

(86) Date de dépôt PCT/PCT Filing Date: 2018/02/01
(87) Date publication PCT/PCT Publication Date: 2019/04/25
(45) Date de délivrance/Issue Date: 2022/09/20
(85) Entrée phase nationale/National Entry: 2020/04/09
(86) N° demande PCT/PCT Application No.: US 2018/016440
(87) N° publication PCT/PCT Publication No.: 2019/078913
(30) Priorité/Priority: 2017/10/17 (US15/785,969)

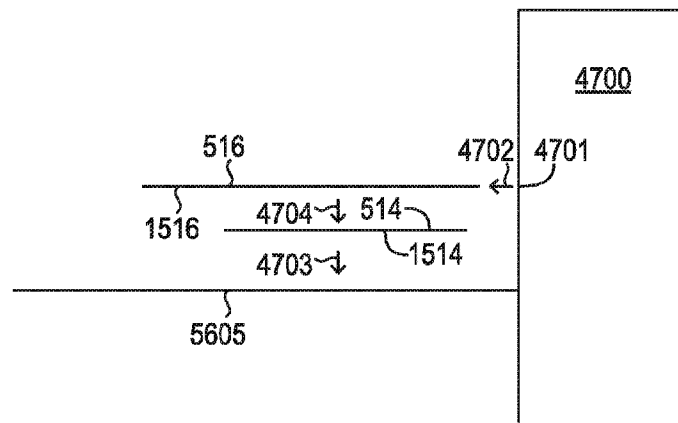
(51) Cl.Int./Int.Cl. *B65C 1/02* (2006.01),
B65C 9/08 (2006.01), *B65C 9/10* (2006.01),
B65C 9/18 (2006.01), *B65C 9/26* (2006.01)

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(54) Titre : SYSTEMES D'ETIQUETTES EN PLUSIEURS PARTIES
(54) Title: MULTI-PART LABEL SYSTEMS



(57) **Abrégé/Abstract:**

Multi-part label systems, and methods for their assembly. A carrier material with a first label and a second label removably adhered thereto is provided. The first label and second label are dispensed from the carrier material and applied to a surface simultaneously, whereby after application the underside of the first label is in contact with the surface and the undersurface of the second label is in contact with the top side of the first label.

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

(19) World Intellectual Property

Organization

International Bureau

(43) International Publication Date

25 April 2019 (25.04.2019)



(10) International Publication Number

WO 2019/078913 A1

(51) International Patent Classification:

B65C 1/02 (2006.01) *B65C 9/18* (2006.01)*B65C 9/08* (2006.01) *B65C 9/26* (2006.01)*B65C 9/10* (2006.01)

(21) International Application Number:

PCT/US2018/016440

(22) International Filing Date:

01 February 2018 (01.02.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

15/785,969 17 October 2017 (17.10.2017) US

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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) Title: MULTI-PART LABEL SYSTEMS

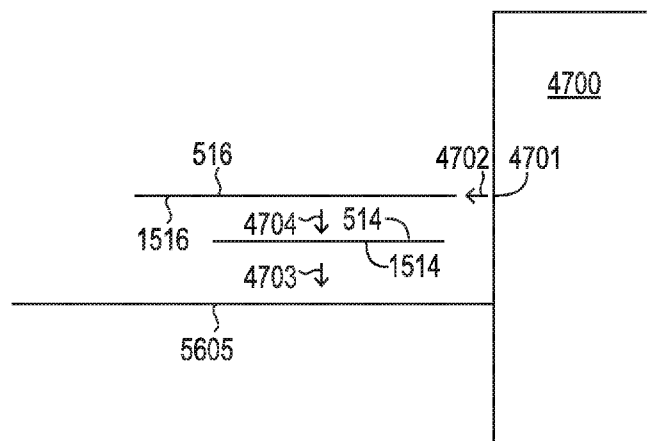


FIG. 47

(57) Abstract: Multi-part label systems, and methods for their assembly. A carrier material with a first label and a second label removably adhered thereto is provided. The first label and second label are dispensed from the carrier material and applied to a surface simultaneously, whereby after application the underside of the first label is in contact with the surface and the undersurface of the second label is in contact with the top side of the first label.

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WO 2019/078913 A1



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to the identity of the inventor (Rule 4.17(i))*

Published:

- *with international search report (Art. 21(3))*
- *with amended claims (Art. 19(1))*

MULTI-PART LABEL SYSTEMS

BACKGROUND

[0001] Labels are commonly used to secure printed indicia to packages to indicate shipping or other information. In the instance of a shipping use, a separate packing list may be enclosed within a package shipped to the customer containing a purchased item.

[0002] There is significant demand for a labeling method that allows automatic printing and application of a lower label and an upper label to a surface. For example, there is significant demand for a labeling method that allows automatic printing and application of a packing list and shipping label to the surface of a sealed carton. Because the carton is sealed prior to packing list generation, it is not efficient to open it to insert a packing list. High volume shipping of such packages requires rapid attachment of a packing list and a shipping label to the package. It is preferred to conceal the information of the packing list until the final recipient receives the shipped package.

[0003] Complicated methods have been implemented for application of a lower label and an upper label to a surface. For example, where a packing list and shipping label are to be applied to the surface of a sealed carton, complicated methods have been implemented in which a packing list is applied and adhered as a pattern adhesive label atop a carton, using a first roll of labels (packing list labels) and a first label applicator. After the packing list label is applied, an address label is applied and adhered atop the packing list label, to conceal the packing list information, using a second roll of labels (address labels) and a second label applicator. Such methods have many shortcomings. For example, precise timing between the packing list application and the shipping label application is required to properly align the two labels, and to avoid mismatches between the packing list and the shipping label (e.g., where the packing list contains information about goods to be shipped to a first customer and the shipping label contains the address of a different customer. In addition, because two printers and two label applicators, along with related hardware and software, are required to apply a packing list and shipping label in sequence, such methods require significant floor space and investment.

[0004] For the foregoing reasons, it is desired to provide labeling methods that allows automatic printing and application of a lower label and an upper label to a surface while avoiding the many shortcomings of existing labeling methods. For the foregoing reasons, it is desired to

provide labeling methods that allows automatic printing and application of a packing list label and shipping label to the surface of a sealed carton while avoiding the many shortcomings of existing labeling methods.

SUMMARY

[0005] The present disclosure includes disclosure of at least one system of labels for automatic application to a surface. In at least one embodiment, a label system according to the present disclosure comprises a carrier material, an upper label, and a lower label. An upper label of at least one such embodiment comprises a top surface and an opposing undersurface, the top surface and the undersurface having a leading edge and a trailing edge, and the undersurface in contact with the carrier material. A lower label of at least one such embodiment comprises a top side and an opposing underside, the top side and the underside having a leading margin and a trailing margin, and the underside being in contact with the carrier material. According to at least one such embodiment of the present disclosure, the upper label and the lower label are in contact with the carrier material in adjacent positions with the trailing edge adjacent to the leading margin, and the upper label and the lower label are configured for dispensing sequentially from the carrier material onto a label applicator apparatus such that when the upper label and the lower label are dispensed onto the label applicator apparatus the lower label is positioned against the undersurface of the upper label prior to attachment of the upper label and the lower label to an article.

[0006] In an aspect of at least one embodiment of the present disclosure, an upper label comprises a removable segment and a lower label comprises a removable region, and when the upper label and the lower label are dispensed onto a label applicator apparatus, the removable segment and the removable region are in registration.

[0007] In an aspect of at least one embodiment of the present disclosure, an undersurface comprises a zone with reduced adhesive properties and an underside comprises an area with reduced adhesive properties, and when an upper label and a lower label are dispensed onto a label applicator apparatus the zone with reduced adhesive properties and the area with reduced adhesive properties are in registration.

[0008] In an aspect of at least one embodiment of the present disclosure, the zone with reduced adhesive properties comprises an adhesive layer covered with an adhesive deadening agent.

[0009] In an aspect of at least one embodiment of the present disclosure, the area with reduced adhesive properties comprises an adhesive layer covered with an adhesive deadening agent.

[0010] In an aspect of at least one embodiment of the present disclosure, an upper label comprises one or more holes therethrough, and when the upper label and a lower label are dispensed onto a label applicator apparatus, the lower label is held in position against the undersurface of the upper label by a vacuum force generated by the label applicator apparatus, the vacuum force acting through the one or more holes.

[0011] In an aspect of at least one embodiment of the present disclosure, all of the underside comprises reduced adhesive properties.

[0012] In an aspect of at least one embodiment of the present disclosure, all of the underside comprises an adhesive layer covered with an adhesive deadening agent.

[0013] In an aspect of at least one embodiment of the present disclosure, the undersurface comprises pressure sensitive adhesive that removably adheres the undersurface to the carrier material.

[0014] In at least one embodiment, a label system according to the present disclosure comprises a carrier material, an upper label, and a lower label. An upper label of at least one such embodiment is removably adhered to the carrier material, and comprises a top surface, an undersurface, and a removable segment. An upper label of at least one such embodiment is bounded by a leading edge, a trailing edge, and first and second side edges. The undersurface of an upper label of at least one such embodiment comprises adhesive on at least a portion thereof and such an upper label is removably adhered to the carrier material by the adhesive. A lower label of at least one such embodiment is removably adhered to the carrier material in a position on the carrier material adjacent to the upper label and comprises a top side and an opposing underside. A lower label of at least one such embodiment is bounded by a leading margin, a trailing margin, and a first and second side margins. According to at least one such embodiment of the present disclosure, the upper label and the lower label are configured for dispensing sequentially from the carrier material onto a label applicator apparatus, such that when the upper

label and the lower label are dispensed onto the label applicator apparatus the top surface is positioned against the label applicator apparatus, the top side of lower label is positioned against the undersurface of the upper label, and the underside is exposed.

[0015] In an aspect of at least one embodiment of the present disclosure, the top side of an upper label comprises a first surface area circumscribed by the leading margin, the trailing margin, and the first and second side margins, and the top surface of a lower label comprises a second surface area circumscribed by the leading edge, the trailing edge, and the first and second side edges, and the second surface area is not larger than the first surface area.

[0016] In at least one embodiment, a label system according to the present disclosure comprises a carrier material, a removable upper label on the carrier material, and a removable lower sheet on the carrier material in a position on the carrier material adjacent to the upper label. An upper label of at least one such embodiment comprises a top surface and an opposing undersurface, the undersurface facing the carrier material. A lower sheet of at least one such embodiment comprises a top side and an opposing underside, the underside facing the carrier material. According to at least one such embodiment of the present disclosure, wherein the upper label and the lower sheet are configured for dispensing sequentially from the carrier material onto a label applicator apparatus such that the top side of the lower sheet is positioned against the undersurface when the upper label and the lower sheet are dispensed onto the label applicator apparatus.

[0017] In an aspect of at least one embodiment of the present disclosure, an upper label comprises a removable segment, and a lower sheet comprises a removable region, and when the lower sheet is dispensed onto the label applicator apparatus, the removable segment and the removable region are in registration.

[0018] In an aspect of at least one embodiment of the present disclosure, the undersurface of an upper label comprises a zone with reduced adhesive properties, and the underside of a lower sheet comprises an area with reduced adhesive properties, and when the lower sheet is dispensed onto the label applicator apparatus, the zone with reduced adhesive properties and the area with reduced adhesive properties are in registration.

[0019] In an aspect of at least one embodiment of the present disclosure, the zone with reduced adhesive properties comprises an adhesive layer covered with an adhesive deadening agent.

[0020] In an aspect of at least one embodiment of the present disclosure, the area with reduced adhesive properties comprises an adhesive layer covered with an adhesive deadening agent.

[0021] In an aspect of at least one embodiment of the present disclosure, an upper label comprises one or more holes therethrough, and a lower sheet is held in position against the undersurface of the upper label by the vacuum force generated by a label applicator apparatus, the vacuum force acting through the one or more holes.

[0022] In an aspect of at least one embodiment of the present disclosure, a lower sheet is held in position against the undersurface of the upper label by a vacuum force generated by a label applicator apparatus.

[0023] In an aspect of at least one embodiment of the present disclosure, all of the underside of a lower sheet comprises reduced adhesive properties.

[0024] In an aspect of at least one embodiment of the present disclosure, all of the underside of a lower sheet comprises an adhesive layer covered with an adhesive deadening agent.

[0025] In an aspect of at least one embodiment of the present disclosure, the undersurface of an upper label comprises adhesive, and when a lower sheet is dispensed onto the label applicator apparatus the adhesive on the undersurface adhesively interacts with the top side of the lower sheet.

[0026] In at least one embodiment, the present disclosure includes disclosure of a method of assembling a multi-layer label comprising the steps of providing a label dispensing apparatus, the label dispensing apparatus comprising a dispensing mechanism and a receptacle; providing a carrier material to the label dispensing apparatus, the carrier material comprising a first label thereon and a second label thereon in a position on the carrier material adjacent to the first label, wherein the first label and the second label are removably adhered to the carrier material in a non-overlapping arrangement, the first label comprising a top side and an opposing underside, the underside facing the carrier material, the second label comprising a top surface and an opposing undersurface, the undersurface facing the carrier material; with the label dispensing apparatus, dispensing the first label from the carrier material onto the receptacle, whereby the underside of the first label is against the receptacle and the top side of the first label is exposed; while the first label is on the receptacle, with the label dispensing apparatus,

dispensing the second label from the carrier material, wherein the second label aligns on the first label such that the second label is layered over and aligned with the first label with the undersurface of the second label in contact with the top side of the first label.

[0027] In an aspect of at least one embodiment of the present disclosure, the second label comprises a displaceable segment, and the first label comprises a removable region, and after the second label is dispensed onto the receptacle, the displaceable segment and the removable region are in registration.

[0028] In an aspect of at least one embodiment of the present disclosure, the undersurface comprises a zone with reduced adhesive properties, and the underside comprises an area with reduced adhesive properties, and after the second label is dispensed onto the receptacle, the zone with reduced adhesive properties and the area with reduced adhesive properties are in registration.

[0029] In an aspect of at least one embodiment of the present disclosure, the undersurface comprises exposed adhesive.

[0030] In an aspect of at least one embodiment of the present disclosure, the second label comprises a removable segment.

[0031] In an aspect of at least one embodiment of the present disclosure, the second label comprises one or more holes therethrough.

[0032] In at least one embodiment, the present disclosure includes disclosure of a method of applying a first label and a second label to a surface, the method comprising the steps of providing a label dispensing apparatus, the label dispensing apparatus comprising a dispensing mechanism and a receptacle; providing a carrier material to the label dispensing apparatus, the carrier material comprising a first label removably adhered thereto and a second label removably adhered thereto in a position on the carrier material adjacent to the first label, the first label comprising a top side, and an underside, the first label being bounded by a leading edge, a trailing edge, and first and second side edges, the underside comprising adhesive on at least a portion thereof, the underside removably adhered to the carrier material by the adhesive, the second label comprising a top side and an opposing undersurface, the second label being bounded by a leading margin, a trailing margin, and first and second side margins; dispensing the first label onto a receptacle, whereby the underside of the first label is adjacent to the receptacle and the top side is exposed; advancing the second label with label dispensing apparatus; while

the first label is on the receptacle, dispensing the second label onto the receptacle, wherein the second label aligns on the first label such that the second label is layered over and aligned with the first label with the undersurface of the second label in contact with the top side of the first label; and applying the second label and the first label to a surface simultaneously, whereby after application the underside of the first label is in contact with the surface and the undersurface of the second label is in contact with the top side of the first label and adhered to the surface.

[0033] In an aspect of at least one embodiment of the present disclosure, the second label comprises a displaceable segment, and wherein the first label comprises a removable region, and wherein after the second label is dispensed onto the receptacle, the displaceable segment and the removable region are in registration.

[0034] In at least one embodiment, the present disclosure includes disclosure of a method of applying a first label and a second label to a container, the method comprising the steps of providing a carrier material, the carrier material comprising a first label removably adhered thereto and a second label removably adhered thereto in a position on the carrier adjacent to the first label, the carrier material comprising a release coating on a surface thereof, the first label comprising a top side and an opposing underside, the top side and the underside being bounded by a leading margin, a trailing margin, and first and second side margins, the top side comprising a first surface area, the underside comprising adhesive on at least a portion thereof, the underside removably adhered to the release coating by the adhesive, the second label comprising a top surface, and an undersurface, the top surface and the undersurface being bounded by a leading edge, a trailing edge, and first and second side edges, the top surface comprising a second surface area, the second surface area being at least as large as the first surface area, the undersurface comprising adhesive on at least a portion thereof, the undersurface removably adhered to the release coating by the adhesive; dispensing the second label onto a receptacle, whereby the undersurface of the first label is against the receptacle and the top surface is exposed; advancing the second label toward the receptacle; while the first label is against the receptacle, dispensing the second label onto the receptacle, wherein the second label aligns on the first label such that the second label is layered over and aligned with the first label with the undersurface of the second label in contact with the top side of the first label; and applying the second label and the first label to a surface simultaneously, whereby after

application the underside of the first label is adhered to the surface and the undersurface of the second label is adhered to the surface.

BRIEF DESCRIPTION OF THE DRAWINGS

[0035] The features and advantages of this disclosure, and the manner of attaining them, will be more apparent and better understood by reference to the following descriptions of the disclosed methods and systems, taken in conjunction with the accompanying drawings, wherein:

[0036] Figure 1 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0037] Figure 2 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0038] Figure 3A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0039] Figure 3B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0040] Figures 4A-B show side views of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0041] Figure 5 shows the underside of a label applicator after an upper label and a lower label according to at least one embodiment of the present disclosure have been dispensed thereon.

[0042] Figure 6 shows a side view of the application of an upper label and a lower label according to at least one embodiment of the present disclosure to a surface of a container.

[0043] Figure 7 shows an upper label and a lower label according to at least one embodiment of the present disclosure adhered to a surface of a container.

[0044] Figures 8A-B show an embodiment of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0045] Figure 9A shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0046] Figure 9B shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0047] Figure 10A shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0048] Figure 10B shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0049] Figure 11A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0050] Figure 11B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0051] Figures 12A-B show side views of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0052] Figure 13 shows the underside of a label applicator after an upper label and a lower label according to at least one embodiment of the present disclosure have been dispensed thereon.

[0053] Figure 14 shows a side view of the application of an upper label and a lower label according to at least one embodiment of the present disclosure to a surface of a container.

[0054] Figure 15 shows an upper label and a lower label according to at least one embodiment of the present disclosure adhered to a surface of a container.

[0055] Figures 16A-B show a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0056] Figure 17 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0057] Figure 18 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0058] Figure 19A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0059] Figure 19B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0060] Figure 20 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0061] Figure 21 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0062] Figure 22A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0063] Figure 22B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0064] Figure 23 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0065] Figure 24 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0066] Figure 25A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0067] Figure 25B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0068] Figure 26 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0069] Figure 27 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0070] Figure 28 shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0071] Figure 29 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0072] Figure 30 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0073] Figure 31 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0074] Figure 32 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0075] Figure 33 shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0076] Figure 34 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0077] Figure 35 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0078] Figure 36 shows two labels dispensed from a label printer onto a tray for future application to a surface, according to at least one embodiment of the present disclosure.

[0079] Figure 37 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0080] Figure 38 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0081] Figure 39 shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0082] Figure 40 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0083] Figure 41 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0084] Figure 42 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0085] Figure 43 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0086] Figure 44 shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0087] Figure 45 shows a multi-part upper and lower label system according to at least one embodiment of the present disclosure.

[0088] Figure 46 shows the underside of a lower label and the undersurface of an upper label according to at least one embodiment of the present disclosure.

[0089] Figure 47 shows two labels dispensed from a label printer onto a tray for future application to a surface, according to at least one embodiment of the present disclosure.

DESCRIPTION

[0090] For the purposes of promoting an understanding of the principles of the present disclosure, reference will now be made to the embodiments illustrated in the drawings, and

specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of this disclosure is thereby intended.

[0091] Figure 1 shows a multi-part upper and lower label system 10 according to at least one embodiment of the present disclosure. Shown in Figure 1 are lower label 14 and upper label 16. In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, a plurality of lower labels 14 and upper labels 16 reside alternately on carrier 12. In at least one embodiment of a multi-part upper and lower label system 10 according to the present disclosure, each lower label 14 comprises a packing list label, and each upper label 16 comprises a shipping label.

[0092] According to at least one embodiment of a multi-part upper and lower label system according to the present disclosure, lower label 14 is bounded by leading edge 18, trailing edge 22, and side edges 20 and 24. One or more lines of weakness 36 define a boundary of removable region 44. In at least one embodiment of the present disclosure where lower label 14 comprises a packing list label, removable region 44 comprises a removable packing list. Frame 40 exists between a line of weakness 36 and leading edge 18, trailing edge 22, and side edges 20 and 24.

[0093] According to at least one embodiment of a multi-part upper and lower label system according to the present disclosure, upper label 16 is bounded by leading edge 26, trailing edge 30, and side edges 28 and 32. One or more lines of weakness 38 define a boundary of removable segment 46. Frame 42 lies between line of weakness 38 and leading edge 26, trailing edge 30, and side edges 28 and 32.

[0094] According to at least one embodiment of a multi-part upper and lower label system according to the present disclosure, the area of lower label 14 bounded by leading edge 18, trailing edge 22, and side edges 20 and 24 is greater than the area of upper label 16 bounded by leading edge 26, trailing edge 30, and side edges 28 and 32. According to at least one embodiment of a multi-part upper and lower label system according to the present disclosure, the area of removable region 44 is no larger than the area of removable segment 46.

[0095] According to at least one embodiment of a multi-part upper and lower label system according to the present disclosure, upper label 16 and lower label 14 are deployed adjacent to each other on carrier 12 and removably adhered to carrier 12, thereby enabling upper label 16 and lower label 14 to be dispensed from carrier 12 in sequence as discussed herein.

Carrier 12 comprises, in at least one embodiment, release coating 15 on the surface of carrier 12 facing the undersides of lower label 14 and upper label 16. In at least one embodiment of the present disclosure, release coating 15 is a silicone release coating. According to at least one embodiment of label system 10 according to the present disclosure, adhesive 13 is interposed between release coat 15 and the undersides of lower label 14 and upper label 16, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 13 is a pressure sensitive adhesive.

