readable indicia indicative of a corresponding account. The cards may be provided as prepaid cards. The carrier may include a center panel, wherein the cards are positioned adjacent to a first side of the center panel. The carrier

may further comprise a side flap adjoined to and folded over the center panel, and a side panel adjoined to the center panel and folded over and securely connected to portions of the first side of the center panel and the folded side flap, wherein the cards are disposed in a secure, enclosed space within the carrier.

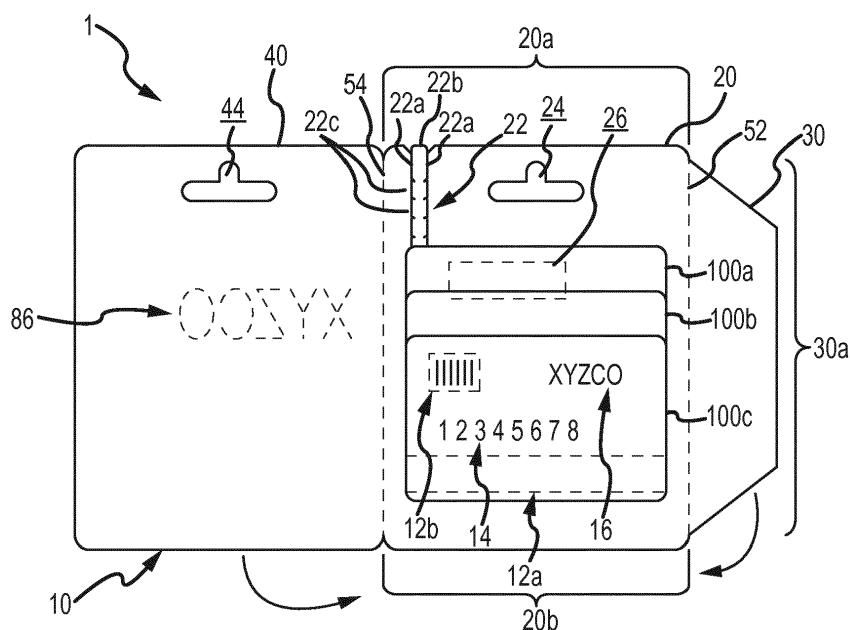


FIG.1

Description

FIELD

[0001] The present disclosure relates to packaged card products, and more particularly, to card packages that include a plurality of cards having one or more associated accounts, and a carrier for containing the cards within a secure, enclosed space thereof.

BACKGROUND

[0002] The sale of prepaid plastic cards (e.g. plastic gift cards, telephone cards, etc.) and other plastic transaction cards at retail locations is widespread and geographically increasing. Typically, such plastic cards have account indicia indicative of corresponding accounts (e.g., machine-readable indicia), and in the case of prepaid cards, the corresponding accounts have predetermined values associated therewith. Often one or a plurality of such plastic cards are packaged, distributed and displayed at point-of-sale (POS) locations in an inactive state. In turn, in conjunction with a purchase transaction, the corresponding card(s) is activated at a POS location. Typically, activation entails reading machine-readable activation indicia on the card packaging therefor, correlating the read data with one or more card account(s) that corresponds with the card(s), and activating the account(s)/card(s) for use.

[0003] Unfortunately, third-party tampering with plastic card packaging at POS locations has presented continuing design challenges. For example, third-parties may wrongfully access the cards to obtain proprietary account data at a POS location, which proprietary account data may then be fraudulently employed after purchase and activation of the cards to access account funds corresponding with the cards. As a result of such tampering schemes, various secure packaging approaches have been proposed to reduce incidents of tampering.

[0004] However, with the implementation of secure packaging approaches, the usage of packaged plastic card products has continued to increase, thereby resulting in significant plastic waste. In turn, such waste contributes to the ever-increasing concerns associated with the environmental impact of plastic products. For example up to 80% of ocean plastic pollution enters the ocean from land, resulting in the death of thousands of sea mammals and birds. And, more generally, plastic waste results in the accumulation and release of dangerous toxins in landfills and other areas of accumulation.

[0005] Further, plastic waste associated with packaged plastic card products typically constitutes single use plastic. Recently, single use plastic products have received increased scrutiny from environmentalists and governmental authorities. For example, in an effort to discourage the proliferation of plastic bag usage, some authorities have instituted regulations requiring retailers to impose a customer charge for the use of plastic bags.

Additionally, in some areas, a total ban on the use of certain types of single use plastic products is under consideration. Unfortunately, despite such efforts, the use and disposal of single use plastic products continues to increase.

SUMMARY

[0006] In one embodiment, an improved multi-card package may comprise a plurality of cards, each being paper-based and having indicia indicative of an account associated therewith, and a paper-based carrier. The paper-based carrier may include a center panel, a side flap adjoined to the center panel along a first adjoinment line, and a side panel adjoined to the center panel along a second adjoinment line. The side flap may be folded over at least a portion of a first side of the center panel. Further, the side panel may be folded over and securely connected to opposing first and second edge portions of the first side of the center panel and a side edge portion of the folded side flap to define a secure, enclosed space within which the plurality of cards are disposed.

[0007] As indicated, the plurality of cards and carrier may comprise paper-based materials. In that regard, the carrier and cards may each comprise at least about 95 % percent by weight organic materials, and in turn, the multi-card package may comprise at least about 95% percent by weight organic materials. In turn, the multi-card package provides an eco-friendly card product, while also offering superior anti-fraud advantages.

[0008] In some embodiments, the side flap may be folded over at least a portion of and releasably attached to at least one of the plurality of cards. In one approach, side flap may be folded over at least a portion of and releasably attached to each of the plurality of cards.

[0009] In some arrangements, adjacent ones of the plurality of cards may be disposed in partially overlapping relation. In such arrangements. The side flap may be releasably attached to each of the plurality of cards by continuous peelable glue line disposed on and extending across portions of each of the plurality of cards.

[0010] In contemplated embodiments, at least a bottom card of the plurality of cards may be releasably attached to the first side of the center panel. In turn, overlapping portions of adjacent ones of the plurality of cards may be releasably attached to one another. For example, the bottom card may be releasably attached to the first side of the center panel by at least one peelable glue line disposed on a first side of the panel, and overlapping portions of adjacent ones of the plurality of cards may be releasably attached by corresponding additional, peelable glue lines disposed on an overlapped portion of a corresponding one of the plurality of cards. Said peelable glue lines may be substantially may be located in substantially parallel, offset relation to one another.

[0011] In contemplated implementations, the side panel may be securely connected to the first and second edge portions of the first side of the center panel and to

the side edge portion of the folded side flap by a non-releasable glue. More particularly, such non-releasable connection may be established by plurality of non-releasable glue regions located along each of the first and second edge portions of the first side of the side of the center panel, and by continuous non-releasable glue line disposed on the side edge portion of the folded side flap.

[0012] In some embodiments, the center panel may further comprise an aperture, wherein a bottom one of the plurality of cards may be located in a predetermined position so that account associable indicia (i.e. indicia associable with one or more account(s) corresponding with the plurality of cards) disposed on a downward-facing, or back, side of the bottom card is viewable through the aperture. In that regard, the plurality of cards may be releasably attached so that the account associable indicia provided on the back side of the bottom card is viewable through the aperture from a second side of the center panel. By way of example, the account associable characters that may be associated with one or more account(s) corresponding with the plurality of cards.

[0013] In contemplated implementations the center panel may further comprise a separable portion offset from the aperture and manipulable to define an opening through the center panel to access the secure, enclosed space for removal of the plurality of cards therethrough. In that regard, the separable portion may extend from an edge comprising one of the first and second edge portions of the center panel toward an edge comprising the other one of the first and second edge portions of the center panel.

[0014] In some arrangements, the separable portion may comprise a tear strip defined by at least one of the following:

a plurality of pairs of spaced slits that successively extend across the center panel, including a first pair of spaced slits that define a graspable pull tab at an edge of one of said top and bottom edge portions of the center panel, wherein the pull tab may be manipulated to progressively define an opening across the center panel between and along the remaining pairs of spaced slits; and,

a tear string that extends across the center panel and includes a graspable end located at an edge of one of the first and second side edge portions of the center panel, wherein the tear string may be manipulated to progressively define an opening across the center panel along the tear string.

[0015] In other arrangements, the separable portion may be defined by one or a spaced pair of perforation line(s) that extend across the center panel, wherein the perforation line(s) may be manipulated to progressively define an opening across the center panel along the perforation line(s).

[0016] In some embodiments, a separable portion may extend from an edge of one of said first and second edge portions of the center panel to an end location that is overlapped by at least one of the plurality of cards. In that regard, the separable portion may be overlapped by each of the plurality of cards.

[0017] In contemplated arrangements, the carrier may be a first rectangular configuration having a corresponding first length greater than a corresponding first width, and each of the plurality of cards may be of a second rectangular configuration having a corresponding second length greater than a corresponding second width, wherein the first width is greater than each of the second length and second width. In turn, the plurality of cards may be disposed lengthwise across a portion of the first width of the carrier with the secure, enclosed space.

[0018] In conjunction with such arrangements, the first and second edge portions of the first side of the center panel may extend along the top and bottom edge portions of the carrier, respectively. In turn, the side edge portion of the folded side flap may extend along the first side of the center panel between the first and second edge portions thereof. In contemplated arrangements, the folded side flap may overlap at least about 25% and no more than about 45% of the first width of the center panel, and preferably between about 29% to 40% of the first width of the center panel. Further, in some arrangements, the folded side flap may overlap at least about 25% and no more than about 40% of the second width of each of the plurality of cards, and preferably between about 26% to 38% of the second width of each of the plurality of cards.