[0096] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, carrier 12 comprises transverse stripe 34. Transverse stripe 34 comprises a color or shading of a region of carrier 12 that is different from the color of the remainder of carrier 12. In at least one embodiment, a transverse stripe 34 is located after each upper label 16 and before the adjacent lower label 14. In at least one embodiment, a transverse stripe 34 overlaps the trailing edge 30 of each upper label 16 and the leading edge 18 of each lower label 14.

[0097] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, one or more transverse stripes 34 are used in conjunction with a detection apparatus for purposes of synchronizing the dispensing of the upper label 16 and the adjacent lower label 14.

[0098] Figure 2 shows the underside of lower label 14 and the undersurface of upper label 16 according to at least one embodiment of a multi-part upper and lower label system according to the present disclosure, with carrier 12 not visible for purposes of clarity. Shown in Figure 2 is underside 1014 of lower label 14, which is bounded by leading edge 18, trailing edge 22, and side edges 20 and 24. Also shown in Figure 2 is undersurface 1016 of upper label 16, which is bounded by leading edge 26, trailing edge 30, and side edges 28 and 32.

[0099] In at least one embodiment, underside 1014 of lower label 14 comprises a first portion 1040 and a second portion 1044, separated by a line of weakness 36. First portion 1040 comprise the underside of frame 40. Second portion 1044 comprises the underside of removable region 44. In at least one embodiment, first portion 1040 comprises adhesive 13 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1044 is free of or substantially free of adhesive. In at least one embodiment, second portion 1044 comprises adhesive 13 on all of or substantially all of or a majority of its surface area, but

an adhesive deadening agent 17 such as, for example, a non-adhesive varnish, covers adhesive 13 in those areas thereby rendering adhesive 13 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 17 is selected so as to not render adhesive 13 completely ineffective in those areas treated by adhesive deadening agent 17. In such an embodiment, after treatment of adhesive 13 with adhesive deadening agent 17, the treated areas retain a slight tackiness.

[00100] In at least one embodiment of the present disclosure, undersurface 1016 of upper label 16 comprises a first portion 1042 and a second portion 1046, separated by a line of weakness 38. First portion 1042 comprises the undersurface of frame 42. Second portion 1046 comprises the undersurface of removable segment 46. In at least one embodiment, first portion 1042 comprises adhesive 13 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1046 is free of or substantially free of adhesive. In at least one embodiment, second portion 1046 comprises adhesive 13 on all of or substantially all of or a majority of its surface area, but an adhesive deadening agent 17 thereby such as, for example, a non-adhesive varnish, covers adhesive 13 in those areas rendering adhesive 13 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 17 is selected so as to not render adhesive 13 completely ineffective in those areas treated by adhesive deadening agent 17. In such an embodiment, after treatment of adhesive 13 with adhesive deadening agent 17, the treated areas retain a slight tackiness.

[00101] Figure 3A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line III-III of Figure 1. The multi-part upper and lower label system is shown in Figure 3A in a semi-exploded state for purposes of clarity. Shown in Figure 3A are carrier 12, adhesive 13, lower label 14 comprising leading edge 18 and trailing edge 22, release coating 15, and upper label 16 comprising leading edge 26 and trailing edge 30. As shown in this embodiment of a multi-part upper and lower label system according to the present disclosure, second portion 1044 and second portion 1046 are free of adhesive 13.

[00102] Figure 3B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line III-III of Figure 1. The multi-part upper and lower label system is shown in Figure 3B in a semi-exploded state for purposes of clarity. Shown in Figure 3B are carrier 12, adhesive 13, lower label 14

comprising leading edge 18 and trailing edge 22, release coating 15, upper label 16 comprising leading edge 26 and trailing edge 30, and adhesive deadening agent 17. As shown in this embodiment of a multi-part upper and lower label system according to the present disclosure, second portion 1044 comprises adhesive 13 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 17 such as, for example, a non-adhesive varnish, covers adhesive 13 in those areas. Second portion 1046 also comprises adhesive 13 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 17 such as, for example, a non-adhesive varnish, covers adhesive 13 in those areas.

[00103] Figures 4A-B show side views of a multi-part upper and lower label system according to at least one embodiment of the present disclosure while in use. As shown in Figure 4A, carrier 12 with upper label 16 and lower label 14 thereon is advanced in direction 508. Carrier 12 is routed around member 502, causing upper label 16 to be dispensed from carrier 12 beginning with leading edge 26. At least a portion of undersurface 1016 of upper label 16 comprises adhesive 13 after it is dispensed from carrier 12. As upper label 16 is dispensed from carrier 12, upper label 16 passes under label applicator 500. Force 504 generated by label applicator 500 causes upper label 16 to be lifted and held against screen 506. Screen 506 forms a lower surface of label applicator 500. In at least one embodiment of the present disclosure, force 504 is a vacuum force. In at least one embodiment of the present disclosure, force 504 is an electrostatic force.

[00104] Turning now to Figure 4B, after upper label 16 is dispensed from carrier 12, carrier 12 with lower label 14 thereon is advanced in direction 508. Carrier 12 is routed around member 502, causing lower label 14 to be dispensed from carrier 12 beginning with leading edge 18. At least a portion of underside 1014 of lower label 14 comprises adhesive 13 after it is dispensed from carrier 12. As lower label 14 is dispensed from carrier 12, lower label 14 passes under label applicator 500. Force 504 generated by label applicator 500 causes lower label 14 to be lifted and held against, and in registration with, upper label 16. Because in such an embodiment of a multi-part upper and lower label system according to the present disclosure the area of lower label 14 is greater than the area of upper label 16, force 504 acts on the edges of lower label 14 to hold lower label 14 against screen 506. Undersurface 1016 begins to be adhered to lower label 14 by adhesive 13.

[00105] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, prior to the time upper label 16 is dispensed from carrier 12, indicia is printed on or applied to upper label 16. In an embodiment of applied upper and lower label system according to the present disclosure where upper label 16 is a shipping label, indicia, such as, for example, destination address and/or other relevant shipping indicia, may be printed on or applied to upper label 16.

[00106] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, prior to the time lower label 14 is dispensed from carrier 12, indicia is printed on or applied to lower label 14. In an embodiment of applied upper and lower label system according to the present disclosure where lower label 14 is a packing list label, indicia, such as, for example, container contents and/or other packing list indicia, may be printed on or applied to lower label 14.

[00107] In at least one embodiment, label applicator 500 comprises a printing capability such as, for example, a thermal transfer printer or a direct thermal printer. In such an embodiment, indicia may be applied to upper label 16 and/or lower label 14 by label applicator 500.

[00108] Figure 5 shows the underside of label applicator 500 after upper label 16 and lower label 14 have been dispensed thereon, according to at least one embodiment of a multi-part upper and lower label system according to the present disclosure. Visible in Figure 5 is screen 506. As shown in Figure 5, underside 1014 of lower label 14 is visible. From the point of view shown in Figure 5, lower label 14 fully obscures upper label 16, although upper label 16 is in registration with lower label 14, between lower label 14 and screen 506. Adhesive 13 is present in an effective amount in first portion 1040. Second portion 1044 comprises no more than very limited adhesive properties.

[00109] Figure 6 shows a side view of the application of upper label 16 and lower label 14 to surface 601 of container 600, according to at least one embodiment of the present disclosure. As shown in Figure 6, label applicator 500 moves in direction 602, thereby moving upper label 16 and lower label 14 in direction 604 until the underside 1014 of lower label 14 is in contact with surface 601 of container 600. The pressure of label applicator 500 against surface 601 of container 600 causes adhesive 13 to adhere the underside 1014 of lower label 14 to surface 601 of container 600, and completes the adhesion of undersurface 1016 to lower label 14.

[00110] Figure 7 shows lower label 14 and upper label 16 adhered to surface 601 of container 600, according to at least one embodiment of the present disclosure. As shown in Figure 7, lower label 14 and upper label 16 are in registration. A line of weakness 38 is visible on upper label 16.

[00111] Figures 8A-B show an embodiment of a multi-part upper and lower label system according to the present disclosure. As shown in Figure 8A, removable segment 46 of upper label 16 is partially removed from upper label 16 along a line of weakness 38. Removing segment 46 in this fashion reveals removable region 44 of lower label 14. In an embodiment of applied upper and lower label system according to the present disclosure where lower label 14 is a packing list label, removable region 44 may comprise a removable packing list. Because in such an embodiment of the present disclosure underside 1046 has no more than very limited adhesive properties, removable region 44 is not damaged or defaced by removing segment 46. As segment 46 is removed, frame 42 of upper label 16 remains adhered to lower label 14.

[00112] As shown in Figure 8B, removable segment 46 of upper label 16 is fully removed from upper label 16 along a line of weakness 38. Removable region 44 may be removed from lower label 14 along a line of weakness 36. In an embodiment of applied upper and lower label system according to the present disclosure where lower label 14 is a packing list label, removable region 44 may comprise a removable packing list. Because in such an embodiment of the present disclosure underside 1044 has no more than very limited adhesive properties, removable region 44 is readily removable from surface 601 of container 600. After removable region 44 is removed, frame 42 of upper label 16 remains adhered to frame 40 of lower label 14, and frame 40 of lower label 14 remains adhered to surface 601 of container 600.

[00113] Figures 9A-B shows multi-part upper and lower label system 100 according to at least one embodiment of the present disclosure. Shown in Figures 9A-B are lower label 114 and upper label 116. In at least one embodiment of the present disclosure, lower label 114 and upper label 116 reside adjacent to each other on carrier 112. In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, a plurality of lower labels 114 and upper labels 116 reside alternately on carrier 112. In at least one embodiment of a multi-part upper and lower label system 100 according to the present disclosure, each lower label 114 comprises a packing list label, and each upper label 116 comprises a shipping label.

[00114] According to at least one embodiment of the present disclosure, lower label 114 comprises leading edge 118, trailing edge 122, side edges 120 and 124, side tabs 131 and 133, trailing tab 135, and removable region 144. In an embodiment of multi-part upper and lower label system 100 according to the present disclosure such as is shown in Figure 9A, a trailing edge of side tabs 131 and 133 is substantially even with trailing edge 122. In an embodiment of multi-part upper and lower label system 100 according to the present disclosure such as is shown in Figure 9B, a trailing edge of side tabs 131 and 133 is not even with trailing edge 122. One or more lines of weakness 136 and 137 define a boundary between removable region 144 and side tabs 131 and 133, respectively. One or more lines of line of weakness 139 define a boundary between removable region 144 and trailing tab 135. In at least one embodiment of the present disclosure, removable region 144 comprises a removable packing list.

[00115] According to at least one embodiment of the present disclosure, upper label 116 is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132. One or more lines of weakness 138 define a boundary of removable segment 146. Frame 142 lies between a line of weakness 138 and leading edge 126, trailing edge 130, and side edges 128 and 132. According to at least one embodiment of the present disclosure, upper label 116 comprises one or more holes 147. Holes 147a, 147b, 147c, 147d, 147e, 147f, 147g, and 147h are shown in the embodiment of label system 100 of Figures 9A-B. Other embodiments of label system 100 may have a greater number or lesser number of holes. According to at least one embodiment of the present disclosure, holes 147 extend through segment 146 and carrier 112. In at least one embodiment of the present disclosure, holes 147 extend only through segment 146.

[00116] According to at least one embodiment of the present disclosure, prior to use upper label 116 and lower label 114 are deployed adjacent to each other on carrier 112, thereby enabling upper label 116 and lower label 114 to be dispensed from carrier 112 in sequence as discussed herein. Carrier 112 comprises, in at least one embodiment, release coating 115 on the surface of carrier 112 facing the undersides of lower label 114 and upper label 116. In at least one embodiment of the present disclosure, release coating 115 is a silicone release coating. According to at least one embodiment of label system 100 according to the present disclosure, adhesive 113 is interposed between release coat 115 and the undersides of lower label 114 and upper label 116, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 113 is a pressure sensitive adhesive.

[00117] In at least one embodiment, carrier 112 comprises transverse stripe 134. Transverse stripe 134 comprises a color or shading of a region of carrier 112 that is in contrast with the color of the remainder of carrier 112. In at least one embodiment, a transverse stripe 134 is located after each upper label 116 and before the adjacent lower label 114. In at least one embodiment, a transverse stripe 134 is located after each lower label 114 and before the adjacent upper label 116. In at least one embodiment, a transverse stripe 134 overlaps the trailing edge 130 of each upper label 116 and the leading edge 118 of each lower label 114.

[00118] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, one or more transverse stripes 134 are used in conjunction with a detection apparatus for purposes of synchronizing the dispensing of the upper label 116 and the adjacent lower label 114.

[00119] Figures 10A-B shows the underside of lower label 114 and the undersurface of upper label 116 according to at least one embodiment of the present disclosure, with carrier 112 not visible for purposes of clarity. Shown in Figures 10A-B is underside 1114 of lower label 114, comprising leading edge 118, trailing edge 122, side edges 120 and 124, side tabs 131 and 133, trailing tab 135, and removable region underside 1144. In an embodiment of multi-part upper and lower label system 100 according to the present disclosure such as is shown in Figure 10A, a trailing edge of side tabs 131 and 133 is substantially even with trailing edge 122. In an embodiment of multi-part upper and lower label system 100 according to the present disclosure such as is shown in Figure 10B, a trailing edge of side tabs 131 and 133 is not even with trailing edge 122. Also shown in Figures 10A-B is undersurface 1116 of upper label 116, which is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132.

[00120] In at least one embodiment, underside 1114 of lower label 114 is substantially free of adhesive. In at least one embodiment, underside 1114 of lower label 114 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but underside 1114 comprises an adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas thereby rendering adhesive 113 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 117 is selected so as to not render adhesive 113 completely ineffective in those areas treated by adhesive deadening agent 117. In such an embodiment, after treatment of adhesive 113 with adhesive deadening agent 117, the treated areas retain a slight tackiness. In at least one embodiment, all of underside 1114

is free of or substantially free of adhesive properties, although in such an embodiment underside 1114 may retain a slight tackiness. In at least one alternate embodiment, at least a portion of the underside of trailing tab 135 may comprise adhesive 113 on all of or substantially all of or a majority of its surface area. In such an embodiment, adhesive 113 serves to removably adhere lower label 114 to carrier 112 until lower label 114 is dispensed.

[00121] In at least one embodiment of the present disclosure, undersurface 1116 of upper label 116 comprises a first portion 1142 and a second portion 1146, separated by a line of weakness 138. First portion 1142 comprises the undersurface of frame 142. Second portion 1146 comprises the undersurface of removable segment 146. In at least one embodiment, first portion 1142 comprises adhesive 113 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1146 is free of or substantially free of adhesive. In at least one embodiment, second portion 1146 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but an adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas thereby rendering adhesive 113 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 117 is selected so as to not render adhesive 113 completely ineffective in those areas treated by adhesive deadening agent 117. In such an embodiment, after treatment of adhesive 113 with adhesive deadening agent 117, the treated areas retain a slight tackiness.

[00122] Figure 11A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XI-XI of Figure 9A or Figure 9B. The multi-part upper and lower label system is shown in Figure 11A in a semi-exploded state for purposes of clarity. Shown in Figure 11A are carrier 112, adhesive 113, lower label 114 including leading edge 118 and trailing tab 135, release coating 115, upper label 116 including leading edge 126 and trailing edge 130, hole 147a, and hole 147h. As shown in this embodiment of a multi-part upper and lower label system according to the present disclosure, underside 1144 and second portion 1146 are free of adhesive 113.

[00123] Figure 11B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XI-XI of Figure 9A or Figure 9B. The multi-part upper and lower label system is shown in Figure 11B in a semi-exploded state for purposes of clarity. Shown in Figure 11B are carrier 112, adhesive 113, lower label 114 including leading edge 118 and trailing tab 135, release coating 115, upper

label 116 including leading edge 126 and trailing edge 130, adhesive deadening agent 117, hole 147a, and hole 147h. In at least one other embodiment of the present disclosure, underside 1144 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas. Second portion 1146 also comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas.

[00124] Figures 12A-B show a side view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure while in use. As shown in Figure 12A, carrier 112 with upper label 116 and lower label 114 thereon is advanced in direction 508. Carrier 112 is routed around member 502, causing upper label 116 to be dispensed from carrier 112 beginning with leading edge 126. At least a portion of undersurface 1116 of upper label 116 comprises adhesive 113 after it is dispensed from carrier 112. As upper label 116 is dispensed from carrier 112, upper label 116 passes under label applicator 500. Force 504 generated by label applicator 500 causes upper label 116 to be lifted and held against screen 506. Screen 506 forms a lower surface of label applicator 500.

[00125] Turning now to Figure 12B, after upper label 116 is dispensed from carrier 112, carrier 112 with lower label 114 thereon is advanced in direction 508. Carrier 112 is routed around member 502, causing lower label 114 to be dispensed from carrier 112 beginning with leading edge 118. As lower label 114 is dispensed from carrier 112, lower label 114 passes under label applicator 500. Force 504 generated by label applicator 500 causes lower label 114 to be lifted and held against, and in registration with, upper label 116. In such an embodiment, lower label 114 is not in contact with screen 506. Because in at least one such embodiment of a multi-part upper and lower label system according to the present disclosure upper label 116 comprises one or more holes 147, even though the area of lower label 114 is less than the area of upper label 116, if force 504 is a vacuum force, force 504 acts through holes 147 in upper label 116 to hold lower label 114 against, and in registration with, upper label 116. Undersurface 1116 begins to be adhered to lower label 114 by adhesive 113.

[00126] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, prior to the time upper label 116 is dispensed from carrier 112, indicia is printed on or applied to upper label 116. In an embodiment of applied upper and

lower label system according to the present disclosure where upper label 116 is a shipping label, indicia, such as, for example, destination address and/or other relevant shipping indicia, may be printed on or applied to upper label 116.

[00127] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, prior to the time lower label 114 is dispensed from carrier 112, indicia is printed on or applied to lower label 114. In an embodiment of applied upper and lower label system according to the present disclosure where lower label 114 is a packing list label, indicia, such as, for example, container contents and/or other packing list indicia, may be printed on or applied to lower label 114.

[00128] In at least one embodiment, label applicator 500 comprises a printing capability such as, for example, a thermal transfer printer or a direct thermal printer. In such an embodiment, indicia may be applied to upper label 116 and/or lower label 114 by label applicator 500.

[00129] Figure 13 shows the underside of label applicator 500 after upper label 116 and lower label 114 have been dispensed thereon, according to at least one embodiment of a multi-part upper and lower label system according to the present disclosure. Visible in Figure 13 is screen 506. Shown in Figure 13 are undersurface 1116 comprising first portion 1142 and second portion 1146 separated by a line of weakness 138. First portion 1142 comprises effective amount of adhesive 113 on its surface area. Also shown in Figure 13 is underside 1114 of lower label 114, comprising side tabs 131 and 133, trailing tab 135, lines of weakness 136, 137, and 139, and removable region underside 1144. As shown in Figure 13, in at least one embodiment of a multi-part upper and lower label system according to the present disclosure only tabs 131, 133, and 135 come into contact with adhesive 113 on first portion 1142. Accordingly, in such an embodiment lower label 114 is adhered to undersurface 1116 only at tabs 131, 133, and 135.

[00130] Figure 14 shows a side view of the application of upper label 116 and lower label 114 to a surface 601 of container 600, according to at least one embodiment of the present disclosure. As shown in Figure 14, label applicator 500 moves in direction 602, thereby moving upper label 116 and lower label 114 in direction 604 until the underside of lower label 114 is in contact with surface 601 of container 600. The pressure of label applicator 500 against surface 601 of container 600 causes adhesive 113 to adhere the undersurface 1116 of upper label 116 to

surface 601 of container 600, and completes the adhesion of undersurface 1116 to lower label 114.

[00131] Figure 15 shows lower label 114 and upper label 116 adhered to a surface of container 600. Shown in Figure 15 is upper label 116 comprising a line of weakness 138 and removable segment 146. Lower label 114 comprising removable region 144 is concealed under upper label 116, with removable region 144 in registration with removable segment 146.

[00132] Figures 16A-B show an embodiment of a multi-part upper and lower label system according to the present disclosure. As shown in Figure 16A, removable segment 146 of upper label 116 is partially removed from upper label 116 along a line of weakness 138. Removing segment 146 in this fashion reveals removable region 144. In an embodiment of applied upper and lower label system according to the present disclosure where lower label 114 is a packing list label, removable region 144 may comprise a removable packing list. Because in such an embodiment of the present disclosure underside 1146 has no more than very limited adhesive properties, removable region 144 is not damaged or defaced by removing segment 146. As segment 146 is removed, frame 142 of upper label 116 remains adhered to lower label 114 at tabs 131, 133, and 135 and also to surface 601.

[00133] As shown in Figure 16B, removable region 144 may be removed from lower label 114 along lines of weakness 136, 137, and 139. In an embodiment of applied upper and lower label system according to the present disclosure where lower label 114 is a packing list label, removable region 144 may comprise a removable packing list. Because in such an embodiment of the present disclosure underside 1144 has no more than very limited adhesive properties, removable region 144 is readily removable from surface 601 of container 600. After removable region 144 is removed, frame 142 of upper label 116 remains adhered to surface 601 of container 600, and tabs 131, 133, and 135 are retained under frame 142.

[00134] Figure 17 shows multi-part upper and lower label system 101 according to at least one embodiment of the present disclosure. Shown in Figure 17 are lower label 114 and upper label 116. In at least one embodiment of the present disclosure, lower label 114 and upper label 116 reside adjacent to each other on carrier 112. In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, a plurality of lower labels 114 and upper labels 116 reside alternately on carrier 112. In at least one embodiment of a multi-part

upper and lower label system 101 according to the present disclosure, each upper label 116 comprises a shipping label, and each lower label 114 comprises a return label.

[00135] According to at least one embodiment of the present disclosure, lower label 114 comprises leading edge 118, trailing edge 122, side edges 120 and 124, side tabs 131 and 133, and trailing tab 135. In an embodiment of multi-part upper and lower label system 101 according to the present disclosure, a trailing edge of side tabs 131 and 133 may be substantially even with trailing edge 122.