[0019] In various embodiments, a multi-card package may be provided in which the carrier is of a single piece construction and comprises a first paperboard type having a first thickness, the plurality of cards each comprise a second paperboard type having a second thickness, and wherein the second thickness is at least about 50%, and preferably at least about 75% greater than the first thickness. In that regard, multiple design opportunities are presented for the implementation of a robust, secure and eco-friendly multi-card package.

[0020] Numerous additional features and advantages of the present disclosure will become apparent to those skilled in the art upon consideration of the embodiment descriptions provided hereinbelow.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021]

Fig. 1 illustrates one embodiment of a paper-based, multi-card package.

Fig. 2 illustrates a carrier of the embodiment of Fig. 1.

Figs. 3-8 illustrate the carrier of the embodiment of Fig. 1, and the successive disposition of glue lines and releasable attachment of cards of the embodi-

ment of Fig. 1.

Fig. 9 illustrates the carrier of the embodiment of Fig. 1, and the disposition of another glue line to the cards of the embodiment of the embodiment of Fig. 1.

Fig. 10 illustrates a side flap of the carrier of the embodiment of Fig. 1, as folded over a center panel thereof and releasably attached to the glue line shown in Fig. 9.

Fig. 11 illustrates the disposition of glue regions on the center panel and folded side flap of the carrier of the embodiment of Fig. 1, as shown in Fig. 10.

Fig. 12 schematically illustrates how a side panel of the carrier of the embodiment of Fig. 1 folds over and non-releasably connects to the center panel and folded flap of the carrier, as shown in Fig. 11.

DETAILED DESCRIPTION

[0022] Fig. 1 illustrates an embodiment of a multi-card package 1 comprising a carrier 10 and a plurality of cards 100a, 100b, 100c (e.g. prepaid cards such as gift cards) disposed for containment within a secure, enclosed space defined by the carrier 10. In the later regard, the carrier 10 may comprise a center panel 20, a side flap 30 foldable over a first, or inner, side of the center panel 20, and a side panel 40 foldable over and non-releasably securable to opposing first and second edge portions 20a, 20b of center panel 20, and to a side edge portion 30a of side flap 30 to define the enclosed space in the finished product, as will be further described.

[0023] In contemplated embodiments, the multi-card package 1 may comprise paper-based materials. In that regard, the carrier 10 and cards 100a, 100b, 100c may each comprise at least about 90 %, and preferably at least about 95%, by weight organic materials (e.g. cellulose material), and some implementations at least about 90%, and preferably at least about 95%, by weight organic materials (e.g. cellulose material). Correspondingly, the multi-card package 1 comprises substantially no polymer-based materials (e.g. less than about 5% by weight), and otherwise comprises at least about 90%, and preferably at least about 95%, by weight organic materials. In turn, the multi-card package 1 provides an eco-friendly card product, while also offering superior anti-fraud advantages.

[0024] More particularly, and as illustrated in Fig. 1, carrier 10 may be of single piece construction, wherein the center panel 20, side flap 30 and side panel 40 may be defined by a common, continuous substrate, or sheet, of a paper-based material. In turn, side flap 30 may be adjoined to center panel 20 along a first adjointment line 52 on a first side of the center panel 20, and side panel 40 may be adjoined to center panel 20 along a second adjointment line 54 along a second side of the center pan-

el 20 opposite to the first side thereof. The first and second adjointment lines 52, 54 may define corresponding fold lines, wherein the first and second adjointment lines 52, 54, may advantageously define opposing, secure side edges of multi-card package 1.

[0025] In the illustrated embodiment, side flap 30 extends between the first and second edge portions 20a, 20b, along first adjointment line 52. Similarly, side panel 40 extends from first edge portion 20a to second edge portion 20b along second adjointment line 54. In one approach, the first and second adjointment lines 52, 54 may be defined by corresponding perforations, or depressions, in the carrier 10, thereby facilitating the folding of side flap 30 over the center panel 20 and folding of side panel 40 over the center panel 20 and folded side flap 30.

[0026] As shown in Fig. 1, the plurality of cards 100a, 100b, 100c may be disposed adjacent to the first side of center panel 20 of carrier 10 in partially overlapping relation. The cards 100a, 100b, 100c may be of a common rectangular configuration with a length that exceeds a width. In particular, the cards 100a, 100b, 100c may be sized as CR80 cards. In some arrangements, the plurality of cards 100a, 100b, 100c, may comprise three cards as illustrated. In other arrangements, one, two or four or more cards may be provided. In any case, the side flap 30 may be folded over and releasably attached to at least one of the cards 100a, 100b, 100c, as will be further described.

[0027] In contemplated embodiments, carrier 10 may comprise a first paperboard type having a first thickness, and the plurality of cards may each comprise a second paperboard type having a second thickness, wherein the second thickness is at least about 50%, and preferably at least about 75%, greater than the first thickness. In some arrangements, the first paperboard type may have a first thickness within a range of about 290 micron to about 360 micron, and the second paperboard type may have a second thickness within a range of about 500 micron to about 800 micron. In one specific example, the first paperboard type may have a weight/thickness of about 260 grams per square meter/345 micron, and the second paperboard type may have weight/thickness of about 440 grams per square meter/610 micron.

[0028] With further reference to Fig. 1, center panel 20 of carrier 10 may comprise a separable portion 22 manipulatable to define an opening through the center panel 20 to access the enclosed space for removal of cards 100 therethrough. As shown, the separable portion 22 may extend from an edge of the first side edge portion 20a of center panel 20 toward the second side edge portion 20b thereof. In the illustrated embodiment, separable portion 22 may comprise a pair of adjacent slit lines 22a defining a graspable pull tab 22b located at the edge of the first side edge portion 20a, and an additional plurality of spaced pairs of adjacent slits 22c successively extending across a portion of the center panel 20 toward the second edge portion 20b, as will be further described.

[0029] As further shown in Fig. 1, carrier 10 may further

comprise a hangar aperture defined by an aperture 24 through center panel 20 and an aperture 44 through side panel 40. Apertures 24 and 44 may be of a coincidental configuration, wherein aperture 24 is larger than said aperture 44 about the peripheries thereof. As may be appreciated, aperture 44 may overlies aperture 24 to define the hangar aperture for suspending multi-card package 1 on support hook at a point of sale location.

[0030] With further reference to Fig. 1, center panel 20 may also include an aperture 26 (shown in phantom lines) located so that a bottom one of the plurality of cards 100a, 100b, 100c overlaps the aperture 26. In turn, the bottom card 100a may be provided with account associable indicia on a downward-facing, or back, side thereof that is located in a fixed location relative to and viewable through the aperture 26 from a second, or outer, side of the center panel 20, i.e. viewable before the multi-card package is accessed for removal of the cards 100a, 100b, 100c, as will be further described.

[0031] As shown by example card 100c in Fig. 1, the plurality of cards 100a, 100b, 100c may each include machine-readable account indicia indicative of an account corresponding with the given card and employable in transactional use of the card, e.g. in the form of an encoded magnetic stripe 12a (shown in phantom lines) and/or bar code 12b (shown in phantom lines) disposed on a downward-facing, or back, side of the card and/or on an upward-facing, or front, side of the card. Further, human-readable account indicia 14 may be provided on each of the cards 100a, 100b, 100c, e.g. printed and/or embossed human-readable characters on the front and/or back sides thereof. Additionally, printing 16 may be provided on the front and/or back sides of the cards 100a, 100b, 100c, and may comprise a name/brand/logo of a goods/services merchant and/or issuer/processor associated with the cards 100a, 100b, 100c, and/or graphics selected thereby. In varying instances, cards 100a, 100b, 100c may comprise prepaid cards for the same merchant or for different merchants. Additionally, cards 100a, 100b, 100c may have corresponding activatable accounts having the same prepaid value or different prepaid values. Further, cards 100a, 100b, 100c may be provided with additional card features, e.g. signature blocks, and scratch-off panel regions with underlying PINs (i.e. personal identification numbers for the corresponding card account).

[0032] With further reference to Fig. 1, printing 86 may be provided on outer-facing sides of the side panel 40 and/or center panel 20, and may comprise instructions for card activation, fraud detection inspection and/or accessing the cards 100a, 100b, 100c, and/or a name/brand/logo of a goods/services merchant and/or issuer/processor associated with the cards 100a, 100b, 100c, and/or graphics selected thereby.

[0033] Reference is now made to Figs. 2-12 which illustrate additional features of the multi-card package 1 and a method embodiment for the manufacture thereof. As shown in Fig. 2, an outer-facing side of the center

panel 20 may be provided with machine-readable activation indicia corresponding with the plurality of cards 100a, 100b, and 100c and readable to activate the accounts associated with each of the cards 100a, 100b, and 100c. For example, the machine-readable activation indicia may comprise an encoded magnetic stripe 82a (shown in phantom lines) and/or bar code 82b (shown in phantom lines) that may be read at a POS location to effect activation of all of the accounts corresponding with cards 100a, 100b, 100c.