[00136] According to at least one embodiment of the present disclosure, upper label 116 is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132. One or more lines of weakness 138 define a boundary of removable segment 146. Frame 142 lies between a line of weakness 138 and leading edge 126, trailing edge 130, and side edges 128 and 132. According to at least one embodiment of the present disclosure, upper label 116 comprises one or more holes 147. Holes 147a-147h are shown in the embodiment of label system 101 of Figure 17. Other embodiments of label system 101 may have a greater number or lesser number of holes. According to at least one embodiment of the present disclosure, holes 147 extend through segment 146 and carrier 112. In at least one embodiment of the present disclosure, holes 147 extend only through segment 146.

[00137] According to at least one embodiment of the present disclosure, prior to use upper label 116 and lower label 114 are deployed adjacent to each other on carrier 112, thereby enabling upper label 116 and lower label 114 to be dispensed from carrier 112 in sequence as discussed herein. Carrier 112 comprises, in at least one embodiment, release coating 115 on the surface of carrier 112 facing the underside of lower label 114 and undersurface of upper label 116. In at least one embodiment of the present disclosure, release coating 115 is a silicone release coating. According to at least one embodiment of label system 101 according to the present disclosure, adhesive 113 is interposed between release coat 115 and the underside of lower label 114 and undersurface of upper label 116, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 113 is a pressure sensitive adhesive.

[00138] In at least one embodiment, carrier 112 comprises transverse stripe 134. Transverse stripe 134 comprises a color or shading of a region of carrier 112 that is in contrast with the color of the remainder of carrier 112. In at least one embodiment, a transverse stripe 134 is located after each upper label 116 and before the adjacent lower label 114. In at least one

embodiment, a transverse stripe 134 is located after each lower label 114 and before the adjacent upper label 116. In at least one embodiment, a transverse stripe 134 overlaps the trailing edge 130 of each upper label 116 and the leading edge 118 of each lower label 114.

[00139] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, one or more transverse stripes 134 are used in conjunction with a detection apparatus for purposes of synchronizing the dispensing of the upper label 116 and the adjacent lower label 114.

[00140] Figure 18 shows the underside of lower label 114 and the undersurface of upper label 116 according to at least one embodiment of the present disclosure, with carrier 112 not visible for purposes of clarity. Shown in Figure 18 is underside 1114 of lower label 114, comprising leading edge 118, trailing edge 122, side edges 120 and 124, side tabs 131 and 133, and trailing tab 135. In an embodiment of multi-part upper and lower label system 101 according to the present disclosure, a trailing edge of side tabs 131 and 133 may be substantially even with trailing edge 122. Also shown in Figure 18 is undersurface 1116 of upper label 116, which is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132.

[00141] In at least one embodiment, underside 1114 of lower label 114 comprises adhesive 113 on at least a portion of its surface area. In at least one embodiment, underside 1114 of lower label 114 comprises adhesive 113 on all of or substantially all of or a majority of its surface area. In at least one embodiment of the present disclosure, undersurface 1116 of upper label 116 comprises a first portion 1142 and a second portion 1146, separated by a line of weakness 138. First portion 1142 comprises the undersurface of frame 142. Second portion 1146 comprises the undersurface of removable segment 146. In at least one embodiment, first portion 1142 comprises adhesive 113 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1146 is free of or substantially free of adhesive. In at least one embodiment, second portion 1146 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but an adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas thereby rendering adhesive 113 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 117 is selected so as to not render adhesive 113 completely ineffective in those areas treated by adhesive deadening agent 117. In such an embodiment, after treatment of adhesive 113 with adhesive deadening agent 117, the treated areas retain a slight tackiness.

[00142] Figure 19A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XIX-XIX of Figure 17. The multi-part upper and lower label system is shown in Figure 19A in a semi-exploded state for purposes of clarity. Shown in Figure 19A are carrier 112, adhesive 113, lower label 114 including leading edge 118 and trailing tab 135, release coating 115, upper label 116 including leading edge 126 and trailing edge 130, hole 147a, and hole 147h. As shown in this embodiment of a multi-part upper and lower label system according to the present disclosure, second portion 1146 is free of adhesive 113 and underside 1144 comprises adhesive 113 on all of or substantially all of or a majority of its surface area.

[00143] Figure 19B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XIX-XIX of Figure 17. The multi-part upper and lower label system is shown in Figure 19B in a semi-exploded state for purposes of clarity. Shown in Figure 19B are carrier 112, adhesive 113, lower label 114 including leading edge 118 and trailing tab 135, release coating 115, upper label 116 including leading edge 126 and trailing edge 130, adhesive deadening agent 117, hole 147a, and hole 147h. In at least one other embodiment of the present disclosure, underside 1144 comprises adhesive 113 on all of or substantially all of or a majority of its surface area. Second portion 1146 also comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in that area.

[00144] Multi-part upper and lower label system 101 according to at least one embodiment of the present disclosure may be automatically applied to a surface through the use of apparatuses and processes substantially similar to the apparatuses and processes shown and described in Figures 12A-15 and this written description. Multi-part upper and lower label system 101 according to at least one embodiment of the present disclosure may be used in a manner substantially similar to manner shown and described in Figures 16A-16B and this written description, provided that because underside 1114 of lower label 114 of multi-part upper and lower label system 101 according to at least one embodiment of the present disclosure comprises adhesive 113 on all of or substantially all of or a majority of its surface area, lower label 114 of multi-part upper and lower label system 101 is not readily removable from the surface to which it is applied. According to at least one embodiment of multi-part upper and lower label system 101

according to the present disclosure, upper label 116 comprises shipping address indicia and lower label 114 comprises return shipping address indicia. According to such an embodiment, if a container comprising upper label 116 and lower label 114 is to be returned to its source, upon receipt the recipient may remove upper label 116 to reveal return shipping address indicia on lower label 114. The container then may be shipped back to its source.

[00145] Figure 20 shows multi-part upper and lower label system 102 according to at least one embodiment of the present disclosure. Shown in Figure 20 are lower label 114 and upper label 116. In at least one embodiment of the present disclosure, lower label 114 and upper label 116 reside adjacent to each other on carrier 112. In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, a plurality of lower labels 114 and upper labels 116 reside alternately on carrier 112. In at least one embodiment of a multi-part upper and lower label system 102 according to the present disclosure, each lower label 114 comprises a packing list label, and each upper label 116 comprises a shipping label.

[00146] According to at least one embodiment of the present disclosure, lower label 114 comprises leading edge 118, trailing edge 122, side edges 120 and 124, and trailing tab 135. According to at least one embodiment of the present disclosure, upper label 116 is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132. One or more lines of weakness 138 define a boundary of removable segment 146. Frame 142 lies between a line of weakness 138 and leading edge 126, trailing edge 130, and side edges 128 and 132. According to at least one embodiment of the present disclosure, upper label 116 comprises one or more holes 147. Holes 147a-147i are shown in the embodiment of label system 102 of Figure 20. Other embodiments of label system 102 may have a greater number or lesser number of holes. According to at least one embodiment of the present disclosure, holes 147 extend through segment 146 and carrier 112. In at least one embodiment of the present disclosure, holes 147 extend only through segment 146.

[00147] According to at least one embodiment of the present disclosure, prior to use upper label 116 and lower label 114 are deployed adjacent to each other on carrier 112, thereby enabling upper label 116 and lower label 114 to be dispensed from carrier 112 in sequence as discussed herein. Carrier 112 comprises, in at least one embodiment, release coating 115 on the surface of carrier 112 facing the underside of lower label 114 and undersurface of upper label 116. In at least one embodiment of the present disclosure, release coating 115 is a silicone

release coating. According to at least one embodiment of label system 102 according to the present disclosure, adhesive 113 is interposed between release coat 115 and the underside of lower label 114 and undersurface of upper label 116, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 113 is a pressure sensitive adhesive.

[00148] In at least one embodiment, carrier 112 comprises transverse stripe 134. Transverse stripe 134 comprises a color or shading of a region of carrier 112 that is in contrast with the color of the remainder of carrier 112. In at least one embodiment, a transverse stripe 134 is located after each upper label 116 and before the adjacent lower label 114. In at least one embodiment, a transverse stripe 134 is located after each lower label 114 and before the adjacent upper label 116. In at least one embodiment, a transverse stripe 134 overlaps the trailing edge 130 of each upper label 116 and the leading edge 118 of each lower label 114.

[00149] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, one or more transverse stripes 134 are used in conjunction with a detection apparatus for purposes of synchronizing the dispensing of the upper label 116 and the adjacent lower label 114.

[00150] Figure 21 shows the underside of lower label 114 and the undersurface of upper label 116 according to at least one embodiment of the present disclosure, with carrier 112 not visible for purposes of clarity. Shown in Figure 21 is underside 1114 of lower label 114, comprising leading edge 118, trailing edge 122, side edges 120 and 124, and trailing tab 135. Also shown in Figure 21 is undersurface 1116 of upper label 116, which is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132.

[00151] In at least one embodiment, underside 1114 of lower label 114 is free of or substantially free of adhesive. In at least one embodiment, underside 1114 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but an adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas thereby rendering adhesive 113 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 117 is selected so as to not render adhesive 113 completely ineffective in those areas treated by adhesive deadening agent 117. In such an embodiment, after treatment of adhesive 113 with adhesive deadening agent 117, the treated areas retain a slight tackiness.

[00152] In at least one embodiment of the present disclosure, undersurface 1116 of upper label 116 comprises a first portion 1142, a second portion 1146, and a third portion 1147. First portion 1142 and third portion 1147 comprise the undersurface of frame 142. Second portion 1146 comprises the undersurface of removable segment 146. In at least one embodiment of the present disclosure, first portion 1142 and second portion 1146 are separated by a line of weakness 138.

[00153] In at least one embodiment, first portion 1142 comprises adhesive 113 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1146 and third portion 1147 are free of or substantially free of adhesive. In at least one embodiment, second portion 1146 and third portion 1147 comprise adhesive 113 on all of or substantially all of or a majority of their surface area, but an adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas thereby rendering adhesive 113 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 117 is selected so as to not render adhesive 113 completely ineffective in those areas treated by adhesive deadening agent 117. In such an embodiment, after treatment of adhesive 113 with adhesive deadening agent 117, the treated areas retain a slight tackiness.

[00154] Figure 22A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XXII- XXII of Figure 20. The multi-part upper and lower label system is shown in Figure 22A in a semi-exploded state for purposes of clarity. Shown in Figure 22A are carrier 112, adhesive 113, lower label 114 including leading edge 118 and trailing tab 135, release coating 115, upper label 116 including leading edge 126 and trailing edge 130, hole 147a, hole 147h, hole 147i, and hole 147j. As shown in this embodiment of a multi-part upper and lower label system according to the present disclosure, second portion 1146 is free of adhesive 113 and underside 1144 is free of adhesive 113.

[00155] Figure 22B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XXII- XXII of Figure 20. The multi-part upper and lower label system is shown in Figure 22B in a semi-exploded state for purposes of clarity. Shown in Figure 22B are carrier 112, adhesive 113, lower label 114 including leading edge 118 and trailing tab 135, release coating 115, upper label 116 including leading edge 126 and trailing edge 130, adhesive deadening agent 117, hole 147a, hole

147h, hole 147i, and hole 147j. In at least one other embodiment of the present disclosure, underside 1144 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in that area. Second portion 1146 also comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in that area.

[00156] Multi-part upper and lower label system 102 according to at least one embodiment of the present disclosure may be automatically applied to a surface through the use of apparatuses and processes substantially similar to the apparatuses and processes shown and described in Figures 12A-15 and this written description. Multi-part upper and lower label system 102 according to at least one embodiment of the present disclosure may be used in a manner substantially similar to manner shown and described in Figures 16A-16B and this written description, provided that because third portion 1147 is either free of adhesive 113 or covered with an adhesive deadening agent 117, when lower label 114 is removed from the surface to which upper and lower label system 102 has been applied, all of lower label 114 including trailing tab 135 is removed from such surface.

[00157] Figure 23 shows multi-part upper and lower label system 103 according to at least one embodiment of the present disclosure. Shown in Figure 23 are lower label 114 and upper label 116. In at least one embodiment of the present disclosure, lower label 114 and upper label 116 reside adjacent to each other on carrier 112. In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, a plurality of lower labels 114 and upper labels 116 reside alternately on carrier 112. In at least one embodiment of a multi-part upper and lower label system 103 according to the present disclosure, each upper label 116 comprises a shipping label, and each lower label 114 comprises a packing list label.

[00158] According to at least one embodiment of the present disclosure, lower label 114 comprises leading edge 118, trailing edge 122, side edges 120 and 124, side tabs 131 and 133, trailing tab 135, and removable region 144. One or more lines of weakness 136 and 137 define a boundary between removable region 144 and side tabs 131 and 133, respectively. In at least one such embodiment, trailing edge 122 comprises a plurality of trailing tabs 141. In at least one embodiment of the present disclosure, removable region 144 comprises a removable packing list.

[00159] According to at least one embodiment of the present disclosure, upper label 116 is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132. One or more lines of weakness 138 define a boundary of removable segment 146. Frame 142 lies between a line of weakness 138 and leading edge 126, trailing edge 130, and side edges 128 and 132. According to at least one embodiment of the present disclosure, upper label 116 comprises one or more holes 147. Holes 147a-147h are shown in the embodiment of label system 103 of Figure 23. Other embodiments of label system 103 may have a greater number or lesser number of holes. According to at least one embodiment of the present disclosure, holes 147 extend through segment 146 and carrier 112. In at least one embodiment of the present disclosure, holes 147 extend only through segment 146.

[00160] According to at least one embodiment of the present disclosure, prior to use upper label 116 and lower label 114 are deployed adjacent to each other on carrier 112, thereby enabling upper label 116 and lower label 114 to be dispensed from carrier 112 in sequence as discussed herein. Carrier 112 comprises, in at least one embodiment, release coating 115 on the surface of carrier 112 facing the underside of lower label 114 and undersurface of upper label 116. In at least one embodiment of the present disclosure, release coating 115 is a silicone release coating. According to at least one embodiment of label system 103 according to the present disclosure, adhesive 113 is interposed between release coat 115 and the underside of lower label 114 and undersurface of upper label 116, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 113 is a pressure sensitive adhesive.

[00161] In at least one embodiment, carrier 112 comprises transverse stripe 134. Transverse stripe 134 comprises a color or shading of a region of carrier 112 that is in contrast with the color of the remainder of carrier 112. In at least one embodiment, a transverse stripe 134 is located after each upper label 116 and before the adjacent lower label 114. In at least one embodiment, a transverse stripe 134 is located after each lower label 114 and before the adjacent upper label 116. In at least one embodiment, a transverse stripe 134 overlaps the trailing edge 130 of each upper label 116 and the leading edge 118 of each lower label 114.

[00162] In at least one embodiment of a multi-part upper and lower label system according to the present disclosure, one or more transverse stripes 134 are used in conjunction with a detection apparatus for purposes of synchronizing the dispensing of the upper label 116 and the adjacent lower label 114.

[00163] Figure 24 shows the underside of lower label 114 and the undersurface of upper label 116 according to at least one embodiment of the present disclosure, with carrier 112 not visible for purposes of clarity. Shown in Figure 24 is underside 1114 of lower label 114, comprising leading edge 118, trailing edge 122, side edges 120 and 124, side tabs 131 and 133, trailing tabs 141, and removable region underside 1144. In at least one embodiment, the underside of at least one of trailing tabs 141 comprises segment 1141. According to such an embodiment, each segment 1141 comprises adhesive 113 on all of or substantially all of or a majority of its surface area. In such an embodiment, each segment 1141 comprising adhesive 113 serves to removably adhere packing list label 114 to carrier 112 until packing list label 114 is dispensed. According to such an embodiment, the rest of underside 1114 of packing list label 114 is substantially free of adhesive. In at least one embodiment, underside 1114 of packing list label 114 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but the portions of underside 1114 other than segments 1141 comprise an adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in those areas thereby rendering adhesive 113 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 117 is selected so as to not render adhesive 113 completely ineffective in those areas treated by adhesive deadening agent 117. In such an embodiment, after treatment of adhesive 113 with adhesive deadening agent 117, the treated areas retain a slight tackiness. In at least one embodiment, all of underside 1114 is free of or substantially free of adhesive properties, although in such an embodiment underside 1114 may retain a slight tackiness.

[00164] Also shown in Figure 24 is undersurface 1116 of upper label 116, which is bounded by leading edge 126, trailing edge 130, and side edges 128 and 132. In at least one embodiment of the present disclosure, undersurface 1116 of upper label 116 comprises a first portion 1142 and a second portion 1146, separated by a line of weakness 138. First portion 1142 comprises the undersurface of frame 142. Second portion 1146 comprises the undersurface of removable segment 146. In at least one embodiment, first portion 1142 comprises adhesive 113 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1146 is free of or substantially free of adhesive. In at least one embodiment, second portion 1146 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but an adhesive deadening agent 117 such as, for example, a non-adhesive varnish,

covers adhesive 113 in those areas thereby rendering adhesive 113 ineffective in those areas. In at least one embodiment of the present disclosure, adhesive deadening agent 117 is selected so as to not render adhesive 113 completely ineffective in those areas treated by adhesive deadening agent 117. In such an embodiment, after treatment of adhesive 113 with adhesive deadening agent 117, the treated areas retain a slight tackiness.

[00165] Figure 25A shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XXV- XXV of Figure 25. The multi-part upper and lower label system is shown in Figure 25A in a semi-exploded state for purposes of clarity. Shown in Figure 25A are carrier 112, adhesive 113, lower label 114 including leading edge 118, a trailing tab 141 and a segment 1141, release coating 115, upper label 116 including leading edge 126 and trailing edge 130. As shown in this embodiment of a multi-part upper and lower label system according to the present disclosure, second portion 1146 is free of adhesive 113 and underside 1144 is free of adhesive 113.

[00166] Figure 25B shows a cross-sectional view of a multi-part upper and lower label system according to at least one embodiment of the present disclosure taken on line XXV- XXV of Figure 23. The multi-part upper and lower label system is shown in Figure 25B in a semi-exploded state for purposes of clarity. Shown in Figure 25B are carrier 112, adhesive 113, lower label 114 including leading edge 118, a trailing tab 141 and a segment 1141, release coating 115, upper label 116 including leading edge 126 and trailing edge 130, and adhesive deadening agent 117. In at least one other embodiment of the present disclosure, underside 1144 comprises adhesive 113 on all of or substantially all of or a majority of its surface area, , but adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in that area.. Second portion 1146 also comprises adhesive 113 on all of or substantially all of or a majority of its surface area, but adhesive deadening agent 117 such as, for example, a non-adhesive varnish, covers adhesive 113 in that area.

[00167] Multi-part upper and lower label system 103 according to at least one embodiment of the present disclosure may be automatically applied to a surface through the use of apparatuses and processes substantially similar to the apparatuses and processes shown and described in Figures 12A-15 and this written description. Multi-part upper and lower label system 102 according to at least one embodiment of the present disclosure may be used in a manner substantially similar to manner shown and described in Figures 16A-16B and this written

description, provided that when removable region 144 is removed the surface to which it is applied, removable region 144 is separated from lower label 114 along lines of weakness 136 and 137, and by tearing trailing tabs 141.

[00168] Figure 26 shows a first and second label system 200 according to at least one embodiment of the present disclosure. Shown in Figure 26 are first label 214 and second label 216 on carrier 212. In at least one embodiment of a first and second label system according to the present disclosure, a plurality of first labels 214 and second labels 216 reside alternately on carrier 212. In at least one embodiment of a first and second label system 200 according to the present disclosure, each first label 214 comprises a packing list label, and each second label 216 comprises a shipping label.

[00169] According to at least one embodiment of a first and second label system 200 according to the present disclosure, first label 214 is bounded by leading edge 218, trailing edge 222, and side edges 220 and 224. According to at least one embodiment of a first and second label system 200 according to the present disclosure, second label 216 is bounded by leading edge 226, trailing edge 230, and side edges 228 and 232. One or more lines of weakness 238 define a boundary of removable segment 246 in second label 216. Frame 242 lies between lines of weakness 238 and leading edge 226, trailing edge 230, and side edges 228 and 232.

[00170] According to at least one embodiment of a first and second label system 200 according to the present disclosure, the area of first label 214 bounded by leading edge 218, trailing edge 222, and side edges 220 and 224 is smaller than the area of second label 216 bounded by leading edge 226, trailing edge 230, and side edges 228 and 232. According to at least one embodiment of a first and second label system according to the present disclosure, the area of first label 214 is no larger than the area of removable segment 246. According to at least one embodiment of a first and second label system 200 according to the present disclosure, second label 216 comprises a length L_1 that is the closest distance between leading edge 226 said trailing edge 230, and first label 214 comprises a length L_2 that is the closest distance between leading edge 218 and trailing edge 222, and $L_1 > L_2$. According to at least one embodiment of a first and second label system 200 according to the present disclosure, second label 216 comprises a width W_1 that is the closest distance between first side edge 228 and second side edge 232, and first label 214 comprises a width W_2 that is the closest distance between first side edge 220 and second side edge 224, and $W_1 > W_2$. According to at least one embodiment of a first and second

label system 200 according to the present disclosure, second label 216 comprises a distance D_1 that is the closest distance between parallel segments of lines of weakness 238, and $D_1 > W_2$.

[00171] According to at least one embodiment of a first and second label system according to the present disclosure, second label 216 and first label 214 are deployed adjacent to each other on carrier 212 and removably adhered to carrier 212, thereby enabling second label 216 and first label 214 to be dispensed from carrier 212 in sequence as discussed herein. Carrier 212 comprises, in at least one embodiment, release coating 215 on the surface of carrier 212 facing the undersides of first label 214 and second label 216. In at least one embodiment of the present disclosure, release coating 215 is a silicone release coating. According to at least one embodiment of label system 200 according to the present disclosure, adhesive 213 is interposed between release coat 215 and first label 214 and second label 216, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 213 is a pressure sensitive adhesive.

[00172] Figure 27 shows the underside of first label 214 and the undersurface of second label 216 according to at least one embodiment of a first and second label system according to the present disclosure, with carrier 212 not visible for purposes of clarity. Shown in Figure 27 is underside 1214 of first label 214, which is bounded by leading edge 218, trailing edge 222, and side edges 220 and 224. Also shown in Figure 27 is undersurface 1216 of second label 216, which is bounded by leading edge 226, trailing edge 230, and side edges 228 and 232.

[00173] In at least one embodiment, underside 1214 of first label 214 comprises adhesive 213 on all of or substantially all of or a majority of its surface area. In at least one embodiment of the present disclosure, undersurface 1216 of second label 216 comprises a first portion 1242 and a second portion 1246, separated by a lines of weakness 238. First portion 1242 comprises the undersurface of frame 242. Second portion 1246 comprises the undersurface of removable segment 246. In at least one embodiment, first portion 1242 comprises adhesive 213 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1246 is free of or substantially free of adhesive. In the embodiment of label system 200 shown in Figure 27, second portion 1246 comprises spot 1213 of adhesive 213 near trailing edge 230.

[00174] Figure 28 shows a cross-sectional view of a first and second label system according to at least one embodiment of the present disclosure taken on line XXVIII-XXVIII of Figure 26. The first and second label system 200 is shown in Figure 28 in a semi-exploded state

for purposes of clarity. Shown in Figure 28 are carrier 212, adhesive 213, first label 214 comprising leading edge 218 and trailing edge 222, release coating 215, and second label 216 comprising leading edge 226 and trailing edge 230.

[00175] Figure 29 shows a first and second label system 200 according to at least one embodiment of the present disclosure, comprising first label 214 and second label 216 as discussed hereinabove. Figure 30 shows the underside of first label 214 and the undersurface of second label 216, with carrier 212 not visible for purposes of clarity. In the embodiment of first and second label system 200 shown in Figures 29-30, second label 216 comprises hole 239. Other embodiments of label system 200 may have a greater number of holes. According to at least one embodiment of the present disclosure, hole 239 extends through removable segment 246 and carrier 212. In at least one embodiment of the present disclosure, hole 239 extends only through removable segment 246.

[00176] Figure 31 shows a first and second label system 300 according to at least one embodiment of the present disclosure. Shown in Figure 31 are first label 314 and second label 316 on carrier 312. In at least one embodiment of a first and second label system according to the present disclosure, a plurality of first labels 314 and second labels 316 reside alternately on carrier 312. In at least one embodiment of a first and second label system 300 according to the present disclosure, each first label 314 comprises a packing list label, and each second label 316 comprises a shipping label.

[00177] According to at least one embodiment of a first and second label system according to the present disclosure, first label 314 is bounded by leading edge 318, trailing edge 322, and side edges 320 and 324. One or more lines of weakness 336 define a boundary of removable region 344 in first label 314. In at least one embodiment of the present disclosure where first label 314 comprises a packing list label, removable region 344 comprises a removable packing list. Frame 340 exists between line of weakness 336, and leading edge 318 and side edges 320 and 324. Frame 340 comprises leading frame segment 333.

[00178] According to at least one embodiment of a first and second label system according to the present disclosure, second label 316 is bounded by leading edge 326, trailing edge 330, and side edges 328 and 332. Second label 316 comprises tear strip 339 framed by parallel lines of weakness 343, 347. Lines of weakness 338 define a boundary of displaceable segment 346. According to at least one embodiment of a first and second label system according

to the present disclosure, the area of first label 314 bounded by leading edge 318, trailing edge 322, and side edges 320 and 324 is smaller than the area of second label 316 bounded by leading edge 326, trailing edge 330, and side edges 328 and 332.

[00179] According to at least one embodiment of a first and second label system 300 according to the present disclosure, first label 314 and second label 316 are deployed adjacent to each other on carrier 312 and removably adhered to carrier 312, thereby enabling first label 314 and second label 316 to be dispensed from carrier 312 in sequence as discussed herein. Carrier 312 comprises, in at least one embodiment, release coating 315 on the surface of carrier 312 facing first label 314 and second label 316. In at least one embodiment of the present disclosure, release coating 315 is a silicone release coating. According to at least one embodiment of label system 300 according to the present disclosure, adhesive 313 is interposed between release coat 315 and the undersides of first label 314 and second label 316, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 313 is a pressure sensitive adhesive.

[00180] Figure 32 shows the underside of first label 314 and the undersurface of second label 316 according to at least one embodiment of a first and second label system according to the present disclosure, with carrier 312 not visible for purposes of clarity. Shown in Figure 32 is underside 1314 of first label 314, which is bounded by leading edge 318, trailing edge 322, and side edges 320 and 324. Also shown in Figure 32 is undersurface 1316 of second label 316, which is bounded by leading edge 326, trailing edge 330, and side edges 328 and 332.

[00181] In at least one embodiment, underside 1314 of first label 314 comprises a first portion 1340 and a second portion 1344, separated by a line of weakness 336. First portion 1340 comprise the underside of frame 340. Second portion 1344 comprises the underside of removable region 344. In at least one embodiment, first portion 1340 comprises adhesive 313 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1344 is free of or substantially free of adhesive.

[00182] In at least one embodiment of the present disclosure, undersurface 1316 of second label 316 comprises a first portion 1342 and a second portion 1346. In at least one embodiment, first portion 1342 comprises adhesive 313 on all of or substantially all of or a majority of its surface area. First portion 1342 comprises leading adhesive segment 335. In at least one embodiment, second portion 1346 is free of or substantially free of adhesive, as is the undersurface of tear strip 339.

[00183] Figure 33 shows a cross-sectional view of a first and second label system according to at least one embodiment of the present disclosure taken on line XXXIII-XXXIII of Figure 31. The first and second label system is shown in Figure 33 in a semi-exploded state for purposes of clarity. Shown in Figure 33 are carrier 312, adhesive 313, first label 314 comprising leading edge 318 and trailing edge 322, release coating 315, and second label 316 comprising leading edge 326 and trailing edge 330.

[00184] Figure 34 shows a first and second label system 300 according to at least one embodiment of the present disclosure, comprising first label 314 and second label 316 as discussed hereinabove. Figure 35 shows the underside of first label 314 and the undersurface of second label 316, with carrier 312 not visible for purposes of clarity. In the embodiment of first and second label system 300 shown in Figures 34-35, second label 316 comprises hole 341. Other embodiments of label system 300 may have a greater number of holes. According to at least one embodiment of the present disclosure, hole 341 extends through second label 316 and carrier 312. In at least one embodiment of the present disclosure, hole 341 extends only through second label 316.

[00185] Figure 36 shows the dispensing of first and second label system 300 from label printer 3600 according to at least one embodiment of the present disclosure. Shown in Figure 36 is label printer 3600, comprising a printing mechanism (not shown), dispensing mechanism 3601, and tray 3605. Label printer 3600 may comprise an ink jet printer, a laser printer, a thermal transfer printer, a direct thermal printer, or another type of printing device capable of applying indicia to first label 314 and second label 316. According to at least one embodiment of the present disclosure, tray 3605 is horizontal or substantially horizontal. In other embodiments tray 3605 may be oriented at an inclining or declining angle. As shown in Figure 36, according to at least one embodiment of the present disclosure, a plurality of first labels 314 and second labels 316 are provided to label printer 3600 in an alternating arrangement on a carrier 312. For example, a plurality of first labels 314 and second labels 316 are removably adhered to carrier 312 in a rolled configuration or in a fan-folded configuration, and are supplied to label printer 3600 in a manner anticipating printing by and dispensing from label printer 3600. As shown in Figure 36, according to at least one embodiment of the present disclosure first label 314 and second label 316 are dispensed in sequence from label printer 3600. First label 314 and second label 316 are dispensed by dispensing mechanism 3601 of label printer 3600 in the

direction of arrow 3602, and then come to rest, in registration with one another, on tray 3605 of label printer 3600. Thereafter, the pair of first label 314 and second label 316, in registration with one another and adhered together, can be retrieved from tray 3605, either mechanically (such as, for example, by a label applicator apparatus) or by hand, and applied to a surface (such as, for example, surface 601 of container 600), either mechanically (such as, for example, by a label applicator apparatus) or by hand.

[00186] In at least one embodiment of the present disclosure, prior to or in conjunction with the dispensing of first label 314 onto tray 3605 of label printer 3600, indicia is added to removable region 344 of first label 314 by the printing mechanism (not shown) of label printer 3600. For example, where first label 314 is intended to serve as a packing list, such indicia may comprise the contents of a container to which first label 314 will be adhered, such as container 600.

[00187] First label 314 is dispensed from label printer 3600 such that underside 1314 of first label 314 faces tray 3605 of label printer 3600. First label 314 moves in the direction shown by arrow 3603 until underside 1314 of first label 314 comes into contact with tray 3605 of label printer 3600. Because no pressure is exerted on first label 314, adhesive 313 on underside 1314 of first label 314 does not adhere first portion 1340 of first label 314 to tray 3605 of label printer 3600. In at least one embodiment, tray 3605 comprises a non-stick surface that retards adherence of adhesive 313 to tray 3605. Second portion 1344 of first label 314 also is adjacent to tray 3605 of label printer 3600, but because second portion 1344 of first label 314 is free of adhesive, second portion 1344 of first label 314 also does not adhere to tray 3605 of label printer 3600.

[00188] In at least one embodiment of the present disclosure, second label 316 then is dispensed from label printer 3600. Second label 316 comes to rest on top of, and in registration with, first label 314. In at least one embodiment, prior to or in conjunction with the dispensing of second label 316 onto tray 3605 of label printer 3600, indicia is added to second label 316, such as within displaceable segment 346 of second label 316, by the printer mechanism (not shown) of label printer 3600. For example, where second label 316 is intended to serve as a shipping label, such indicia may comprise the address to which a container to which first label 314 and second label 316 will be adhered, such as container 600, is to be shipped, a return address, bar codes, maxicodes, identifying numbers, and the like.

[00189] Second label 316 is dispensed from label printer 3600 such that undersurface 1316 of second label 316 faces the upper surface of first label 314. Second label 316 moves in the direction shown by arrow 504 until adhesive 313 on undersurface 1316 of second label 316 comes into contact with first label 314. In at least one embodiment, adhesive on leading adhesive segment 335 comes into contact with leading frame segment 333 of first label 314. In such an embodiment, adhesive 313 on leading adhesive segment 335 of second label 316 adheres first portion 1342 of second label 316 to frame 340 of first label 314 to a sufficient degree that the pair of labels can be handled as a unit, either mechanically (such as, for example, by a label applicator apparatus) or by hand. Second portion 1346 of second label 316 also is adjacent to, and in registration with, removable region 344 of first label 314, but because second portion 1346 of second label 316 has reduced adhesive properties and/or may be completely free of adhesive, second portion 1346 of second label 316 does not adhere to removable region 344 of first label 314. In such an embodiment, after second label 316 is adhered to first label 314, the adhered-together first label 314 and second label 316 then are applied simultaneously to a surface, such as a surface 601 of container 600, either mechanically (such as, for example, by a label applicator apparatus) or by hand.

[00190] Figure 37 shows a first and second label system 400 according to at least one embodiment of the present disclosure. Shown in Figure 37 are first label 414 and second label 416 on carrier 412. In at least one embodiment of a first and second label system according to the present disclosure, a plurality of first labels 414 and second labels 416 reside alternately on carrier 412. In at least one embodiment of a first and second label system 400 according to the present disclosure, each first label 414 comprises a packing list label, and each second label 416 comprises a shipping label.

[00191] According to at least one embodiment of a first and second label system 400 according to the present disclosure, first label 414 is bounded by leading edge 418, trailing edge 422, and side edges 420 and 424. According to at least one embodiment of a first and second label system 400 according to the present disclosure, second label 416 is bounded by leading edge 426, trailing edge 430, and side edges 428 and 432. One or more lines of weakness 438 define a boundary of removable segment 446 in second label 416. Frame 442 lies between lines of weakness 438 and leading edge 426, trailing edge 430, and side edges 428 and 432.

[00192] According to at least one embodiment of a first and second label system 400 according to the present disclosure, the area of first label 414 bounded by leading edge 418, trailing edge 422, and side edges 420 and 424 is smaller than the area of second label 416 bounded by leading edge 426, trailing edge 430, and side edges 428 and 432. According to at least one embodiment of a first and second label system according to the present disclosure, the area of first label 414 is no larger than the area of removable segment 446. According to at least one embodiment of a first and second label system 400 according to the present disclosure, second label 416 comprises a length L_1 that is the closest distance between leading edge 426 said trailing edge 430, and first label 414 comprises a length L_2 that is the closest distance between leading edge 418 and trailing edge 422, and $L_1 > L_2$. According to at least one embodiment of a first and second label system 400 according to the present disclosure, second label 416 comprises a width W_1 that is the closest distance between first side edge 428 and second side edge 432, and first label 414 comprises a width W_2 that is the closest distance between first side edge 420 and second side edge 424, and $W_1 > W_2$. According to at least one embodiment of a first and second label system 400 according to the present disclosure, second label 416 comprises a distance D_1 that is the closest distance between parallel segments of lines of weakness 438, and $D_1 > W_2$.

[00193] According to at least one embodiment of a first and second label system according to the present disclosure, second label 416 and first label 414 are deployed adjacent to each other on carrier 412 and removably adhered to carrier 412, thereby enabling second label 416 and first label 414 to be dispensed from carrier 412 in sequence as discussed herein. Carrier 412 comprises, in at least one embodiment, release coating 415 on the surface of carrier 412 facing the undersides of first label 414 and second label 416. In at least one embodiment of the present disclosure, release coating 415 is a silicone release coating. According to at least one embodiment of label system 400 according to the present disclosure, adhesive 413 is interposed between release coat 415 and first label 414 and second label 416, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 413 is a pressure sensitive adhesive.

[00194] Figure 38 shows the underside of first label 414 and the undersurface of second label 416 according to at least one embodiment of a first and second label system according to the present disclosure, with carrier 412 not visible for purposes of clarity. Shown in Figure 38 is underside 1414 of first label 414, which is bounded by leading edge 418, trailing edge 422, and

side edges 420 and 424. Also shown in Figure 38 is undersurface 1416 of second label 416, which is bounded by leading edge 426, trailing edge 430, and side edges 428 and 432.

[00195] In at least one embodiment, underside 1414 of first label 414 comprises adhesive 413 on all of or substantially all of or a majority of its surface area. In at least one embodiment of the present disclosure, undersurface 1416 of second label 416 comprises a first portion 1442 and a second portion 1446, separated by lines of weakness 438. First portion 1442 comprises the undersurface of frame 442. Second portion 1446 comprises the undersurface of removable segment 446. In at least one embodiment, first portion 1442 comprises adhesive 413 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1446 is free of or substantially free of adhesive. In the embodiment of label system 400 shown in Figure 38, second portion 1446 comprises spot 1413 of adhesive 413 near leading edge 426.

[00196] Figure 39 shows a cross-sectional view of a first and second label system according to at least one embodiment of the present disclosure taken on line XXXIX-XXXIX of Figure 37. The first and second label system 400 is shown in Figure 39 in a semi-exploded state for purposes of clarity. Shown in Figure 39 are carrier 412, adhesive 413, first label 414 comprising leading edge 418 and trailing edge 422, release coating 415, and second label 416 comprising leading edge 426 and trailing edge 430.

[00197] Figure 40 shows a first and second label system 400 according to at least one embodiment of the present disclosure, comprising first label 414 and second label 416 as discussed hereinabove. Figure 41 shows the underside of first label 414 and the undersurface of second label 416, with carrier 412 not visible for purposes of clarity. In the embodiment of first and second label system 400 shown in Figures 40-41, second label 416 comprises hole 439. Other embodiments of label system 400 may have a greater number of holes. According to at least one embodiment of the present disclosure, hole 439 extends through removable segment 446 and carrier 412. In at least one embodiment of the present disclosure, hole 439 extends only through removable segment 446.

[00198] Figure 42 shows a first and second label system 500 according to at least one embodiment of the present disclosure. Shown in Figure 42 are first label 514 and second label 516 on carrier 512. In at least one embodiment of a first and second label system according to the present disclosure, a plurality of first labels 514 and second labels 516 reside alternately on

carrier 512. In at least one embodiment of a first and second label system 500 according to the present disclosure, each first label 514 comprises a packing list label, and each second label 516 comprises a shipping label.

[00199] According to at least one embodiment of a first and second label system according to the present disclosure, first label 514 is bounded by leading edge 518, trailing edge 522, and side edges 520 and 524. One or more lines of weakness 536 define a boundary of removable region 544 in first label 514. In at least one embodiment of the present disclosure where first label 514 comprises a packing list label, removable region 544 comprises a removable packing list. Frame 540 exists between line of weakness 536, and leading edge 518 and side edges 520 and 524. Frame 540 comprises trailing frame segment 533 .

[00200] According to at least one embodiment of a first and second label system according to the present disclosure, second label 516 is bounded by leading edge 526, trailing edge 530, and side edges 528 and 532. Second label 516 comprises tear strip 539 framed by parallel lines of weakness 543, 547. Lines of weakness 538 define a boundary of displaceable segment 546. According to at least one embodiment of a first and second label system according to the present disclosure, the area of first label 514 bounded by leading edge 518, trailing edge 522, and side edges 520 and 524 is smaller than the area of second label 516 bounded by leading edge 526, trailing edge 530, and side edges 528 and 532.

[00201] According to at least one embodiment of a first and second label system 500 according to the present disclosure, first label 514 and second label 516 are deployed adjacent to each other on carrier 512 and removably adhered to carrier 512, thereby enabling first label 514 and second label 516 to be dispensed from carrier 512 in sequence as discussed herein. Carrier 512 comprises, in at least one embodiment, release coating 515 on the surface of carrier 512 facing first label 514 and second label 516. In at least one embodiment of the present disclosure, release coating 515 is a silicone release coating. According to at least one embodiment of label system 500 according to the present disclosure, adhesive 513 is interposed between release coat 515 and the undersides of first label 514 and second label 516, as discussed hereinafter. In at least one embodiment of the present disclosure, adhesive 513 is a pressure sensitive adhesive.

[00202] Figure 43 shows the underside of first label 514 and the undersurface of second label 516 according to at least one embodiment of a first and second label system according to the present disclosure, with carrier 512 not visible for purposes of clarity. Shown in Figure 43 is

underside 1514 of first label 514, which is bounded by leading edge 518, trailing edge 522, and side edges 520 and 524. Also shown in Figure 43 is undersurface 1516 of second label 516, which is bounded by leading edge 526, trailing edge 530, and side edges 528 and 532.

[00203] In at least one embodiment, underside 1514 of first label 514 comprises a first portion 1540 and a second portion 1544, separated by a line of weakness 536. First portion 1540 comprise the underside of frame 540. Second portion 1544 comprises the underside of removable region 544. In at least one embodiment, first portion 1540 comprises adhesive 513 on all of or substantially all of or a majority of its surface area. In at least one embodiment, second portion 1544 is free of or substantially free of adhesive.

[00204] In at least one embodiment of the present disclosure, undersurface 1516 of second label 516 comprises a first portion 1542 and a second portion 1546. In at least one embodiment, first portion 1542 comprises adhesive 513 on all of or substantially all of or a majority of its surface area. First portion 1542 comprises trailing adhesive segment 535. In at least one embodiment, second portion 1546 is free of or substantially free of adhesive, as is the undersurface of tear strip 539.

[00205] Figure 44 shows a cross-sectional view of a first and second label system according to at least one embodiment of the present disclosure taken on line LXIV- LXIV of Figure 42. The first and second label system is shown in Figure 44 in a semi-exploded state for purposes of clarity. Shown in Figure 44 are carrier 512, adhesive 513, first label 514 comprising leading edge 518 and trailing edge 522, release coating 515, and second label 516 comprising leading edge 526 and trailing edge 530.

[00206] Figure 45 shows a first and second label system 500 according to at least one embodiment of the present disclosure, comprising first label 514 and second label 516 as discussed hereinabove. Figure 46 shows the underside of first label 514 and the undersurface of second label 516, with carrier 512 not visible for purposes of clarity. In the embodiment of first and second label system 500 shown in Figures 45-46, second label 516 comprises hole 541. Other embodiments of label system 500 may have a greater number of holes. According to at least one embodiment of the present disclosure, hole 541 extends through second label 516 and carrier 512. In at least one embodiment of the present disclosure, hole 541 extends only through second label 516.

[00207] Figure 47 shows the dispensing of first and second label system 500 from label printer 4700 according to at least one embodiment of the present disclosure. Shown in Figure 47 is label printer 4700, comprising a printing mechanism (not shown), dispensing mechanism 4701, and tray 5605. Label printer 4700 may comprise an ink jet printer, a laser printer, a thermal transfer printer, a direct thermal printer, or another type of printing device capable of applying indicia to first label 514 and second label 516. According to at least one embodiment of the present disclosure, tray 5605 is horizontal or substantially horizontal. In other embodiments tray 5605 may be oriented at an inclining or declining angle. As shown in Figure 47, according to at least one embodiment of the present disclosure, a plurality of first labels 514 and second labels 516 are provided to label printer 4700 in an alternating arrangement on a carrier 512. For example, a plurality of first labels 514 and second labels 516 are removably adhered to carrier 512 in a rolled configuration or in a fan-folded configuration, and are supplied to label printer 4700 in a manner anticipating printing by and dispensing from label printer 4700. As shown in Figure 47, according to at least one embodiment of the present disclosure first label 514 and second label 516 are dispensed in sequence from label printer 4700. First label 514 and second label 516 are dispensed by dispensing mechanism 4701 of label printer 4700 in the direction of arrow 4702, and then come to rest, in registration with one another, on tray 5605 of label printer 4700. Thereafter, the pair of first label 514 and second label 516, in registration with one another and adhered together, can be retrieved from tray 5605, either mechanically (such as, for example, by a label applicator apparatus) or by hand, and applied to a surface (such as, for example, surface 601 of container 600), either mechanically (such as, for example, by a label applicator apparatus) or by hand.

[00208] In at least one embodiment of the present disclosure, prior to or in conjunction with the dispensing of first label 514 onto tray 5605 of label printer 4700, indicia is added to removable region 544 of first label 514 by the printing mechanism (not shown) of label printer 4700. For example, where first label 514 is intended to serve as a packing list, such indicia may comprise the contents of a container to which first label 514 will be adhered, such as container 600.