[0034] As further illustrated in Fig. 2, a single piece carrier 10 may be provided for separation from a paperboard sheet 200 via an automated operation (e.g. via an automated die cut or punch operation) to include the interconnected center panel 20, side flap 30 and side panel 40, as described above. Prior to or after such separation, the first and second adjunction lines 52, 54 may be defined by an automated operation (e.g. an automated perforation operation), separation portion 22 may be defined by an automated operation (e.g. an automated slit formation operation), apertures 24, 44 and 26 may be defined by an automated operation (e.g. via an automated die cut or punch operation), printing 86 may be defined on one or both sides of carrier 10 by an automated operation (e.g. via one or more of an automated silk-screening, lithographic, Gauvre roll, ink-jet and/or other printing operation), and machine readable activation indicia 82a, 82b may be provided by an automated operation (e.g. via an automated operation in which a back surface of magnetic stripe 82a is adhered to the carrier 10 and thereafter encoded and/or in which bar code 82b is printed on the carrier 10).

[0035] In one approach, a plurality of carriers 10 may be separated from different corresponding regions 202 of the paperboard sheet 200 in an automated operation, and prior to such separation, one or more of the additional automated operations noted above may be completed in relation to each of the corresponding regions 202 of the paperboard sheet 200. For example, the plurality of regions 202 may be arranged in rows and columns across the paperboard sheet 200, wherein corresponding carriers 10 and described features thereof are commonly oriented in each of the plurality of regions 202.

[0036] In conjunction with such approach, a length of magnetic tape may be adhered to paperboard sheet 200 to extend across a number of regions 202 to define the magnetic stripe 82a of a corresponding number of carriers 10 thereafter separated from the paperboard sheet 200. In turn, after separation of a given carrier 10 from paperboard sheet 200, the corresponding magnetic stripe 82a may be encoded with activation data associable with the accounts corresponding with cards 100a, 100b, 100c to be provided therewith, typically prior to positioning of the cards 100a, 100b, 100c relative to carrier 10. Relatedly, if a bar code 82b is employed it is normally printed on a given carrier 10 after separation from paperboard sheet 200 to provide activation data associable with the accounts corresponding with cards 100a, 100b,

100c to be provided therewith, typically prior to positioning of the cards 100a, 100b, 100c relative to carrier 10.

[0037] Similarly, cards 100a, 100b, 100c, and additional cards thereto, may be separated, or singulated, from another paperboard sheet in an automated operation. In that regard, a length of magnetic tape may be adhered to the paperboard sheet to extend across a number of regions to define the magnetic stripe 12a of a corresponding number of cards thereafter separated from the paperboard sheet. In turn, after separation of cards 100a, 100b, 100c from the paperboard sheet, the corresponding magnetic stripes 12a may be encoded with corresponding account-specific data prior to positioning of the cards 100a, 100b, 100c relative to carrier 10. Relatedly, if bar codes 12b are employed on cards 100a, 100b, 100c, a bar code 12b may be printed on each given card after separation from the paperboard sheet to provide corresponding account-specific data corresponding with the card, typically prior to positioning of cards 100a, 100b, 100c relative to carrier 10.

[0038] Reference is now made to Figs. 3-8 which illustrate steps for sequential attachment of cards 100a, 100b and 100c. As shown in Fig. 3, a first peelable glue line 60a may be disposed on the first side 22 of center panel 20 to one side of separation portion 22 and below aperture 26. In the illustrated embodiment, the first peelable glue line 60a may extend in a direction substantially normal to the first and second adjoinment lines 52, 54.

[0039] Fig. 4 illustrates releasable attachment of card 100a to the first side 22 of center panel 20 via the first peelable glue line 60a. As shown in phantom lines, card 100a may be attached so that account indicia 12 disposed on the down-facing, or back, side of card 100a is visible through the aperture 26 from a second side of the center panel 20.

[0040] As shown in Fig. 5, a second peelable glue line 60b may be disposed on the upward-facing, or front, side of card 100a. The second peelable glue line 60b may be of the same configuration as, and located parallel relation to, the first peelable glue line 60a, thereby facilitating automated operations for disposing the first and second peelable glue lines 60a, 60b. In turn, in the illustrated embodiment, the second peelable glue line 60b may also extend in a direction substantially normal to the first and second adjoinment lines 52, 54.

[0041] Fig. 6 illustrates releasable attachment of card 100b to the upward-facing, or front, side of card 100a via the second peelable glue line 60b. As shown, card 100b may partially overlap card 100a with the second peelable glue line 60b disposed between the overlapping portions of cards 100a and 100b.

[0042] As shown in Fig. 7, a third peelable glue line 60c may be disposed on the upward-facing, or front, side of card 100b. The third peelable glue line 60b may be of the same configuration as, and located parallel relation to, the first peelable glue line 60a and second peelable glue line 60b, thereby facilitating automated operations for disposing the first, second and third peelable glue

lines 60a, 60b 60c. In turn, in the illustrated embodiment, the third peelable glue line 60c may also extend in a direction substantially normal to the first and second adjoinment lines 52, 54.

5 [0043] Fig. 8 illustrates releasable attachment of card 100c to the upward-facing, or front, side of card 100b via the third peelable glue line 60c. As shown, card 100c may partially overlap card 100b with the third peelable glue line 60c disposed between the overlapping portions of cards 100b and 100c. Further, each of the cards 100a, 100b, and 100c may partially overlap, or extend over, the separation portion 22, with side edges of each of the cards 100a, 100b, and 100c aligned with and slightly offset from the separation portion 22. In the later regard, a bottom end 22c of the separation portion 22 may extend beyond card 100b, as shown by Fig. 7, and may be overlapped by card 100c, as shown in Fig. 8.

10 [0044] Reference is now made to Figs. 9-12 which illustrate fold-over positioning of and releasable attachment of side flap 30 relative to cards 100a, 100b, 100c, and non-releasable attachment of side panel 40 to center panel 20 and folded side flap 30. As shown in Fig. 9, a continuous, fourth peelable glue line 64 may be disposed on the top sides of overlapping cards 100a, 100b, 100c, wherein the fourth peelable glue line 64 extends over the edge of card 100b overlapping card 100a and over the edge of card 100c overlapping card 100b. Again, fourth peelable glue line may be disposed in an automated manner. In the illustrated embodiment, the fourth peelable glue line 64 extends substantially parallel to first and second adjoinment lines 52, 54, and is located a distance from first adjoinment line 52 that is less than a width of a portion of the side flap 30 to be folded over the center panel 20.

35 [0045] More particularly, and as shown in Fig. 10, side flap 30 may be folded along first adjoinment line 52, over portions of center panel 20 and cards 100a, 100b, 100c, and releasably attached to cards 100a, 100b, 100c via the fourth peelable glue line 64. As may be appreciated, the fold at first adjoinment line 52 defines a secure side edge of the multi-card package 1.

40 [0046] In turn, and as illustrated in Fig. 11, non-releasable glue regions 70a, 70b and 70c may be disposed on center panel 20 and folded side flap 30. More particularly, a plurality of non-releasable glue regions 70a may be disposed on the first side 22 of center panel 20 along the first side edge portion 20a, a plurality of non-releasable glue regions 70b may be disposed on the first side 22 of center panel 20 along the second side edge portion 20b, and a non-releasable glue region 70c in the form of a continuous glue line may be disposed on the folded side flap 30 along the first adjoinment line 52 and extending over adjacent portions of center panel 20 on the first side 22 thereof. Again, the non-releasable glue regions 70a, 70b, 70c may be disposed in automated operations.

55 [0047] As indicated by Fig. 12, side panel 40 may be folded along second adjoinment line 54 to extend over center panel 20 (e.g. extend over the entirety of center

panel 20), cards 100a,100b,100c (e.g. extend over the entirety of cards 100a,100b,100c), and folded side flap 30 (e.g. extend over the entirety of folded side flap 30), and non-releasably, or fixedly, connected to center panel 20 and folded side flap 30 via non-releasable glue regions 70a, 70b, 70c. In turn, cards 100a, 100b, 100c may be disposed in a secure, enclosed space of the multi-card package, thereby reducing any potential for fraudulent access, e.g. unlawful access at a point of sale. In that regard, the glue employed for non-releasably glue regions 70a, 70b, 70c may be selected so that, once the non-releasable connections are made, any attempt to access the secure enclosed space along such glue regions 70a, 70b, 70c will result in physical damage that is readily discernable at a point of sale location prior to purchase and/or activation of the cards 100a, 100b, 100c.

[0048] Thus from one perspective there has been described an improved paper-based, multi-card package comprises a paper-based carrier and a plurality of cards each being paper-based and having machine-readable indicia indicative of a corresponding account. The cards may be provided as prepaid cards. The carrier may include a center panel, wherein the cards are positioned adjacent to a first side of the center panel. The carrier may further comprise a side flap adjoined to and folded over the center panel, and a side panel adjoined to the center panel and folded over and securely connected to portions of the first side of the center panel and the folded side flap, wherein the cards are disposed in a secure, enclosed space within the carrier.

[0049] The foregoing description of the present disclosure has been presented for purposes of illustration and description. Furthermore, the description is not intended to limit the disclosure to the form disclosed herein. Consequently, variations and modifications commensurate with the above teachings, and skill and knowledge of the relevant art, are within the scope of the present disclosure. The embodiments described hereinabove are further intended to explain known modes of practicing the disclosure and to enable others skilled in the art to utilize the disclosure in such or other embodiments and with various modifications required by the particular application(s) or use(s) of the present disclosure. It is intended that the appended claims be construed to include alternative embodiments to the extent permitted by the prior art.