[00209] First label 514 is dispensed from label printer 4700 such that underside 1514 of first label 514 faces tray 5605 of label printer 4700. First label 514 moves in the direction shown by arrow 4703 until underside 1514 of first label 514 comes into contact with tray 5605 of label

printer 4700. Because no pressure is exerted on first label 514, adhesive 513 on underside 1514 of first label 514 does not adhere first portion 1540 of first label 514 to tray 5605 of label printer 4700. In at least one embodiment, tray 5605 comprises a non-stick surface that retards adherence of adhesive 513 to tray 5605. Second portion 1544 of first label 514 also is adjacent to tray 5605 of label printer 4700, but because second portion 1544 of first label 514 is free of adhesive, second portion 1544 of first label 514 also does not adhere to tray 5605 of label printer 4700.

[00210] In at least one embodiment of the present disclosure, second label 516 then is dispensed from label printer 4700. Second label 516 comes to rest on top of, and in registration with, first label 514. In at least one embodiment, prior to or in conjunction with the dispensing of second label 516 onto tray 5605 of label printer 4700, indicia is added to second label 516, such as within displaceable segment 546 of second label 516, by the printer mechanism (not shown) of label printer 4700. For example, where second label 516 is intended to serve as a shipping label, such indicia may comprise the address to which a container to which first label 514 and second label 516 will be adhered, such as container 600, is to be shipped, a return address, bar codes, maxicodes, identifying numbers, and the like.

[00211] Second label 516 is dispensed from label printer 4700 such that undersurface 1516 of second label 516 faces the upper surface of first label 514. Second label 516 moves in the direction shown by arrow 4702 until adhesive 513 on undersurface 1516 of second label 516 comes into contact with first label 514. In at least one embodiment, adhesive on trailing adhesive segment 535 comes into contact with trailing frame segment 533 of first label 514. In such an embodiment, adhesive 513 on trailing adhesive segment 535 of second label 516 adheres first portion 1542 of second label 516 to frame 540 of first label 514 to a sufficient degree that the pair of labels can be handled as a unit, either mechanically (such as, for example, by a label applicator apparatus) or by hand. Second portion 1546 of second label 516 also is adjacent to, and in registration with, removable region 544 of first label 514, but because second portion 1546 of second label 516 has reduced adhesive properties and/or may be completely free of adhesive, second portion 1546 of second label 516 does not adhere to removable region 544 of first label 514. In such an embodiment, after second label 516 is adhered to first label 514, the adhered-together first label 514 and second label 516 then are applied simultaneously to a

surface, such as a surface 601 of container 600, either mechanically (such as, for example, by a label applicator apparatus) or by hand.

[00212] While this disclosure has been described as having preferred designs, the apparatus and methods according to the present disclosure can be further modified within the scope and spirit of this disclosure. This application is therefore intended to cover any variations, uses, or adaptations of the disclosure using its general principles. For example, any method disclosed herein and in the appended claims represent one possible sequence of performing the steps thereof. A practitioner may determine in a particular implementation that a plurality of steps of one or more of the disclosed methods may be combinable, or that a different sequence of steps may be employed to accomplish the same results. Each such implementation falls within the scope of the present disclosure as disclosed herein and in the appended claims. Furthermore, this application is intended to cover such departures from the present disclosure as come within known or customary practice in the art to which this disclosure pertains.

CLAIMS

We claim:

1. A method of assembling a multi-layer label, the method comprising the steps of:
 - providing a label dispensing apparatus, said label dispensing apparatus comprising a dispensing mechanism and a receptacle;
 - providing a carrier material to said label dispensing apparatus, said carrier material comprising a first label thereon and a second label thereon in a position on said carrier material adjacent to said first label, wherein said first label and said second label are removably adhered to said carrier material in a non-overlapping arrangement, said first label comprising a top side and an opposing underside, said underside facing said carrier material, said second label comprising a top surface and an opposing undersurface, said undersurface facing said carrier material;
 - with said label dispensing apparatus, dispensing said first label from said carrier material onto said receptacle, whereby said underside of said first label is against said receptacle and said top side of said first label is exposed;
 - while said first label is on said receptacle, with said label dispensing apparatus, dispensing said second label from said carrier material, wherein said second label aligns on said first label such that said second label is layered over and aligned with said first label with said undersurface of said second label in contact with said top side of said first label.
2. The method of claim 1, wherein said second label comprises a displaceable segment, and wherein said first label comprises a removable region, and wherein after said second label is dispensed onto said receptacle, said displaceable segment and said removable region are in registration.
3. The method of claim 1, wherein said undersurface comprises a zone with reduced adhesive properties, and wherein said underside comprises an area with reduced adhesive properties, and wherein after said second label is dispensed onto said receptacle, said zone with reduced adhesive properties and said area with reduced adhesive properties are in registration.
4. The method of claim 1, wherein said undersurface comprises exposed adhesive.
5. The method of claim 4, wherein said second label comprises a removable segment.
6. The method of claim 1, wherein said second label comprises a displaceable segment.

7. The method of claim 1, wherein said second label comprises one or more holes therethrough.

8. The method of claim 1, wherein said undersurface comprises a zone with reduced adhesive properties.

9. A method of applying a first label and a second label to a surface, the method comprising the steps of:

providing a label dispensing apparatus, said label dispensing apparatus comprising a dispensing mechanism and a receptacle;

providing a carrier material to said label dispensing apparatus, said carrier material comprising a first label removably adhered thereto and a second label removably adhered thereto in a position on said carrier material adjacent to said first label, said first label comprising a top side, and an underside, said first label being bounded by a leading edge, a trailing edge, and first and second side edges, said underside comprising adhesive on at least a portion thereof, said underside removably adhered to said carrier material by said adhesive, said second label comprising a top side and an opposing undersurface, said second label being bounded by a leading margin, a trailing margin, and first and second side margins;

dispensing said first label onto a receptacle, whereby said underside of said first label is adjacent to said receptacle and said top side is exposed;

advancing said second label with label dispensing apparatus;

while said first label is on said receptacle, dispensing said second label onto said receptacle, wherein said second label alights on said first label such that said second label is layered over and aligned with said first label with said undersurface of said second label in contact with said top side of said first label; and

applying said second label and said first label to a surface simultaneously, whereby after application said underside of said first label is in contact with said surface and said undersurface of said second label is in contact with said top side of said first label and adhered to said surface.

10. The method of claim 9, wherein said second label comprises a displaceable segment, and wherein said first label comprises a removable region, and wherein after said second label is

dispensed onto said receptacle, said displaceable segment and said removable region are in registration.

11. The method of claim 9, wherein said undersurface comprises a zone with reduced adhesive properties, and wherein said underside comprises an area with reduced adhesive properties, and wherein after said second label is dispensed onto said receptacle, said zone with reduced adhesive properties and said area with reduced adhesive properties are in registration.

12. The method of claim 9, wherein said undersurface comprises exposed adhesive.

13. The method of claim 12, wherein said second label comprises a removable segment.

14. The method of claim 9, wherein said second label comprises a displaceable segment.

15. The method of claim 9, wherein said second label comprises one or more holes therethrough.

16. The method of claim 9, wherein said undersurface comprises a zone with reduced adhesive properties.

17. A method of applying a first label and a second label to a container, the method comprising the steps of:

providing a carrier material, said carrier material comprising a first label removably adhered thereto and a second label removably adhered thereto in a position on said carrier adjacent to said first label, said carrier material comprising a release coating on a surface thereof, said first label comprising a top side and an opposing underside, said top side and said underside being bounded by a leading margin, a trailing margin, and first and second side margins, said top side comprising a first surface area, said underside comprising adhesive on at least a portion thereof, said underside removably adhered to said release coating by said adhesive, said second label comprising a top surface, and an undersurface, said top surface and said undersurface being bounded by a leading edge, a trailing edge, and first and second side edges, said top surface comprising a second surface area, said second surface area being at least as large as said first surface area, said undersurface comprising adhesive on at least a portion thereof, said undersurface removably adhered to said release coating by said adhesive;

dispensing said first label onto a receptacle, whereby said underside of said first label is against said receptacle and said top surface is exposed;

advancing said second label toward said receptacle;

while said first label is against said receptacle, dispensing said second label onto said receptacle, wherein said second label alights on said first label such that said second label is layered over and aligned with said first label with said undersurface of said second label in contact with said top side of said first label; and

applying said second label and said first label to a surface simultaneously, whereby after application said underside of said first label is adhered to said surface and said undersurface of said second label is adhered to said surface.

18. The method of claim 17, wherein said undersurface comprises exposed adhesive.
19. The method of claim 18, wherein said second label comprises a removable segment.
20. The method of claim 17, wherein said second label comprises a displaceable segment, and wherein said first label comprises a removable region, and wherein after said second label is dispensed onto said receptacle, said displaceable segment and said removable region are in registration.

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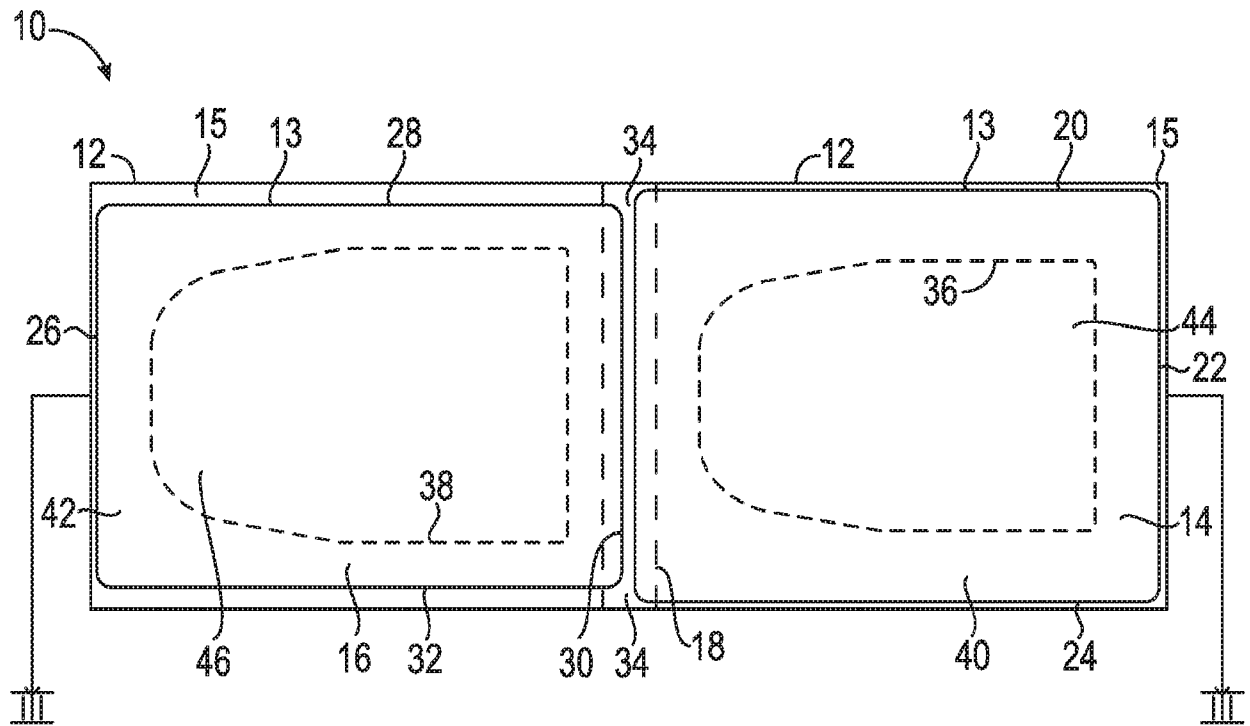


FIG. 1

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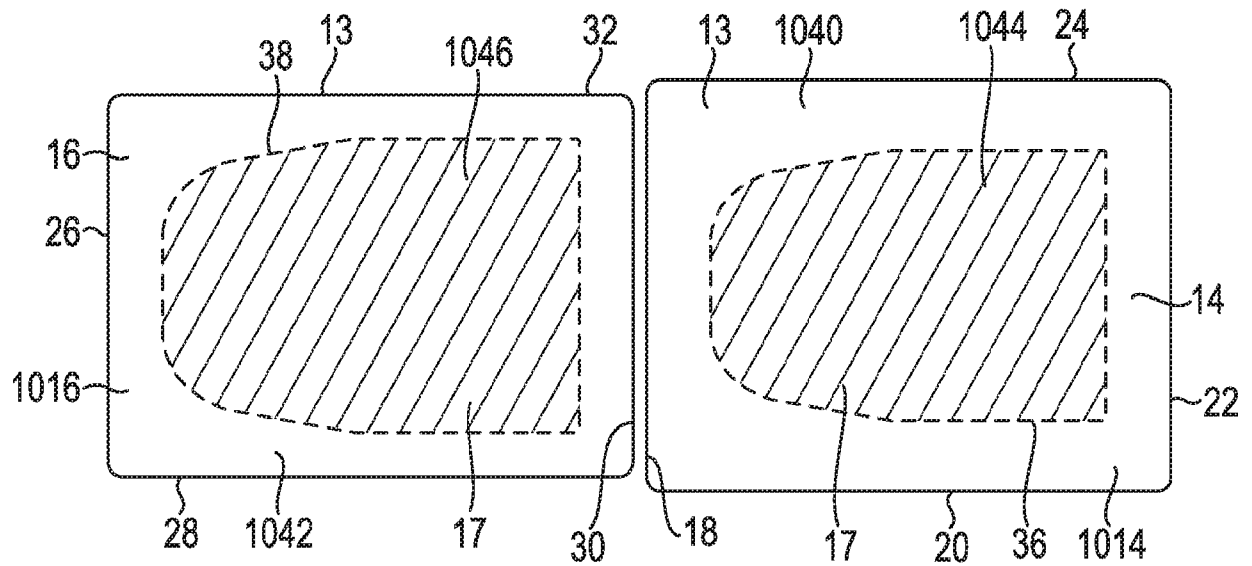


FIG. 2

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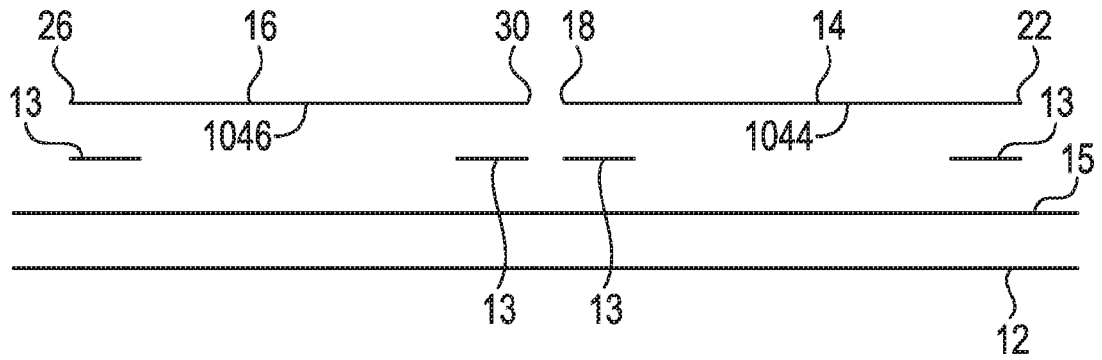


FIG. 3A

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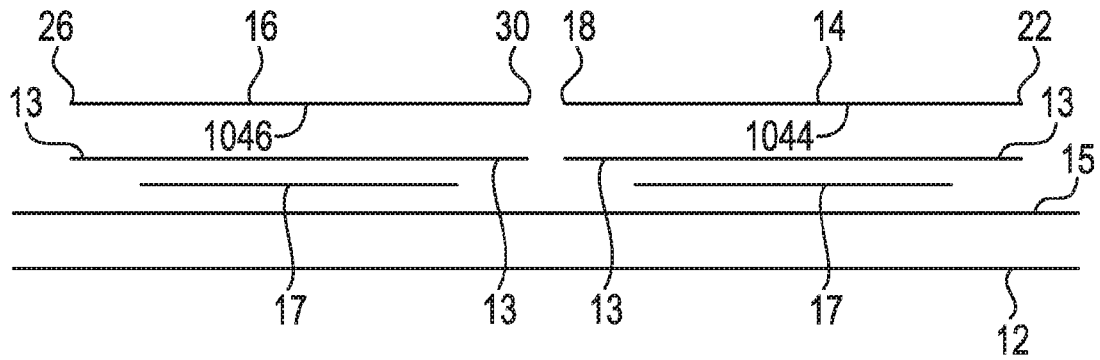


FIG. 3B

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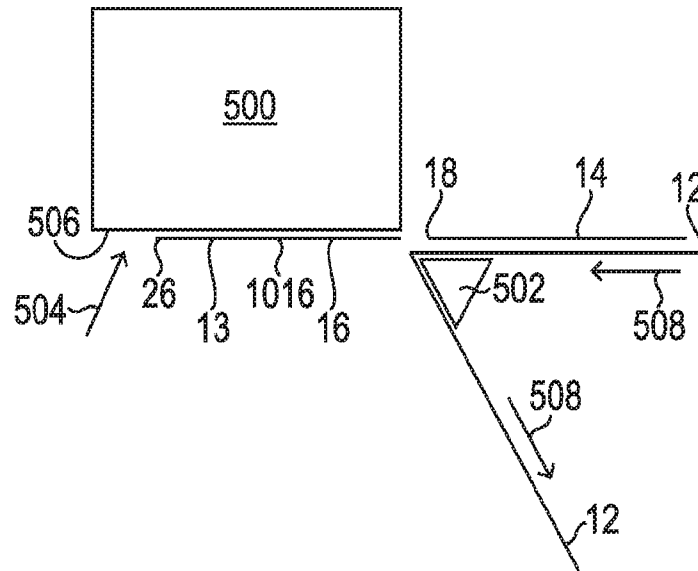


FIG. 4A

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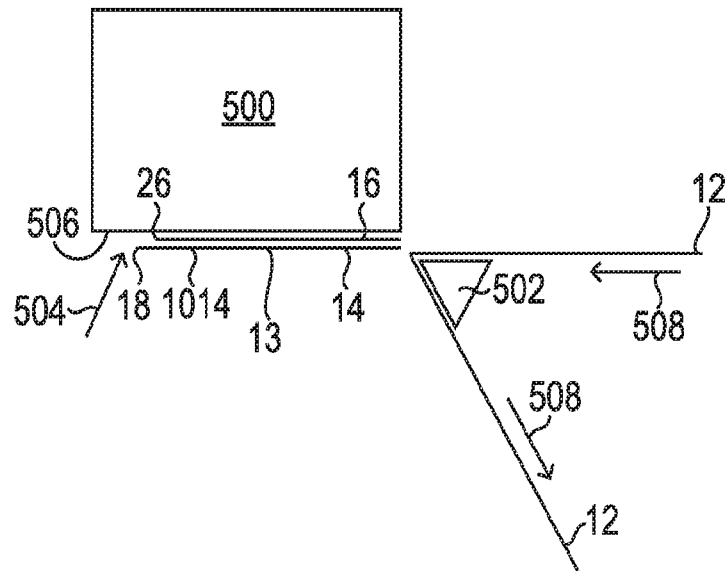


FIG. 4B

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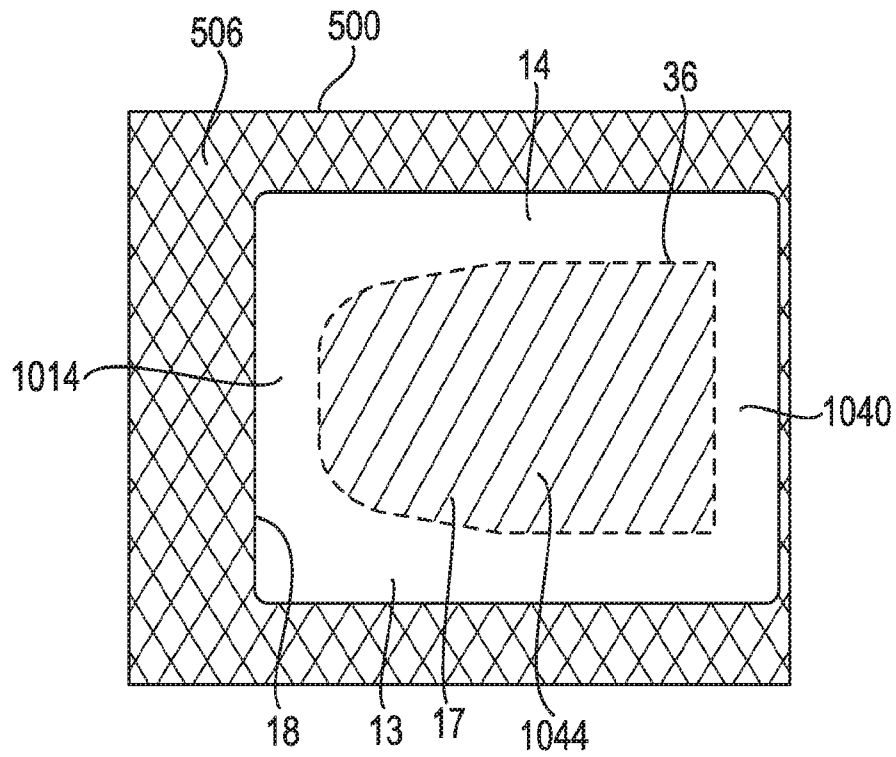


FIG. 5

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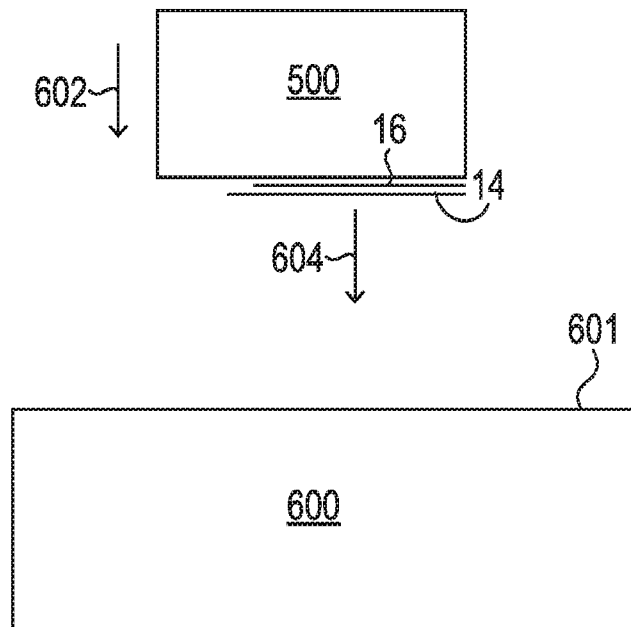


FIG. 6

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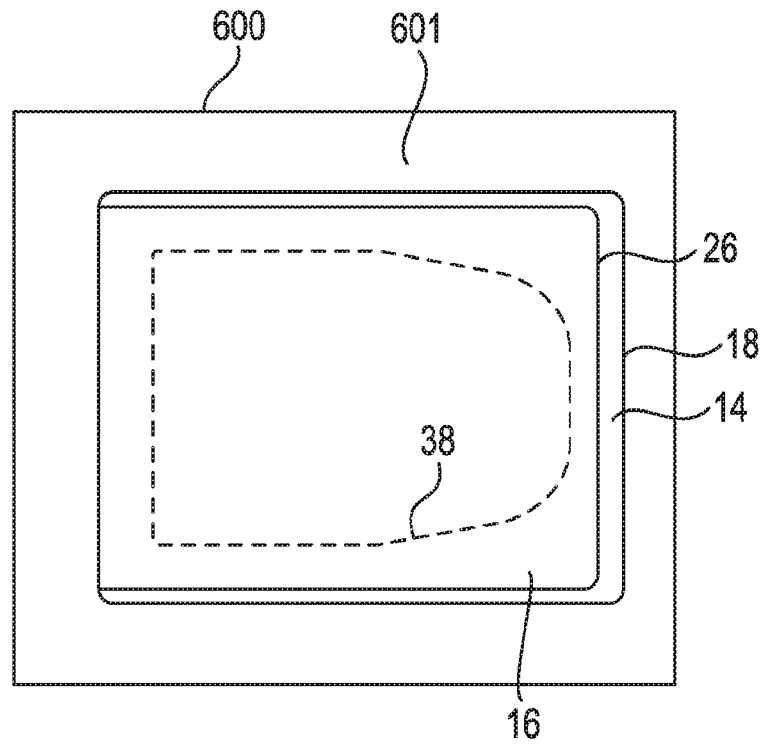


FIG. 7

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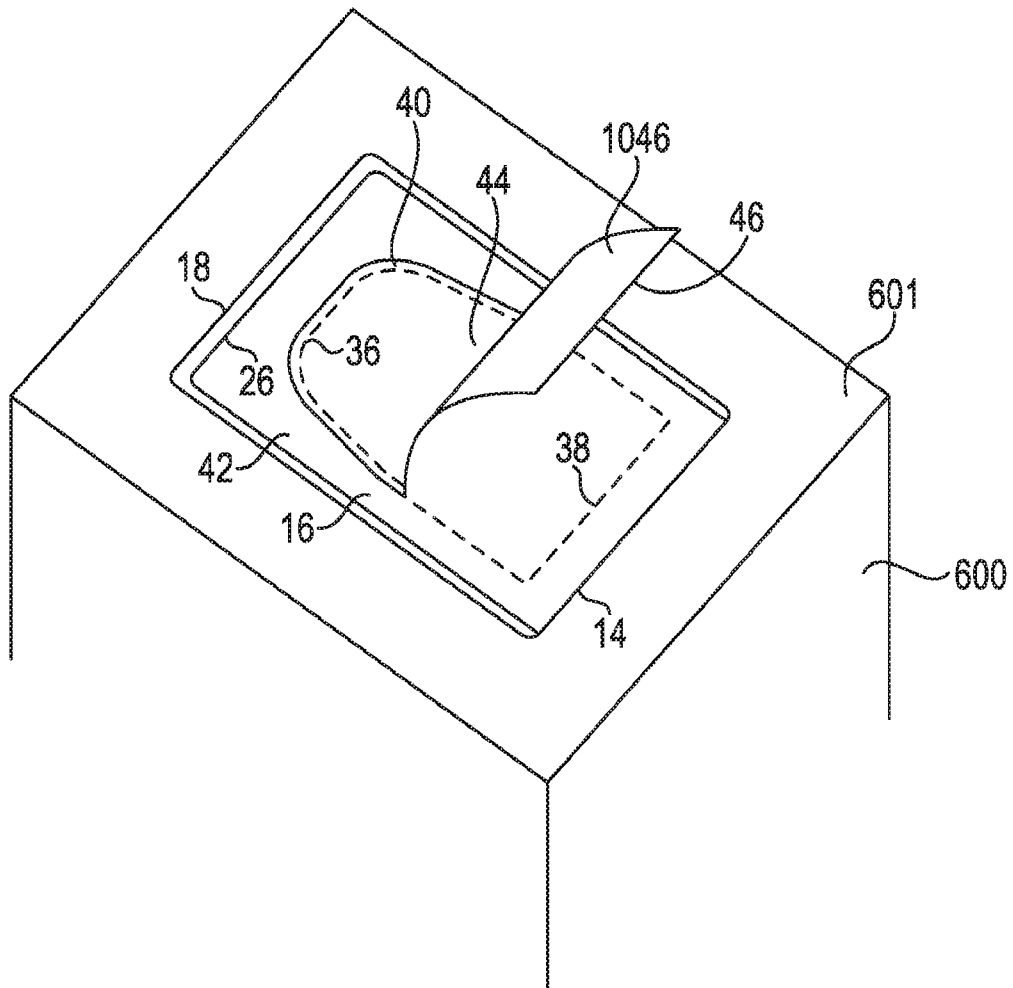


FIG. 8A

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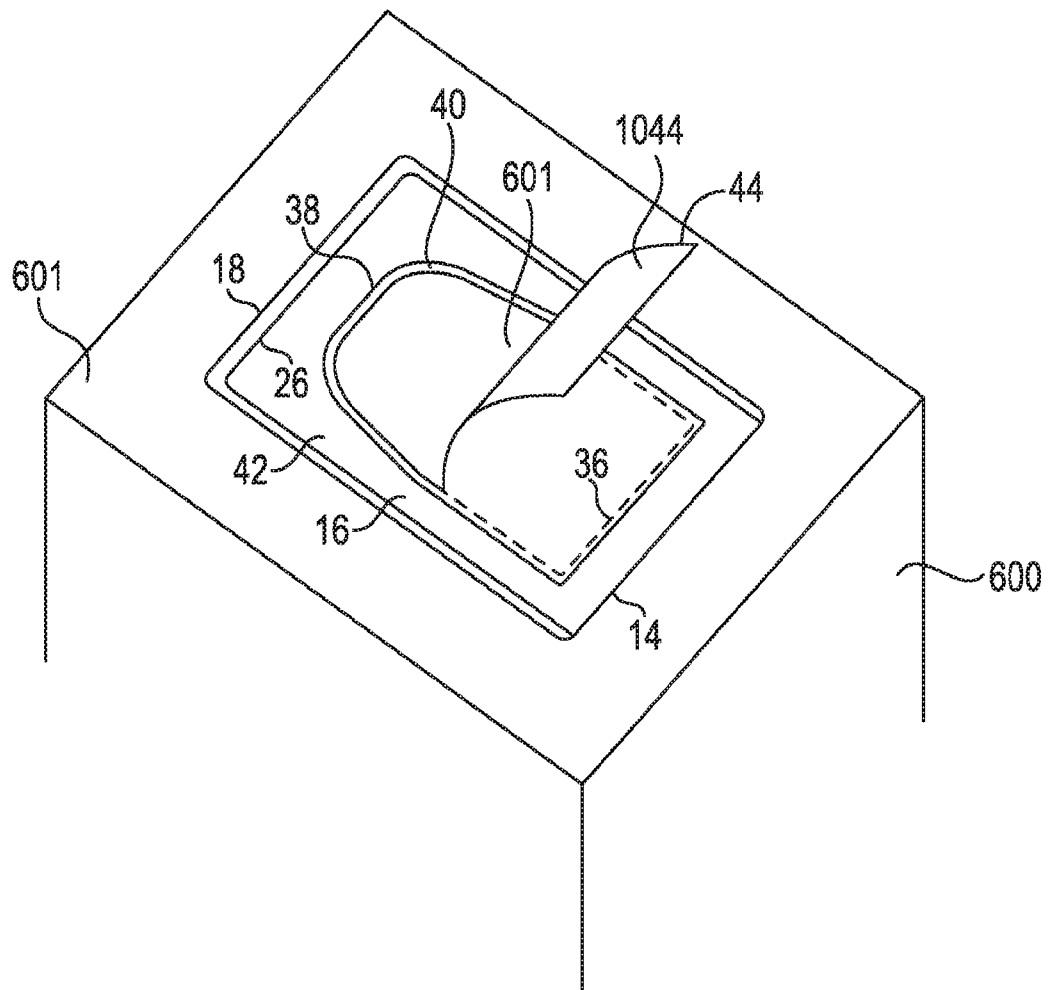


FIG. 8B

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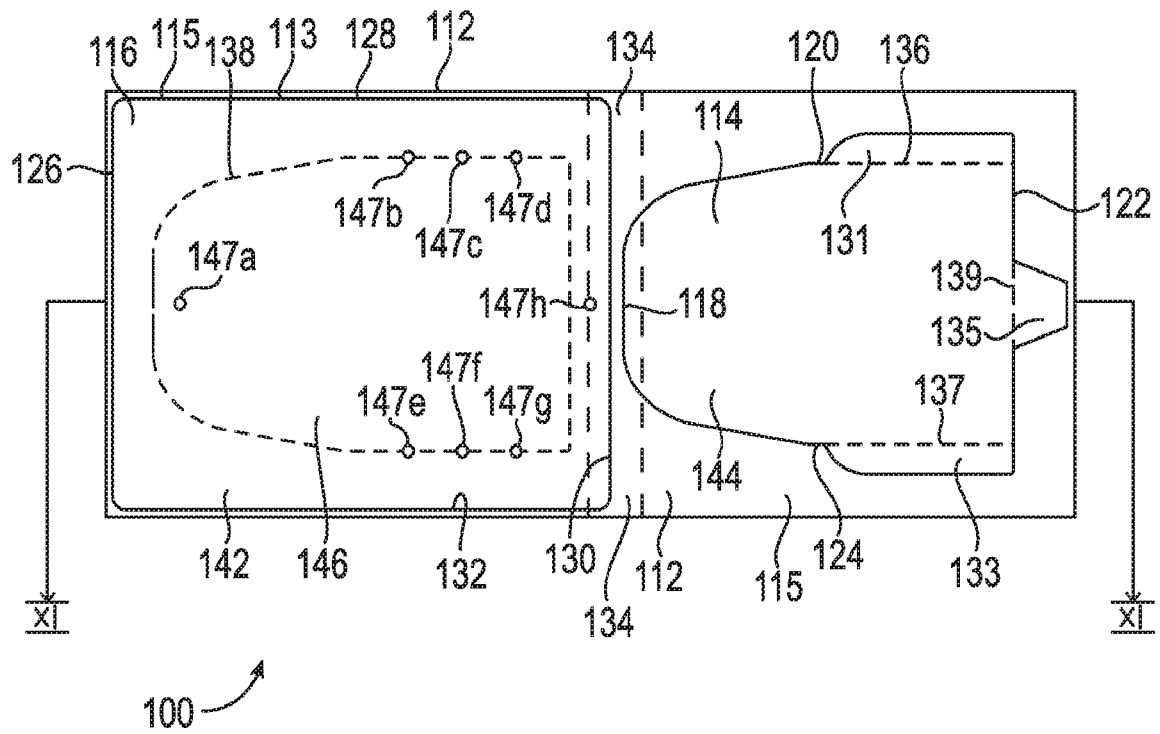


FIG. 9A

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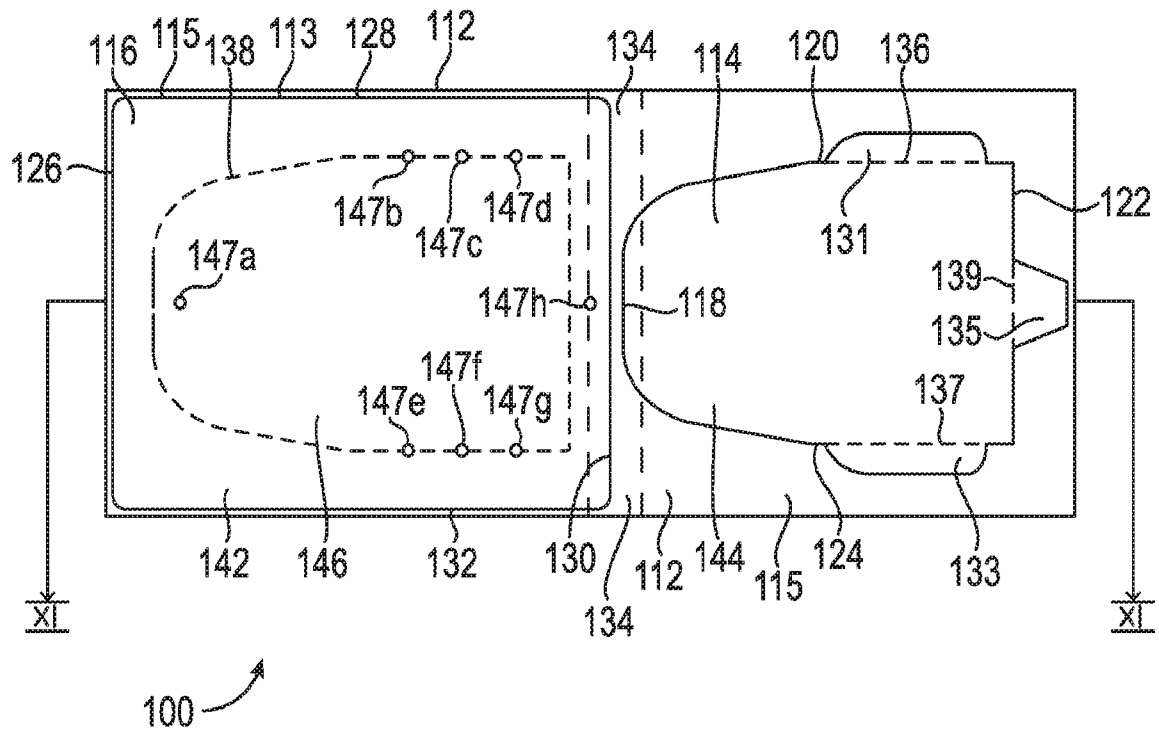


FIG. 9B

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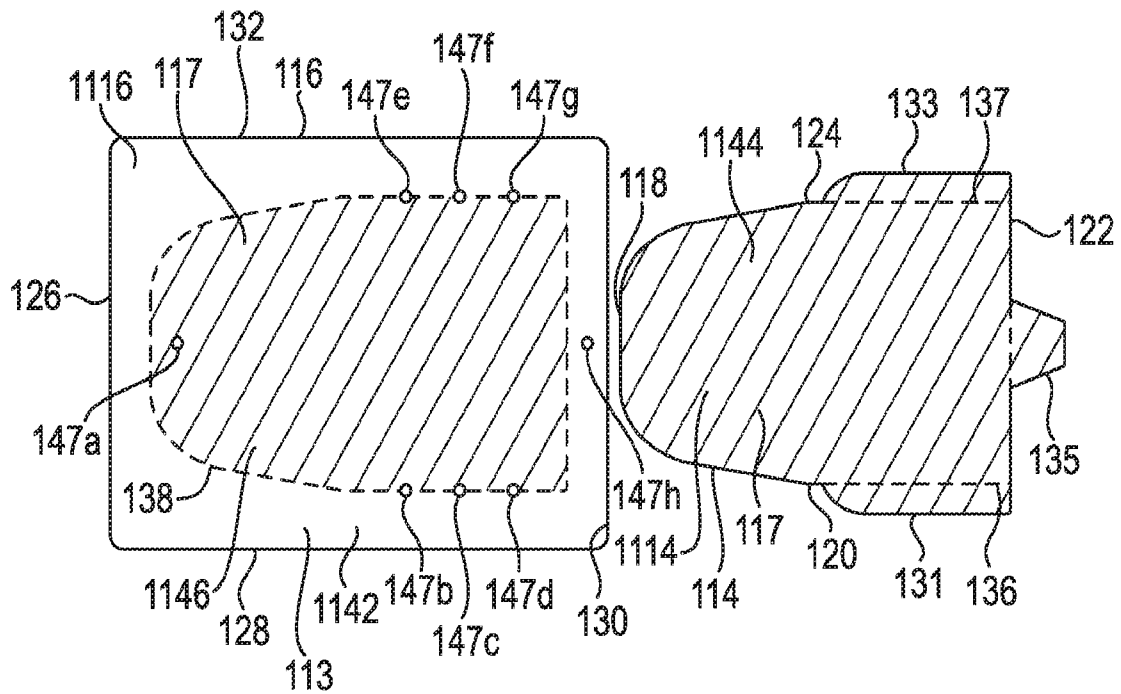


FIG. 10A

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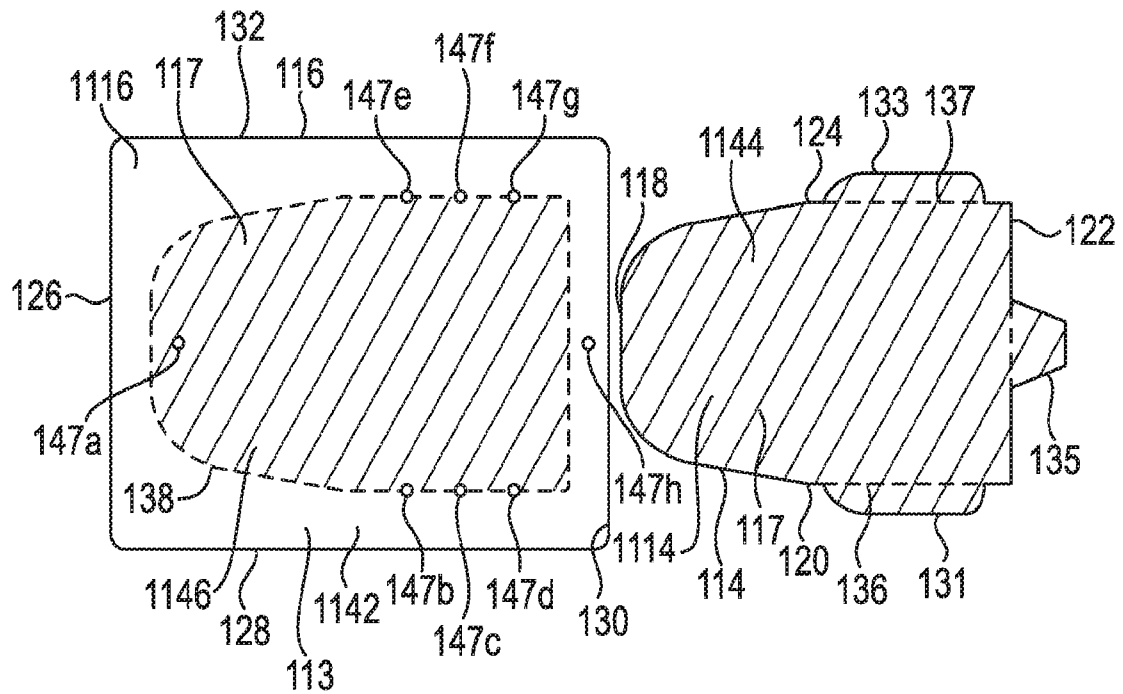


FIG. 10B

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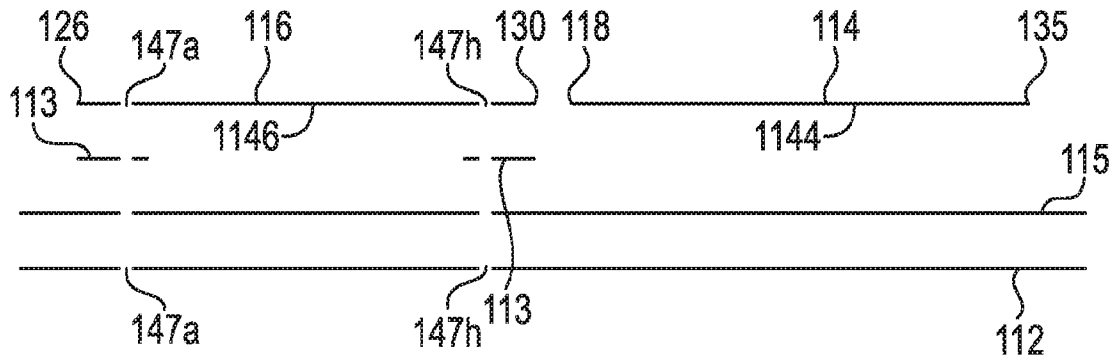


FIG. 11A

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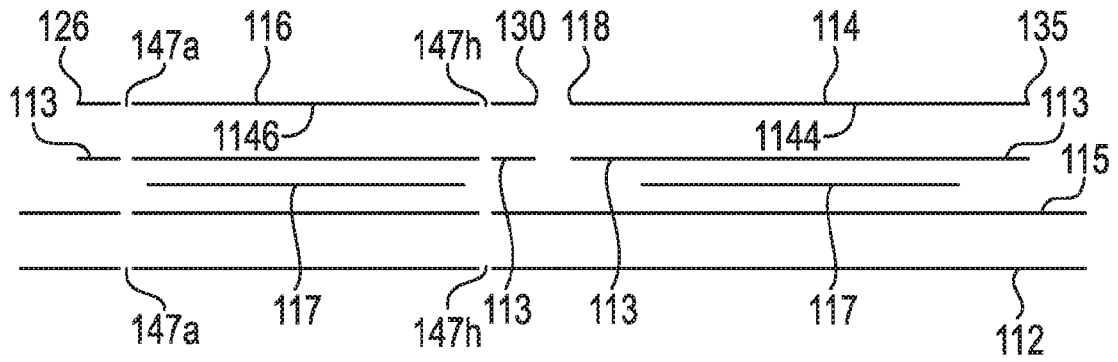