[0050] Example aspects of the present disclosure are presented in the following numbered clauses:

1. A multi-card package, comprising:

a plurality of cards, each being paper-based and having machine-readable indicia indicative of an account associated therewith; and,

a paper-based carrier, including:

a center panel;

a side flap adjoined to the center panel along a first adjointment line, wherein the side flap is folded over at least a portion of the of a first side of the center panel; and,

a side panel adjoined to the center panel along a second adjointment line, wherein the side panel is folded over and securely connected to opposing first and second edge portions of the first side of the center panel and a side edge portion of the folded side flap to define a secure, enclosed space within which the plurality of cards are disposed.

2. A multi-card package as recited in Clause 1, wherein the multi-card package comprises at least about 95% by weight organic materials.

3. A multi-card package as recited in Clause 1, wherein said side flap is folded over at least a portion of and releasably attached to at least one of said plurality of cards.

4. A multi-card package as recited in Clause 3, wherein said side flap is folded over at least a portion of and releasably attached to each of said plurality of cards.

5. A multi-card package as recited in Clause 4, wherein adjacent ones of said plurality of cards are disposed in partially overlapping relation.

6. A multi-card package as recited in Clause 5, wherein said side flap is releasably attached to each of said plurality of cards by a continuous, peelable glue line disposed on and extending across portions of each of said plurality of cards.

7. A multi-card package as recited in Clause 5, wherein at least a bottom card of said plurality of cards is releasably attached to the first side of the center panel.

8. A multi-card package as recited in Clause 7, wherein overlapping portions of said adjacent ones of said plurality of cards are releasably attached to one another.

9. A multi-card package as recited in Clause 8, wherein said bottom card is releasably attached to the first side of the center panel by at least one peelable glue line disposed on the first side of the center panel, wherein the overlapping portions of said adjacent ones of the plurality of cards are releasably attached by at least one a corresponding additional, peelable glue line disposed on an overlapped portion

of a corresponding one of the plurality of cards, and wherein said one and said corresponding additional, peelable glue line are located in substantially parallel, offset relation to one another.

10. A multi-card package as recited in Clause 8, wherein said side panel is securely connected to said top and bottom edge portions of the first side of the center panel and said side edge portion of the folded side flap by non-releasable glue regions.

11. A multi-card package as recited in Clause 7, said center panel comprising:

an aperture, wherein said bottom card of said plurality of cards is releasably attached to the first side of the center panel in a predetermined position so that account associable indicia provided on said bottom card is viewable through the aperture from a second side of the center panel.

12. A multi-card package as recited in Clause 11, said account associable indicia comprising a series of human-readable characters.

13. A multi-card package as recited in Clause 11, said center panel further comprising:

a separable portion offset from said aperture and manipulatable to define an opening through the center panel to access said enclosed space for removal of the plurality of cards therethrough.

14. A multi-card package as recited in Clause 13, wherein said separable portion extends from one of said first and second edges of the center panel toward the other one of said first and second edges of the center panel.

15. A multi-card package as recited in Clause 14, wherein said separable portion comprises at least one of the following:

a tear strip defined by at least one of the following:

a tear string having a graspable end located at said one of said top and bottom edges of the center panel; and,
a pair of adjacent perforation lines defining a graspable pull tab at said one of said top and bottom edges of the center panel; and,

a perforation line.

16. A multi-card package as recited in Clause 14, wherein said separable portion extends from said

one of said top and bottom edges of the center panel to an end location overlapped by at least one of the plurality of cards.

17. A multi-card package as recited in Clause 16, wherein said separable portion is partially overlapped by each of said plurality of cards.

18. A multi-card package as recited in Clause 1, wherein said carrier is of a first rectangular configuration with a first length greater than a first width, and wherein said plurality of cards are of a common, second rectangular configuration with a second length greater than a second width, wherein the plurality of cards are disposed lengthwise across a portion of the first width of the carrier within said secure, enclosed space.

19. A multi-card package as recited in Clause 18, wherein said first and second edge portions of the first side of the center panel extend along top and bottom edge portions of the carrier, respectively, and wherein said edge portion of the folded side flap extends along a first side edge portion of the carrier between said top and bottom edge portions thereof.

20. A multi-card package as recited in Clause 19, wherein said folded side flap overlaps at least about 25% of said second width of each of said plurality of cards.

21. A multi-card package as recited in Clause 19, further comprising:

a separable portion extending along a second side edge portion of the carrier, opposite to said first side edge portion, and manipulatable to define an opening through the center panel to access said enclosed space for removal of the plurality of cards therethrough,

22. A multi-card package as recited in Clause 1, wherein said carrier is of a single piece construction and comprises a first paperboard type having a first thickness, wherein said plurality of cards each comprise a second paperboard type having a second thickness, and wherein said second thickness is at least 75% greater than said first thickness.

23. A method for producing a paper-based multi-card package, comprising:

separating a single-piece carrier from a first sheet of paperboard, wherein the carrier includes:

a center panel;

a side flap adjoined to the center panel

- along a first adjointment line; and,
a side panel adjoined to the center panel
along a second adjointment line;
- positioning a plurality of cards adjacent to a first 5
side of the center panel, each of the plurality of
cards being paper-based and having indicia in-
dicative of a corresponding account;
first folding the side flap over at least a portion 10
of the first side of the center flap; and,
second folding the side panel over and securing
the side panel to opposing first and second side
edge portion of the first side of the center panel
and a side edge portion of the folded side flap 15
to define a secure, enclosed space within which
the plurality of cards are disposed.
24. A method as recited in Clause 23, wherein the
multi-card package comprises at least about 95% by 20
weight organic materials.
25. A method as recited in Clause 23, wherein prior
to said positioning the method further comprises:
- singulating said plurality of cards from a second 25
paperboard sheet.
26. A method as recited in Clause 25, wherein said
second paperboard sheet has a thickness that is at
least 75% greater than a thickness of the first paper- 30
board sheet.
27. A method as recited in Clause 25, wherein after
said singulating the method further comprises: 35
- providing said indicia in the form of machine-
readable indicia to each of said plurality of cards
by at least one of the following:
- encoding a magnetic stripe disposed on the 40
given card; and,
applying a bar code to the given card.
28. A method as recited in Clause 23, wherein said
first holding comprises: 45
- folding the side flap over at least a portion of and
releasably attaching the side flap to at least one
of the plurality of cards. 50
29. A method as recited in Clause 23, wherein said
first folding comprises:
- folding the side flap over at least a portion of and 55
releasably attaching the side flap to each of the
plurality of cards.
30. A method as recited in Clause 29, wherein the

positioning comprises:

- first disposing a first peelable glue to the first
side of the center panel;
first releasably attaching a first one of the plu-
rality of cards to the first peelable glue in a pre-
determined position on the first side of the center
panel;
second disposing a second peelable glue to an
upward-facing side of the first one of the plurality
of cards; and,
second releasably attaching a second one of the
plurality of cards to the second peelable glue in
partially overlapped relation to the first one of
the plurality of cards.
31. A method as recited in Clause 30, wherein the
positioning further comprises:
- third disposing a third peelable glue to an up-
ward-facing side of the second one of the plu-
rality of cards; and,
third releasably attaching a third one of the plu-
rality of cards to the third peelable glue in par-
tially overlapped relation to the second one of
the plurality of cards.
32. A method as recited in Clause 30, wherein said
first peelable glue and second peelable glue are de-
fined by glue lines disposed in substantially parallel
relation across corresponding lengths of the first and
second ones of the plurality of cards.
33. A method as recited in Clause 30, wherein after
said positioning and prior to said first folding the
method further comprises:
- disposing an additional peelable glue to an up-
ward-facing side of at least one of said plurality
of cards, wherein said side flap is releasably at-
tached to said at least one of the plurality of cards
upon said first folding.
34. A method as recited in Clause 33, wherein said
additional peelable glue is defined by an additional
glue line continuously disposed on an upward-facing
side of at least said first and second ones of the plu-
rality of cards.
35. A method as recited in Clause 23, wherein after
said positioning and first folding, and prior to said
second folding, said method further comprises:
- disposing non-peelable glue regions on said first
and second side edge regions of said first side
of the center panel and said side edge region of
the side flap, wherein said side panel is non-
releasably connected to the center panel upon

said second folding.

36. A method as recited in Clause 23, wherein said carrier is one of a plurality of carriers separated from a corresponding plurality of regions of said first paperboard sheet, and wherein prior to said separating the method further comprises:

defining said first and second adjoinment lines in the corresponding region of the plurality of regions of said first paperboard sheet.

37. A method as recited in Clause 36, wherein said center panel of the carrier comprises an aperture, and wherein prior to the separating the method further comprises:

defining said aperture in the corresponding region of the plurality of regions of said first paperboard sheet.

38. A method as recited in Clause 37, wherein said positioning further comprises:

releasably attaching a bottom card of the plurality of cards to the first side of the center panel in a predetermined position so that account associable indicia provided on the bottom card and associable with at least the account corresponding therewith is viewable through aperture from a second side of the center panel.

39. A method as recited in Clause 36, wherein said center panel of the carrier comprises a separable portion manipulatable to define an opening through the center panel to access said enclosed space for removal of the plurality of cards therethrough, and wherein prior to the separating the method further comprises:

defining said separable portion in the corresponding region of the plurality of regions of said first paperboard sheet.

40. A method as recited in Clause 37, wherein said positioning further comprises:

attachably positioning each of the plurality of cards in corresponding locations that overlap corresponding portions of the separable portion.