FIG. 11B

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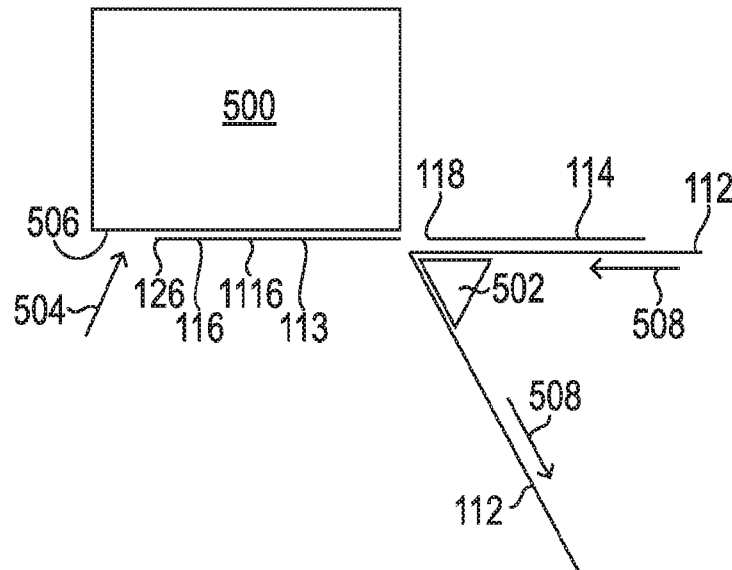


FIG. 12A

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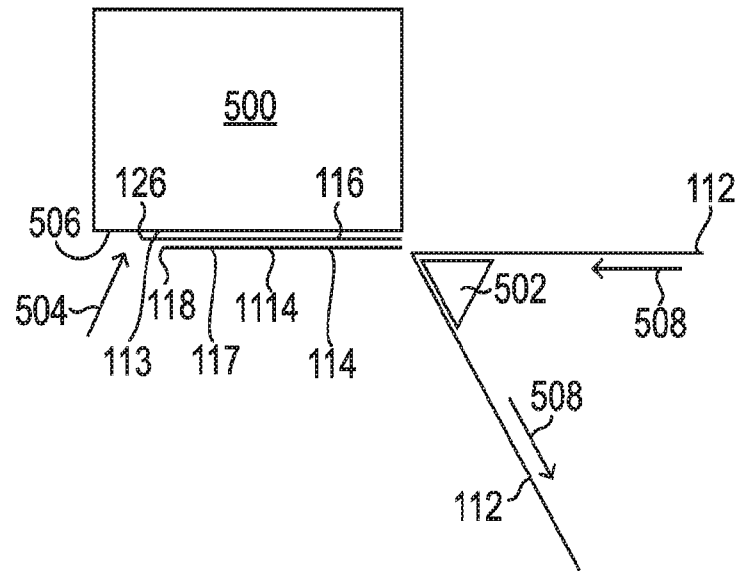


FIG. 12B

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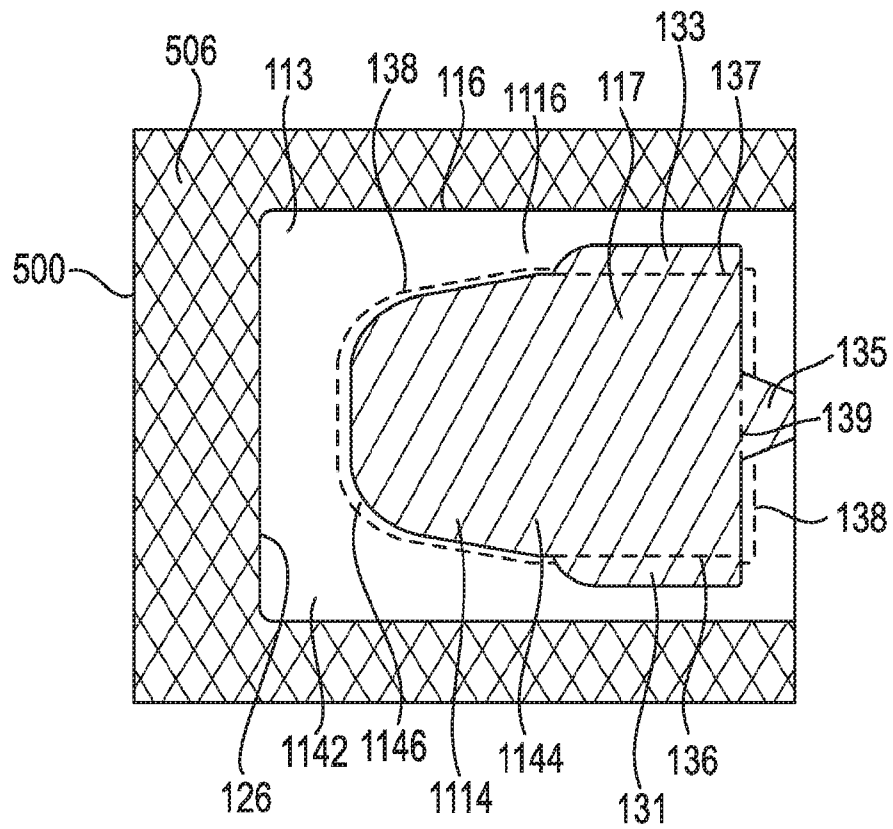


FIG. 13

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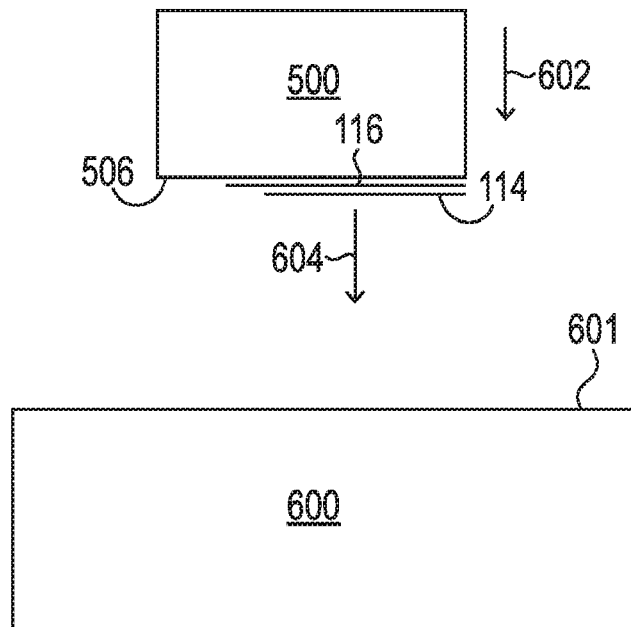


FIG. 14

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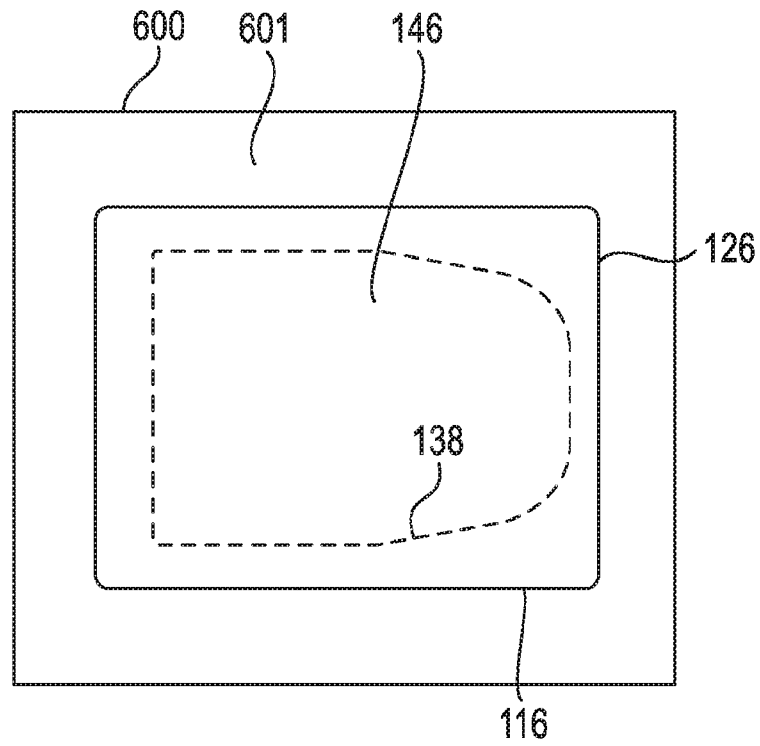


FIG. 15

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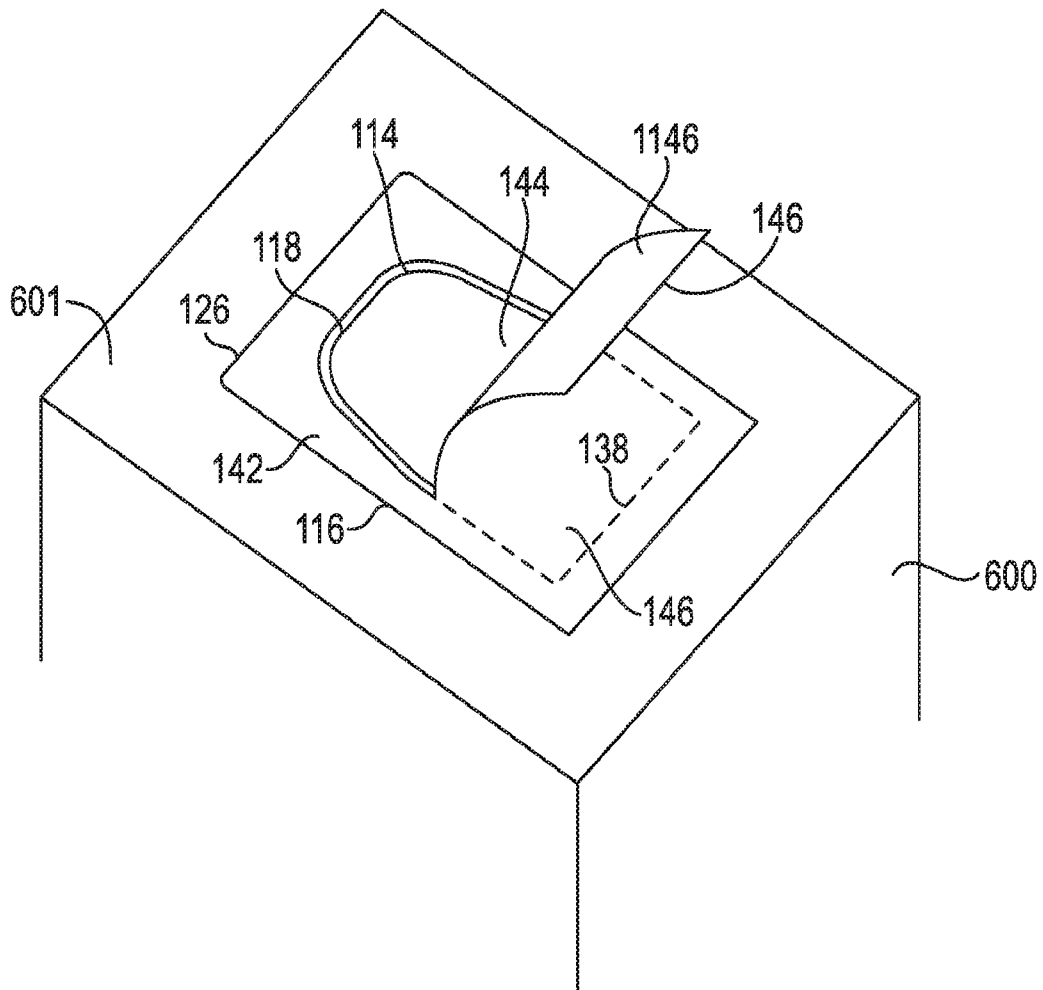


FIG. 16A

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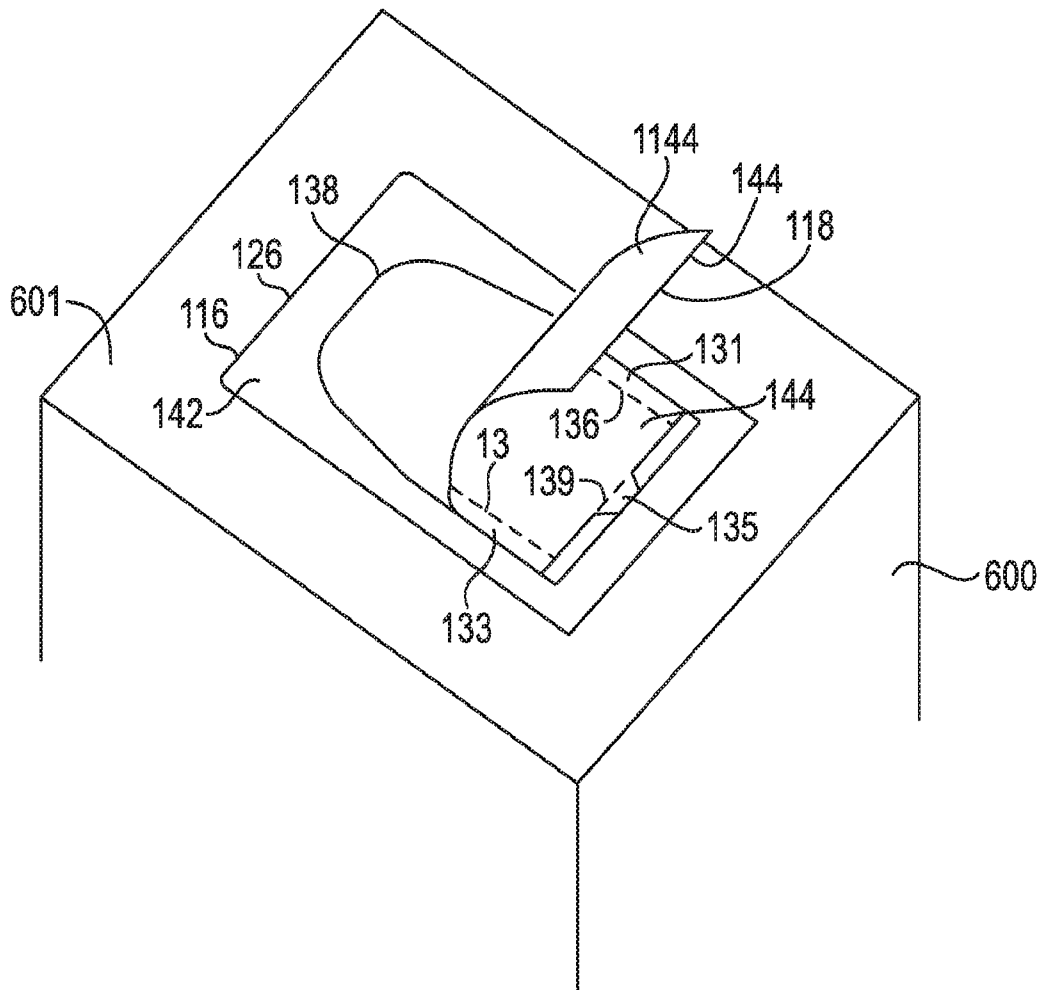


FIG. 16B

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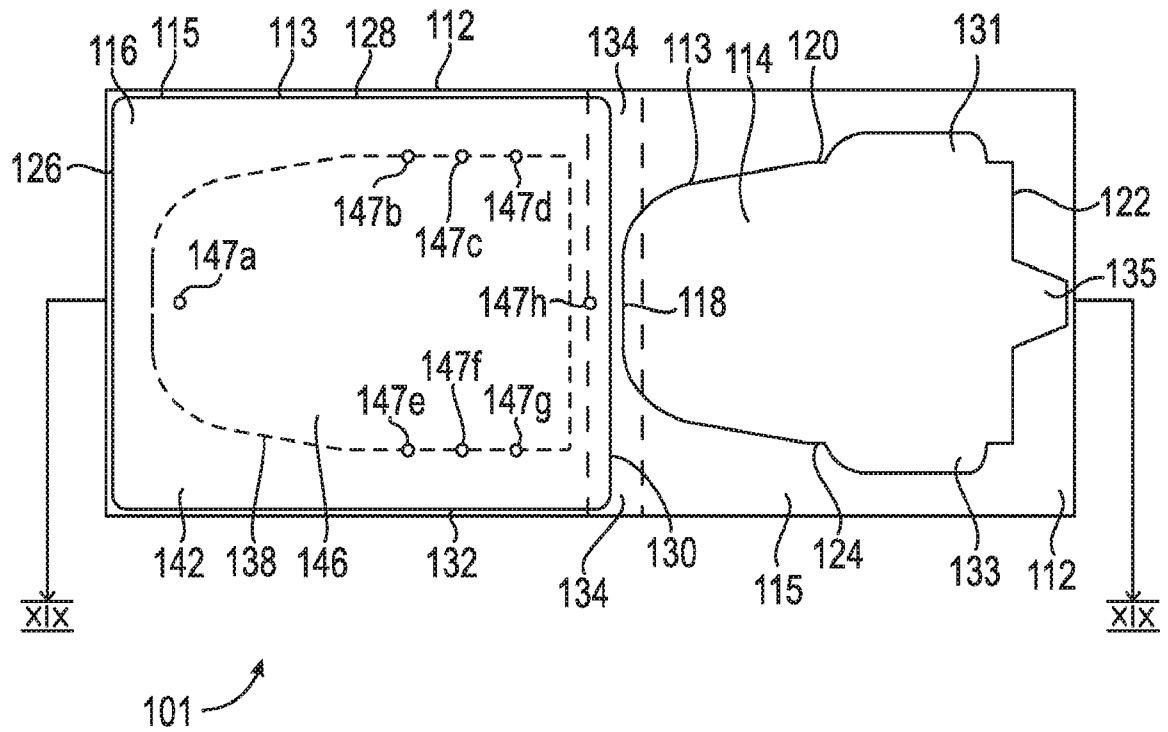


FIG. 17

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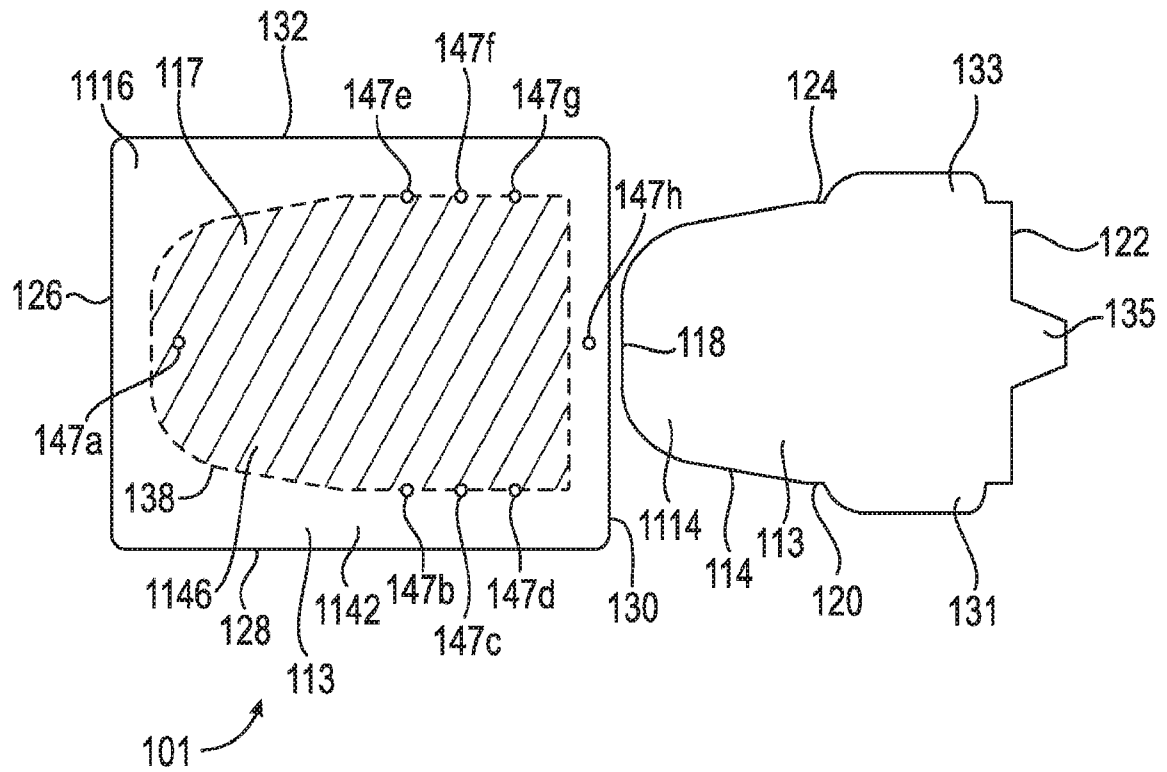


FIG. 18

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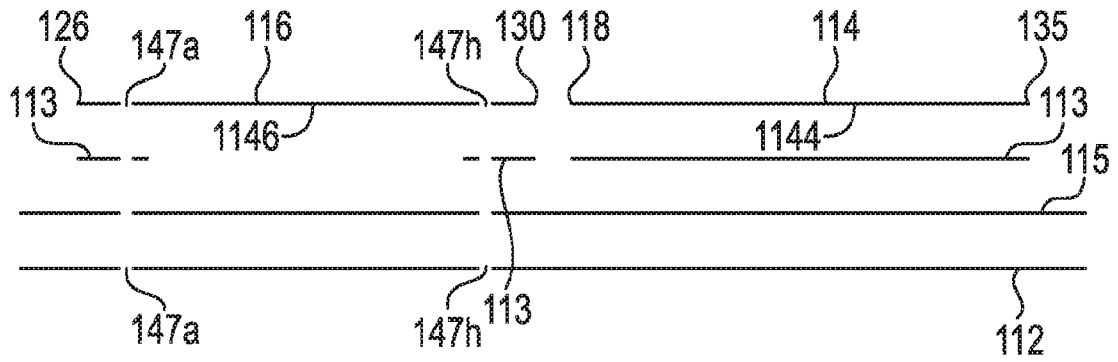