41. A method as recited in Clause 40, wherein said separable portion extends from one of said first and second edges of the center panel toward the other one of said first and second edges of the center panel, and wherein one of said corresponding locations overlaps an end portion of the separable portion.

Claims

1. A multi-card package, comprising:

a plurality of cards, each being paper-based and having machine-readable indicia indicative of an account associated therewith; and,
a paper-based carrier, including:

a center panel;
a side flap adjoined to the center panel along a first adjoinment line, wherein the side flap is folded over at least a portion of the of a first side of the center panel; and,
a side panel adjoined to the center panel along a second adjoinment line, wherein the side panel is folded over and securely connected to opposing first and second edge portions of the first side of the center panel and a side edge portion of the folded side flap to define a secure, enclosed space within which the plurality of cards are disposed.

2. A multi-card package as recited in Claim 1, wherein the multi-card package comprises at least about 95% by weight organic materials.

3. A multi-card package as recited in Claim 1 or Claim 2, wherein said side flap is folded over at least a portion of and releasably attached to at least one of said plurality of cards.

4. A multi-card package as recited in any one of Claims 1-3, wherein said side flap is folded over at least a portion of and releasably attached to each of said plurality of cards.

5. A multi-card package as recited in any one of Claims 1-4, wherein adjacent ones of said plurality of cards are disposed in partially overlapping relation, and wherein said side flap is releasably attached to each of said plurality of cards by a continuous, peelable glue line disposed on and extending across portions of each of said plurality of cards.

6. A multi-card package as recited in any one of Claims 1-5, wherein at least a bottom card of said plurality of cards is releasably attached to the first side of the center panel.

7. A multi-card package as recited in Claim 5 or Claim 6, wherein overlapping portions of said adjacent ones of said plurality of cards are releasably attached to one another.

8. A multi-card package as recited in Claim 7, wherein said bottom card is releasably attached to the first side of the center panel by at least one peelable glue

line disposed on the first side of the center panel, wherein the overlapping portions of said adjacent ones of the plurality of cards are releasably attached by at least one a corresponding additional, peelable glue line disposed on an overlapped portion of a corresponding one of the plurality of cards, and wherein said one and said corresponding additional, peelable glue line are located in substantially parallel, offset relation to one another.

9. A multi-card package as recited in any one of Claims 1-8, wherein said side panel is securely connected to said top and bottom edge portions of the first side of the center panel and said side edge portion of the folded side flap by non-releasable glue regions.

10. A multi-card package as recited in any one of Claims 1-9, said center panel comprising:

an aperture, wherein said bottom card of said plurality of cards is releasably attached to the first side of the center panel in a predetermined position so that account associable indicia provided on said bottom card is viewable through the aperture from a second side of the center panel, said account associable indicia comprising a series of human-readable characters.

11. A multi-card package as recited in Claim 10, said center panel further comprising:

a separable portion offset from said aperture and manipulatable to define an opening through the center panel to access said enclosed space for removal of the plurality of cards therethrough, wherein said separable portion extends from one of said first and second edges of the center panel toward the other one of said first and second edges of the center panel, and wherein said separable portion comprises at least one of the following:

a tear strip defined by at least one of the following:

a tear string having a graspable end located at said one of said top and bottom edges of the center panel; and,
a pair of adjacent perforation lines defining a graspable pull tab at said one of said top and bottom edges of the center panel; and,

a perforation line.

12. A multi-card package as recited in Claim 11, wherein said separable portion extends from said one of said top and bottom edges of the center panel to an end

location overlapped by at least one of the plurality of cards, and wherein said separable portion is partially overlapped by each of said plurality of cards.

13. A multi-card package as recited in Claim 11 or Claim 12, wherein said carrier is of a first rectangular configuration with a first length greater than a first width, wherein said plurality of cards are of a common, second rectangular configuration with a second length greater than a second width, wherein the plurality of cards are disposed lengthwise across a portion of the first width of the carrier within said secure, enclosed space, wherein said first and second edge portions of the first side of the center panel extend along top and bottom edge portions of the carrier, respectively, and wherein said edge portion of the folded side flap extends along a first side edge portion of the carrier between said top and bottom edge portions thereof.

14. A multi-card package as recited in anyone of Claims 1-13, wherein said folded side flap overlaps at least about 25% of said second width of each of said plurality of cards, wherein the separable portion extends along a second side edge portion of the carrier, opposite to said first side edge portion.

15. A multi-card package as recited in anyone of Claims 1-14, wherein said carrier is of a single piece construction and comprises a first paperboard type having a first thickness, wherein said plurality of cards each comprise a second paperboard type having a second thickness, and wherein said second thickness is at least 75% greater than said first thickness.

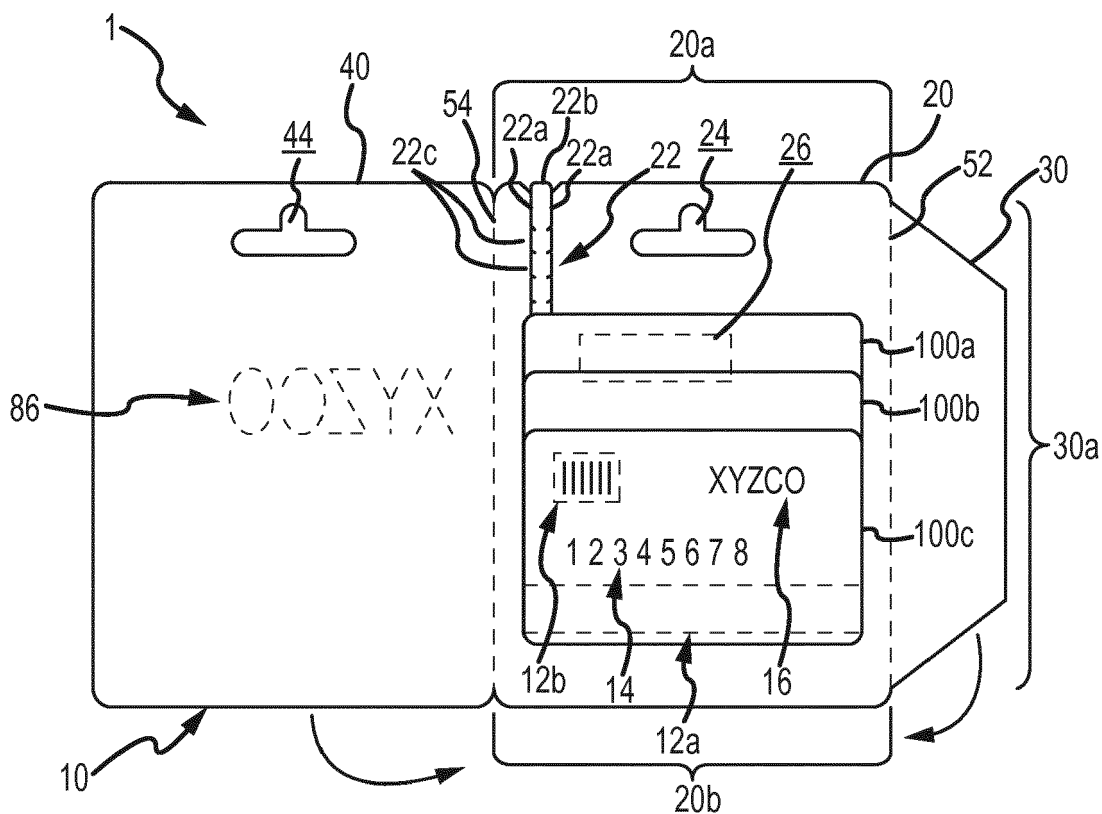


FIG.1

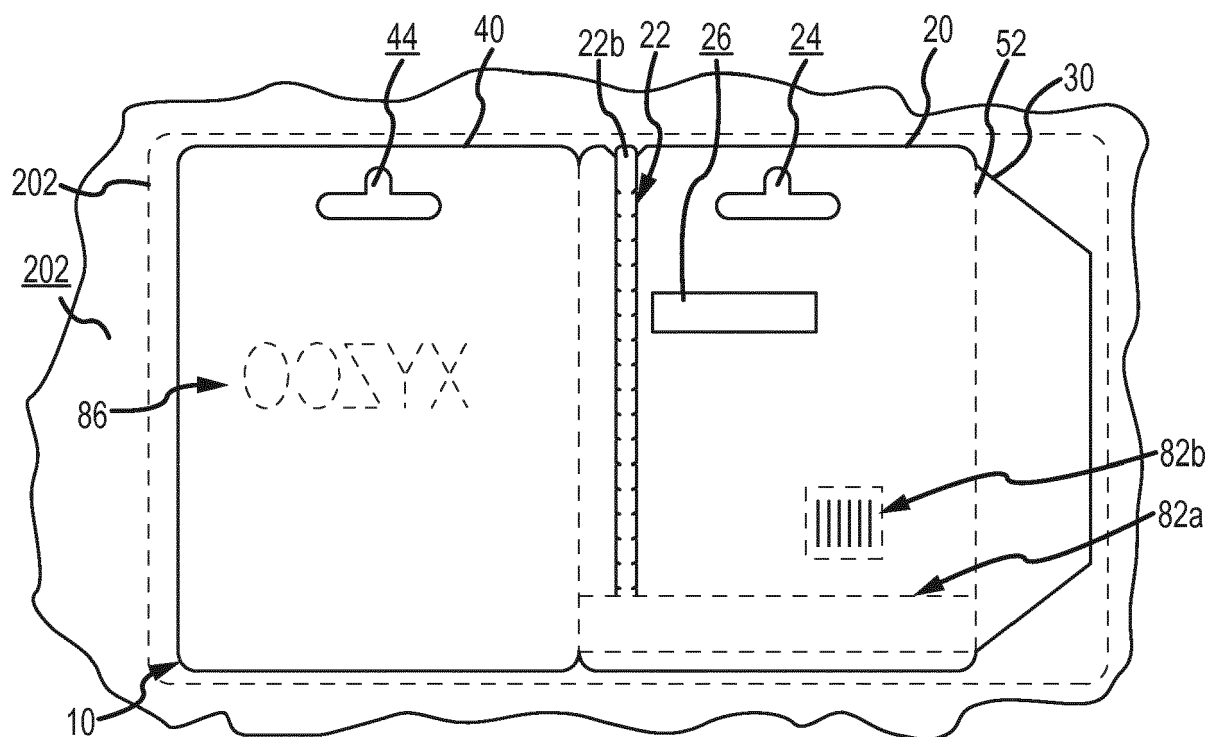


FIG.2

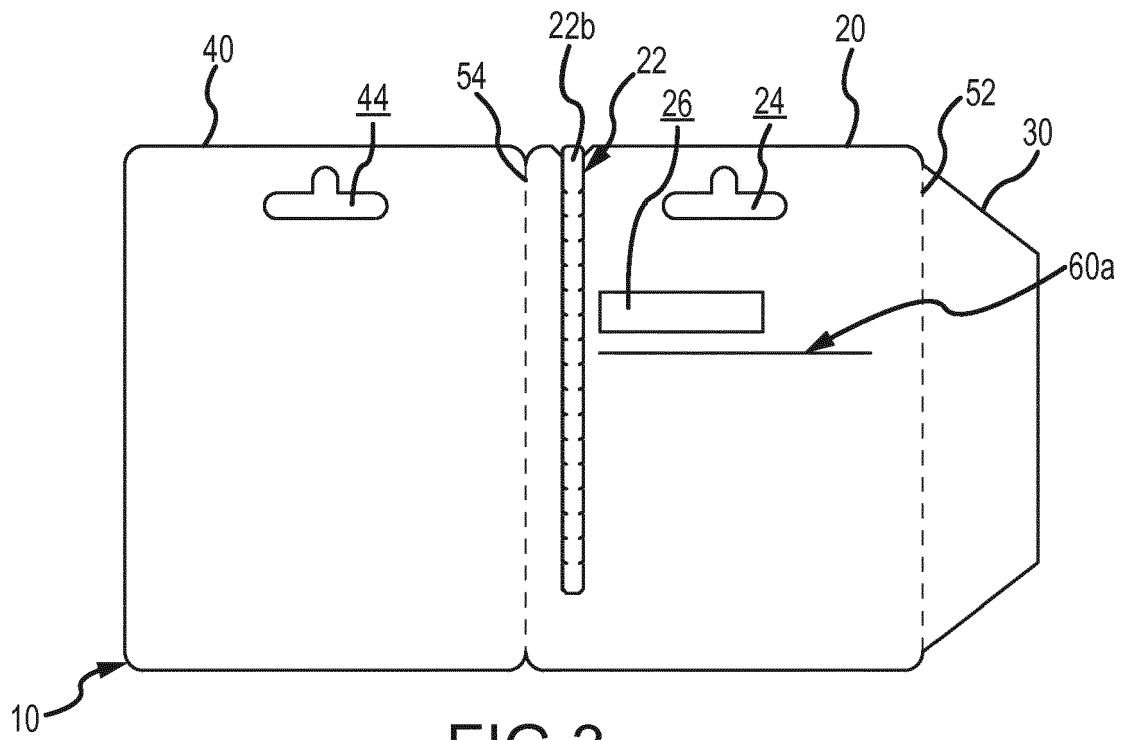


FIG. 3

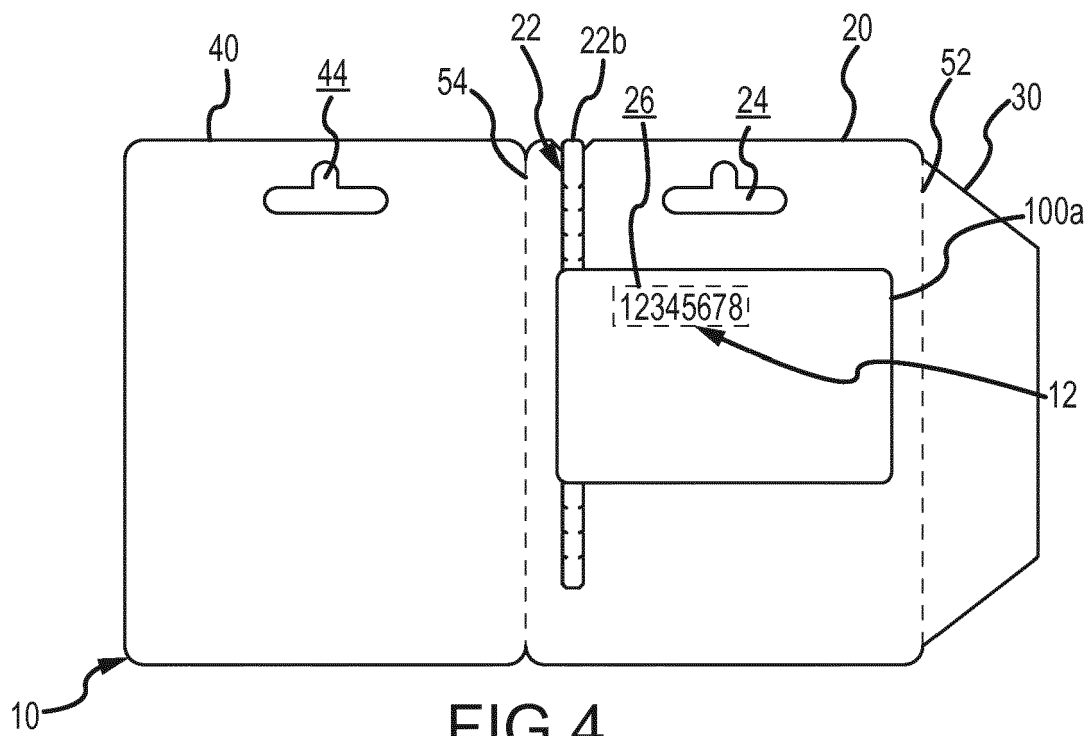
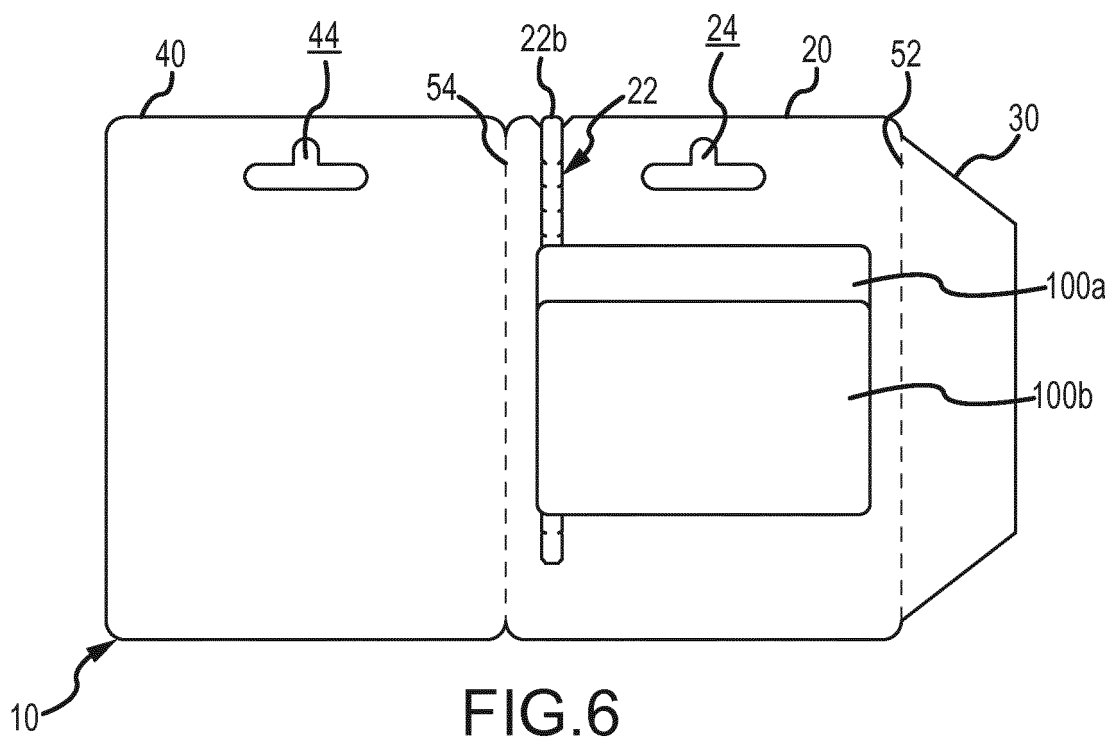
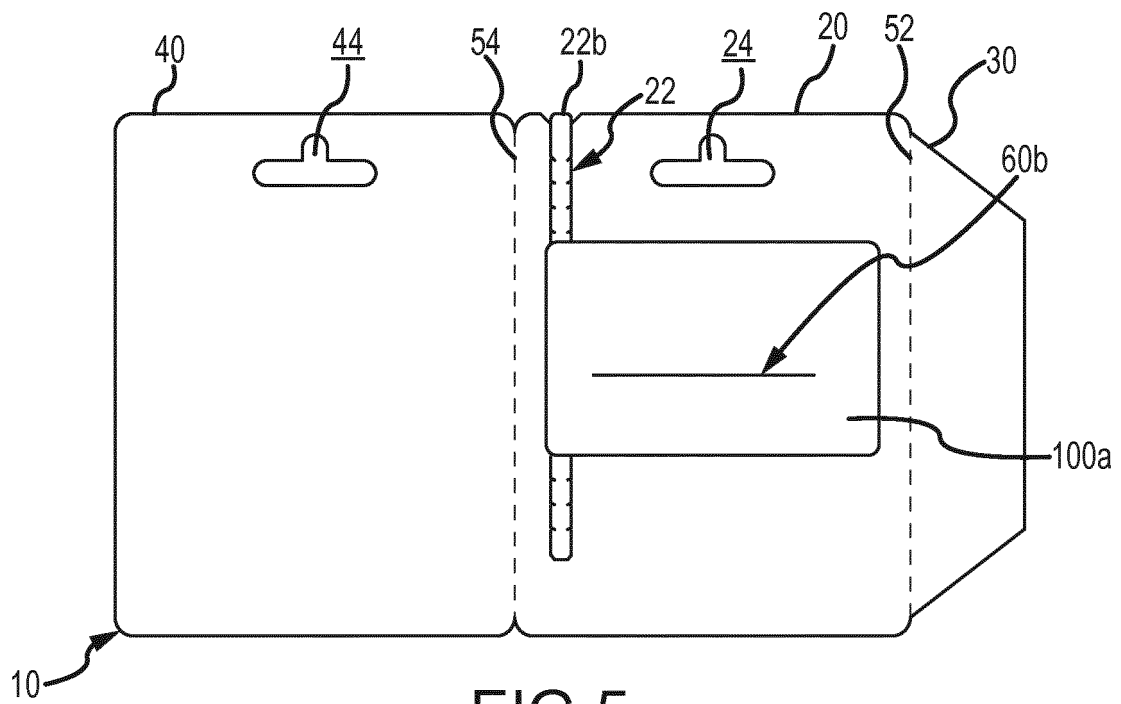
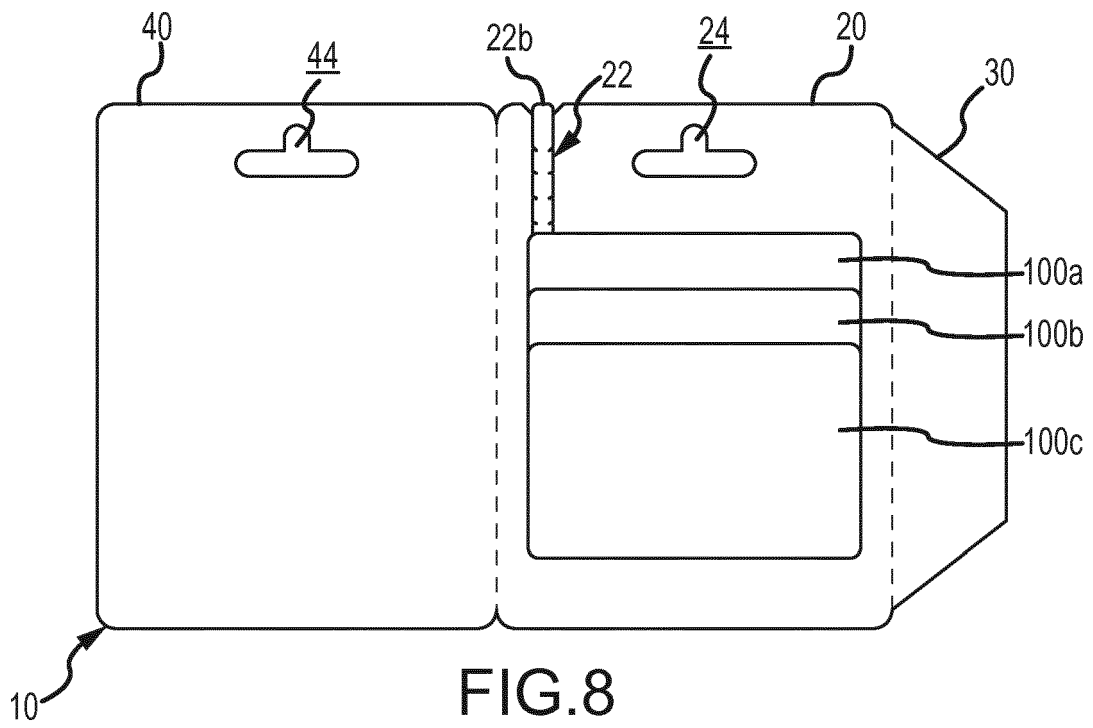
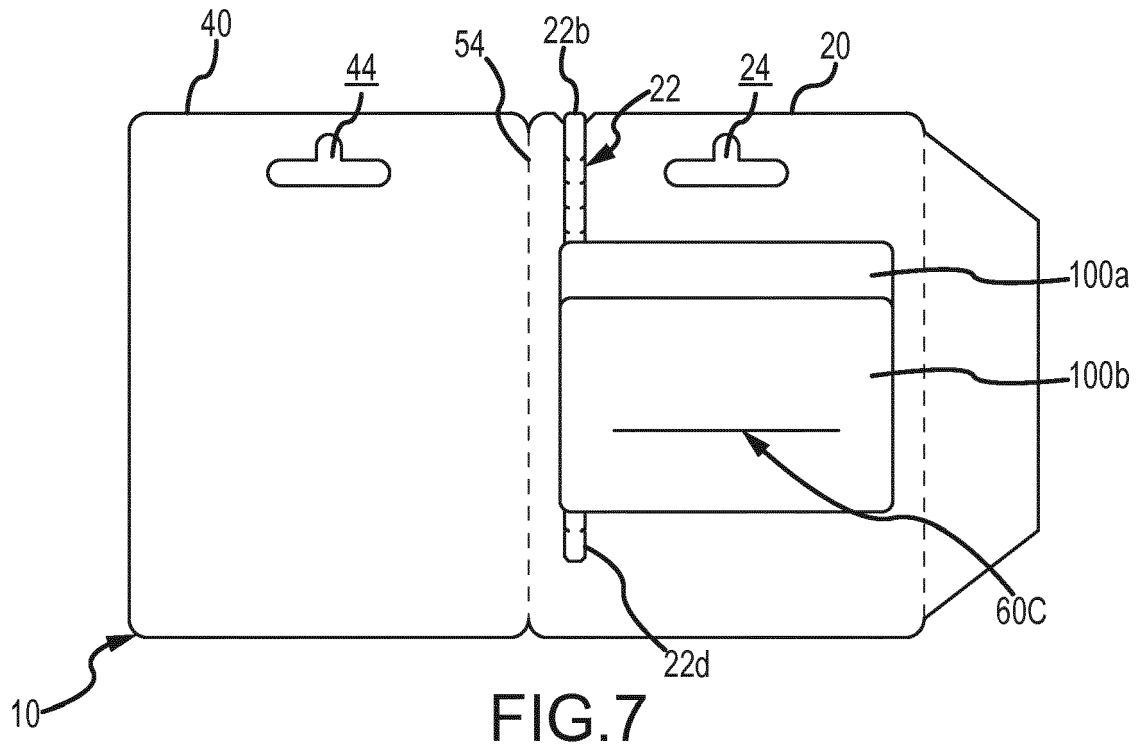
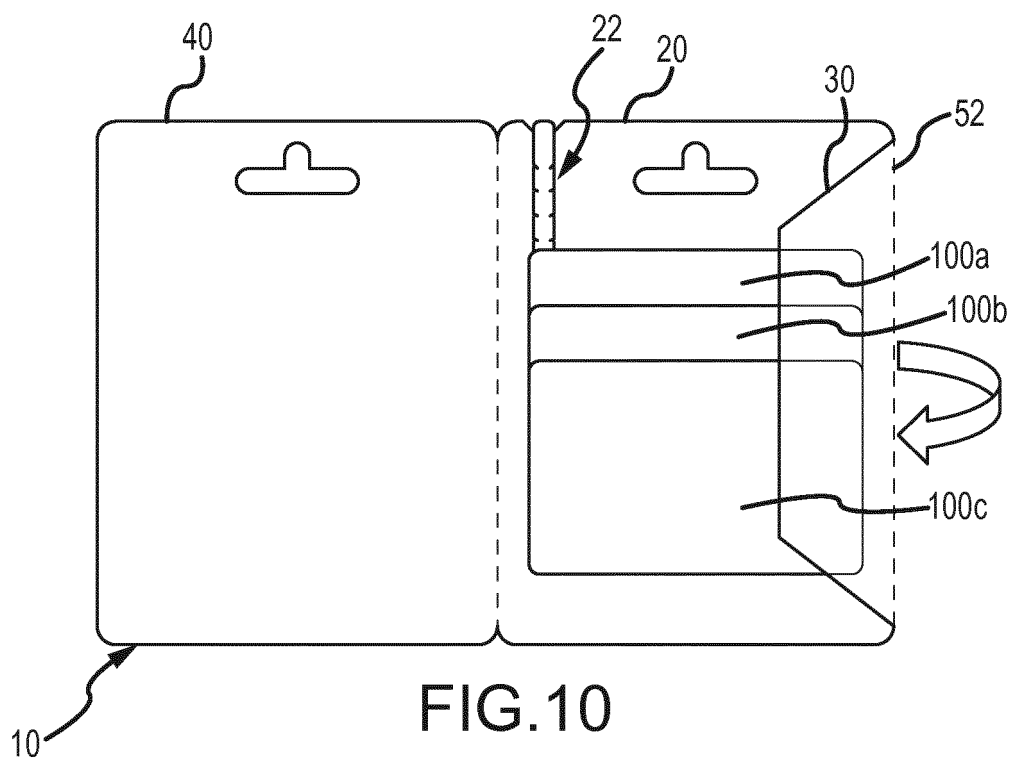
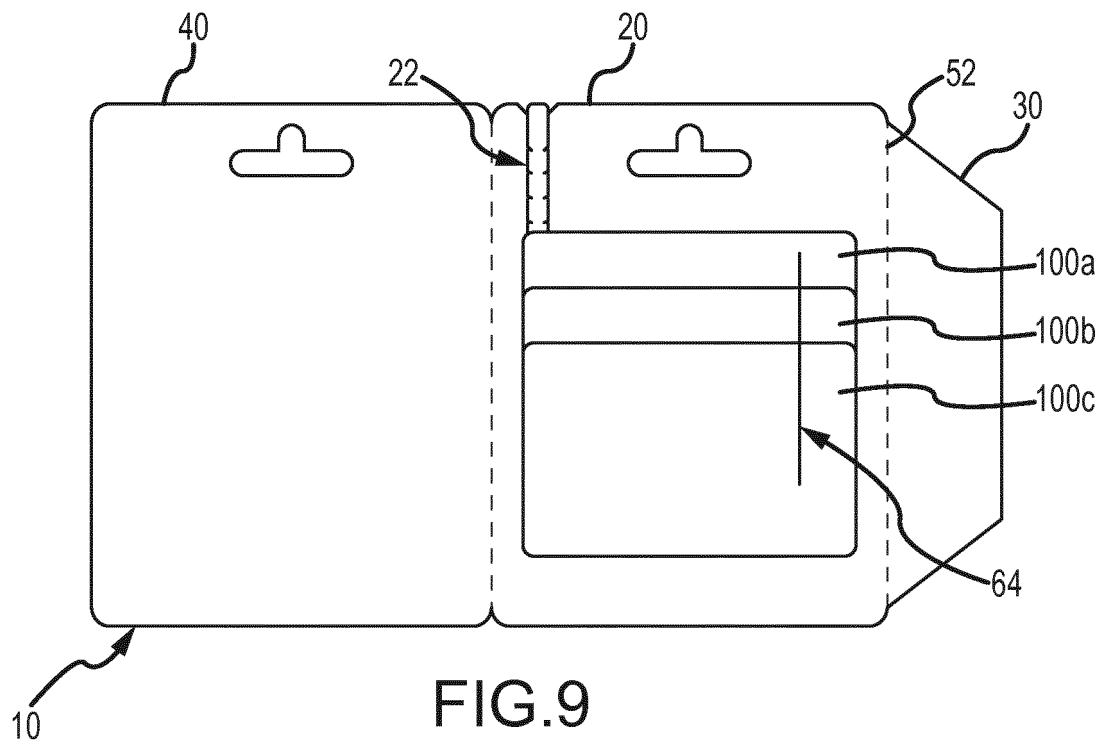
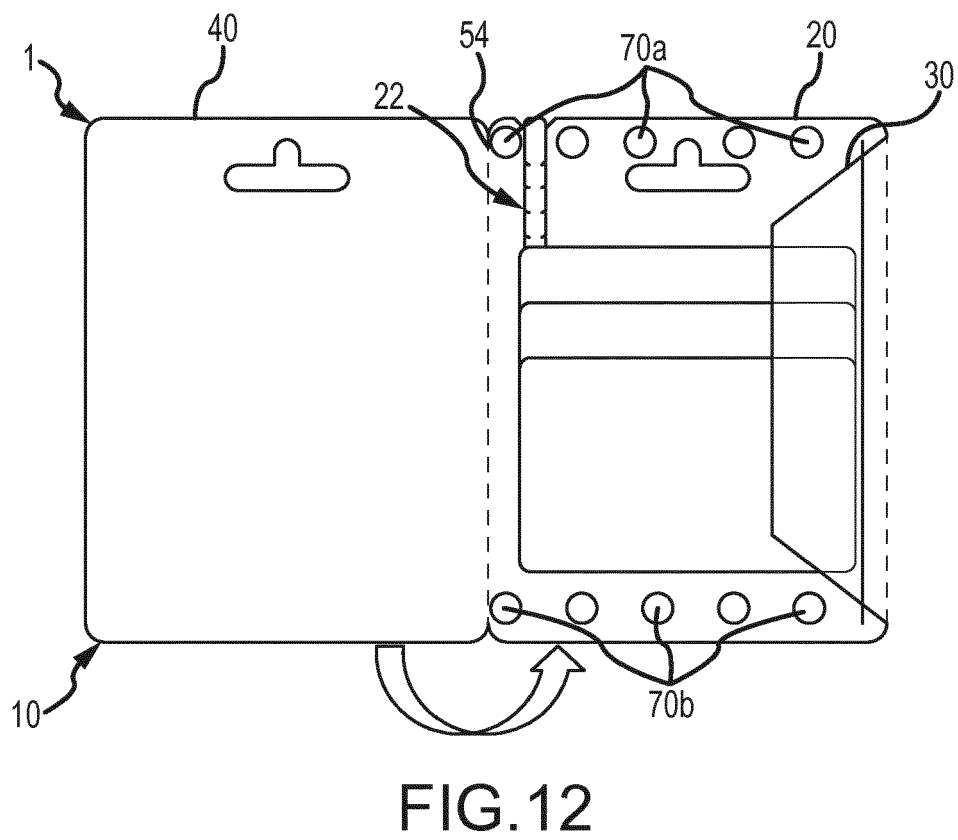
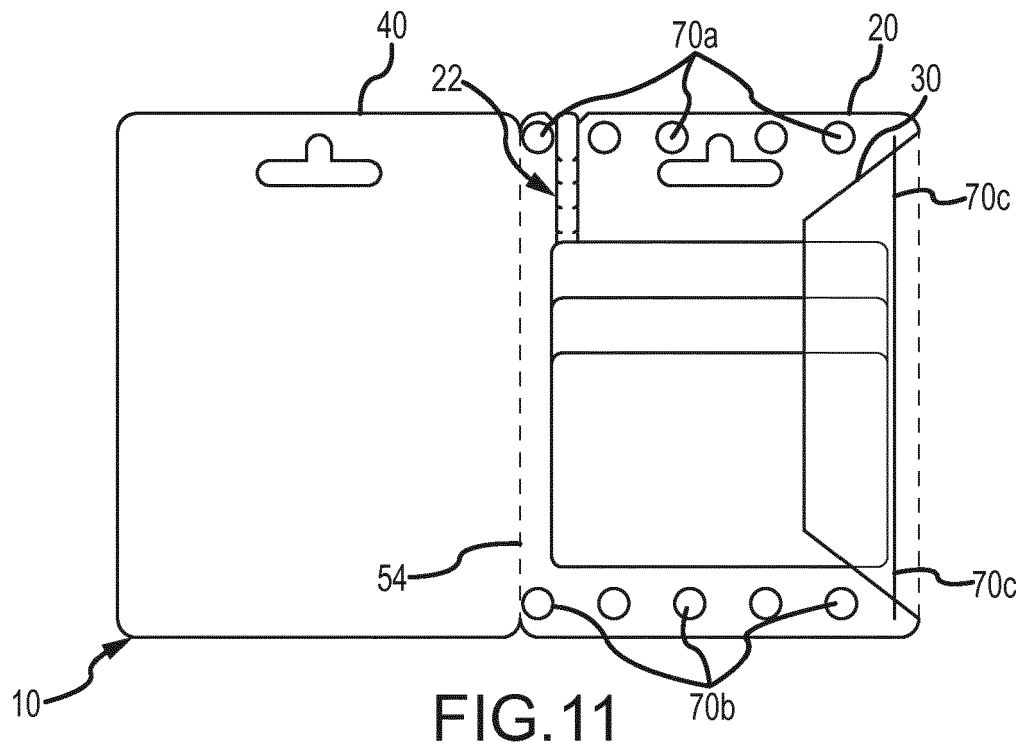


FIG. 4











EUROPEAN SEARCH REPORT

Application Number
EP 18 15 7233

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 8 807 332 B1 (PASCUA SHELL B [US] ET AL) 19 August 2014 (2014-08-19) * column 4; figure 7 * * column 6, line 15 - line 22 * * column 7, line 20 - line 27 * * column 8, line 40 - line 48 *	1-10	INV. B65D73/00
X	US 2016/031624 A1 (PASCUA SHELL B [US] ET AL) 4 February 2016 (2016-02-04) * paragraphs [0038], [0046], [0061]; figure 10D *	1-15	
A	US 2017/323191 A1 (PASCUA SHELL B [US] ET AL) 9 November 2017 (2017-11-09) * figure 7A *	1-15	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 7 September 2018	Examiner Wimmer, Martin
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			

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07-09-2018

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 8807332	B1	19-08-2014	NONE
US 2016031624	A1	04-02-2016	NONE
US 2017323191	A1	09-11-2017	NONE

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