FIG. 19A

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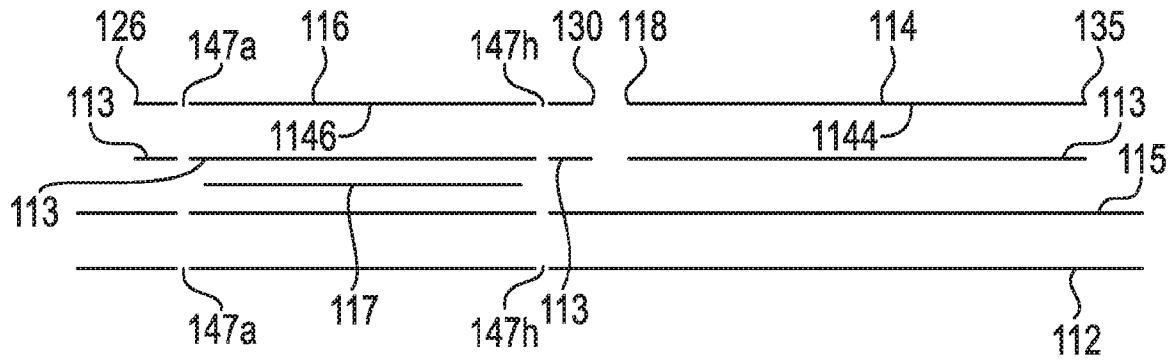


FIG. 19B

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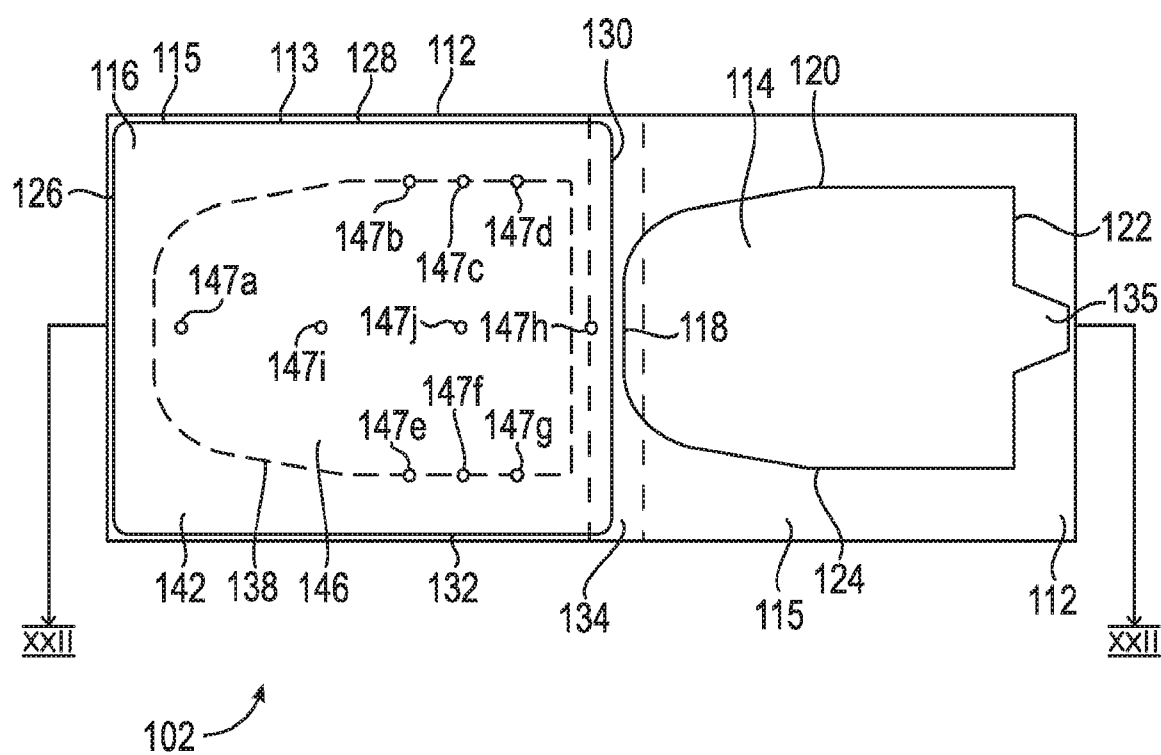


FIG. 20

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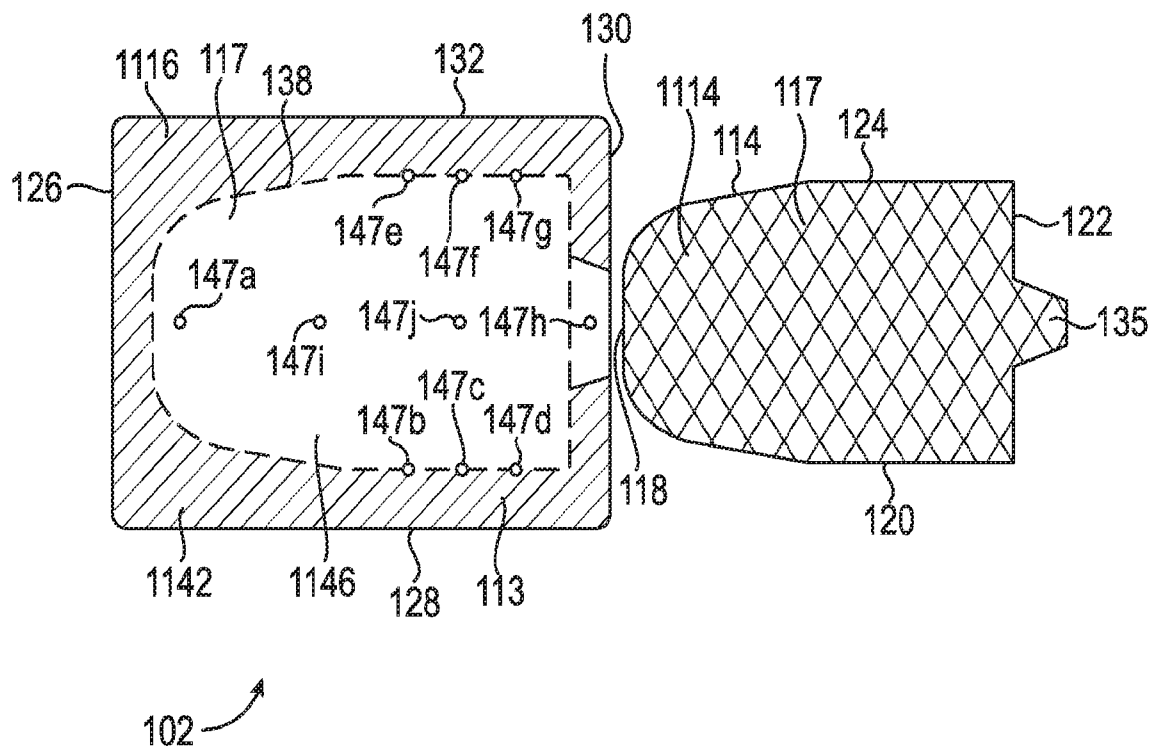


FIG. 21

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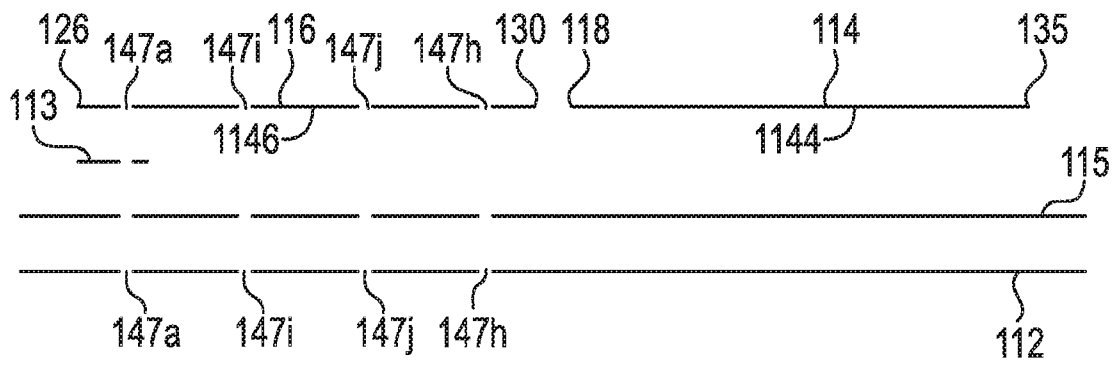


FIG. 22A

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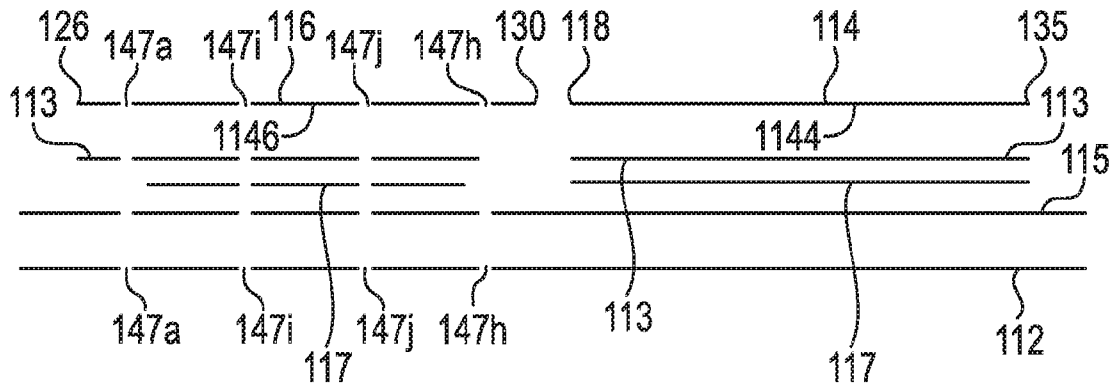


FIG. 22B

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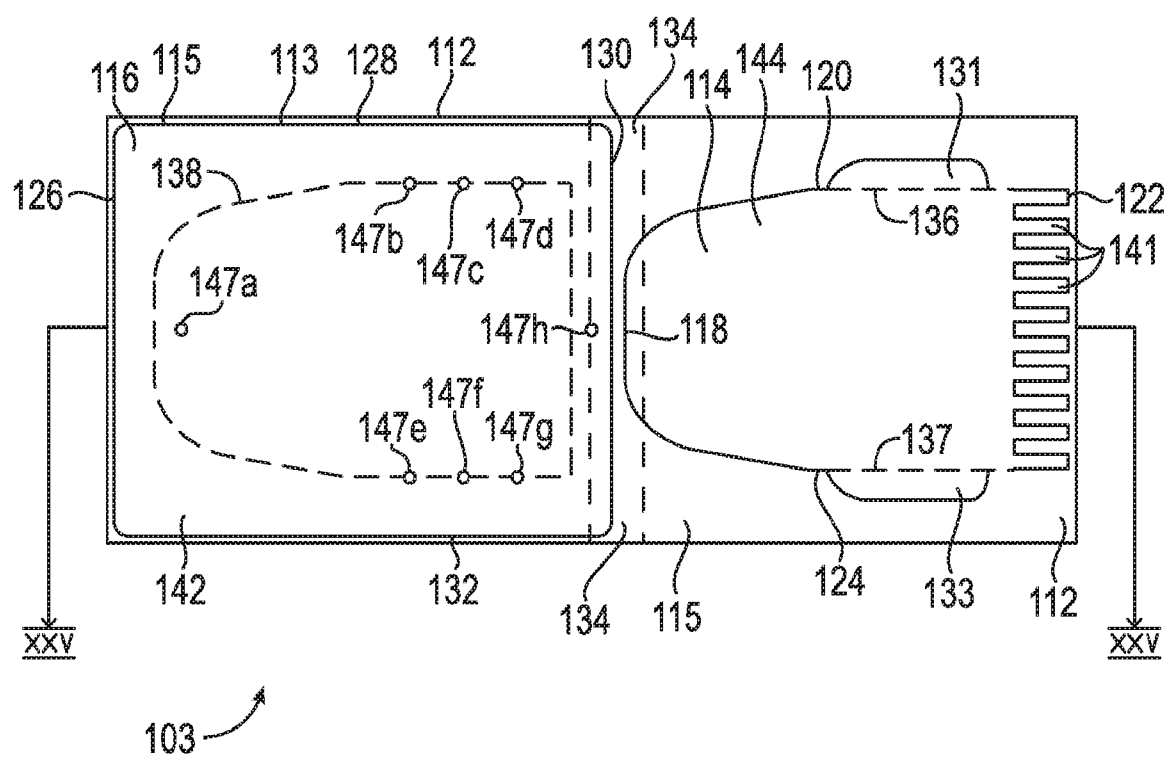


FIG. 23

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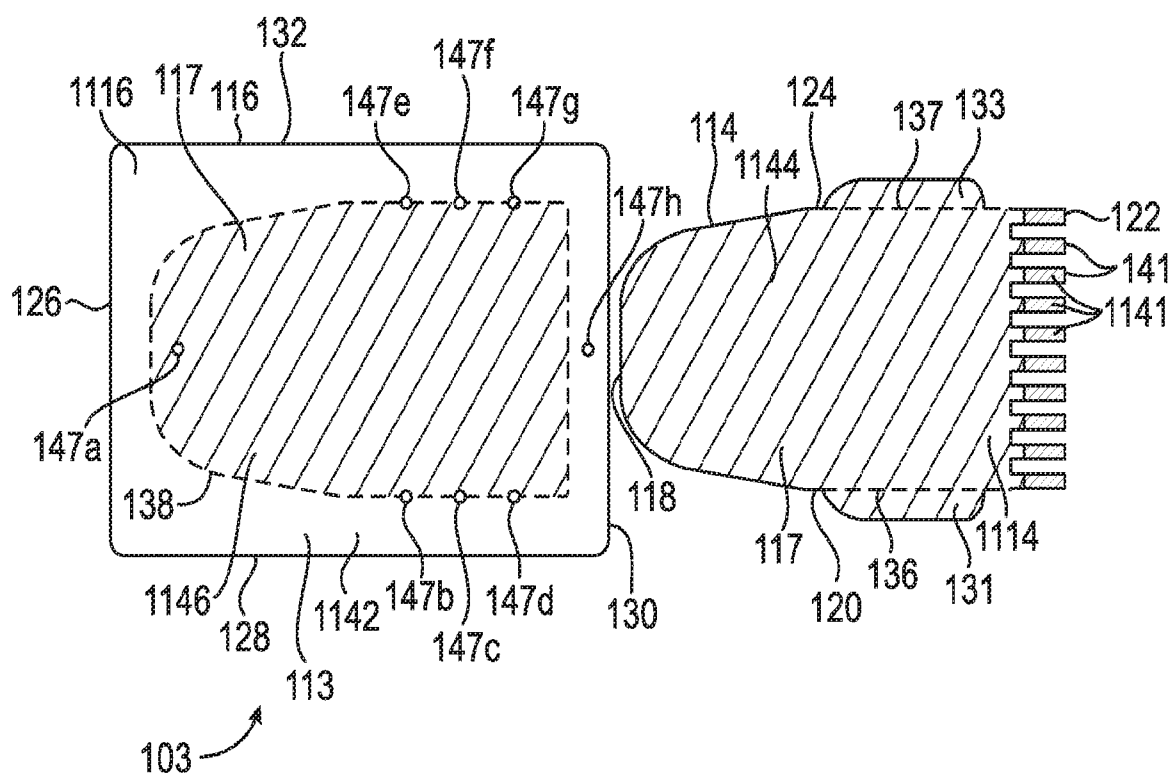


FIG. 24

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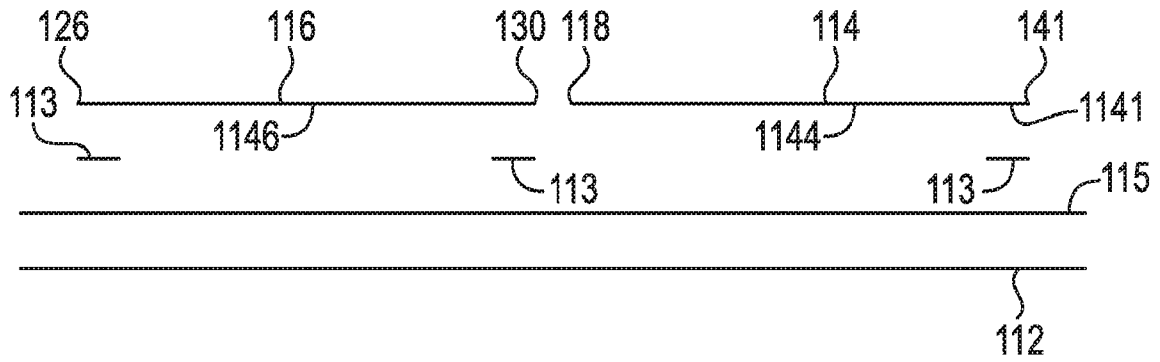


FIG. 25A

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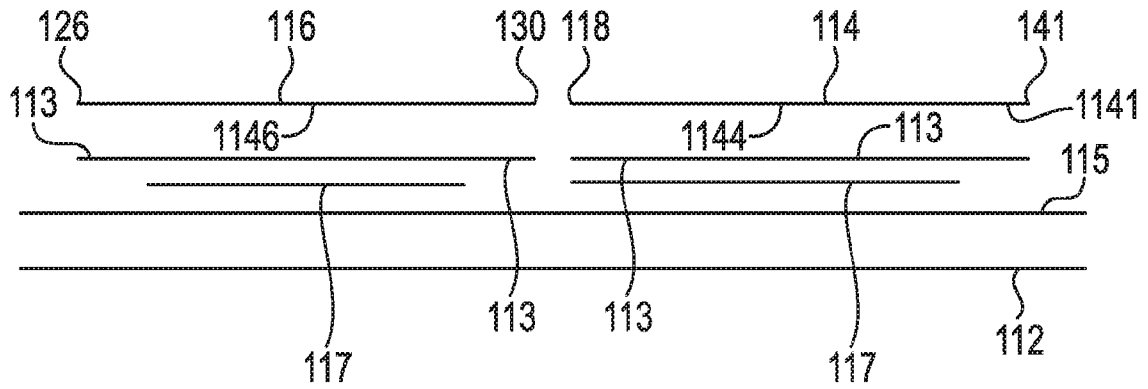


FIG. 25B

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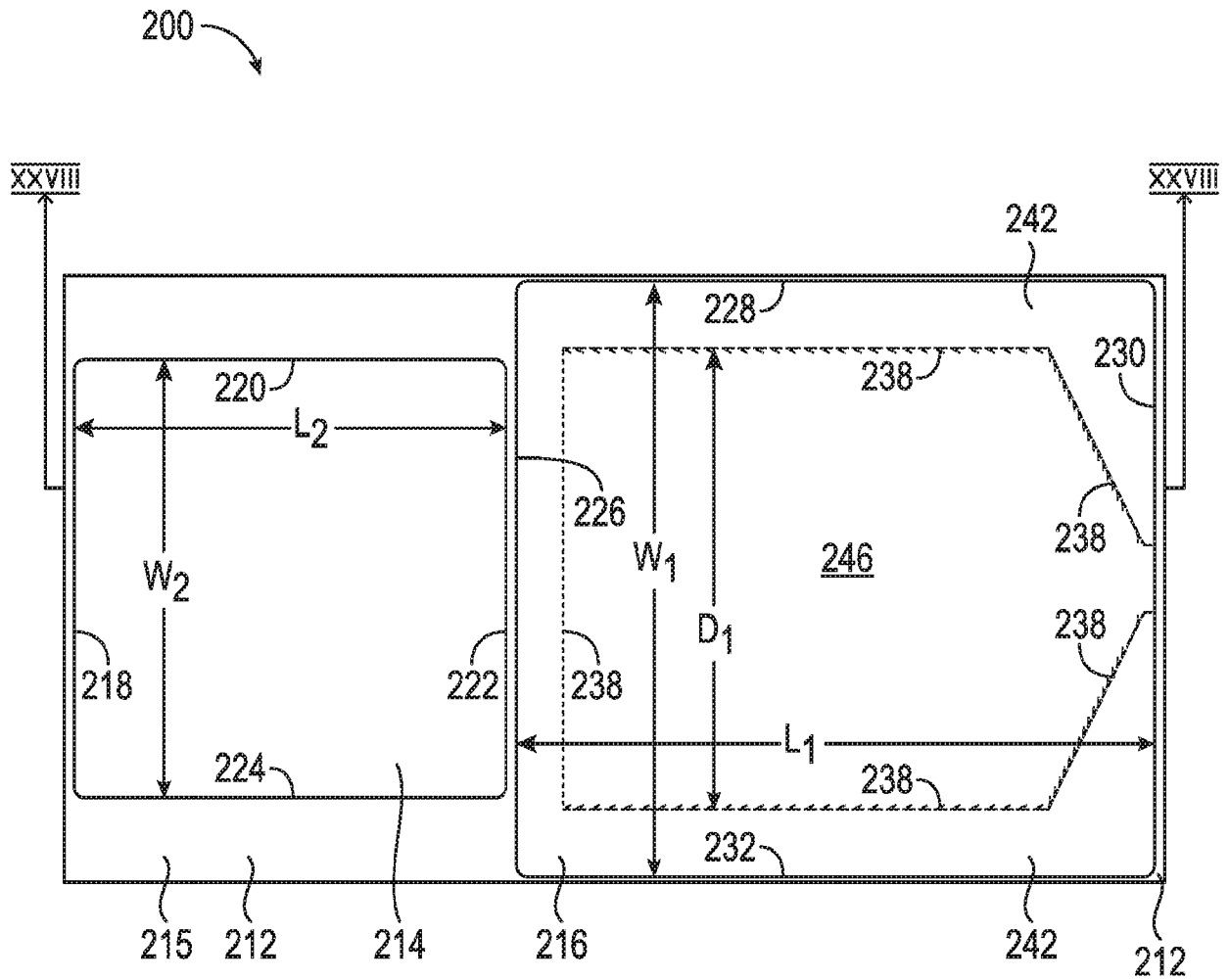


FIG. 26

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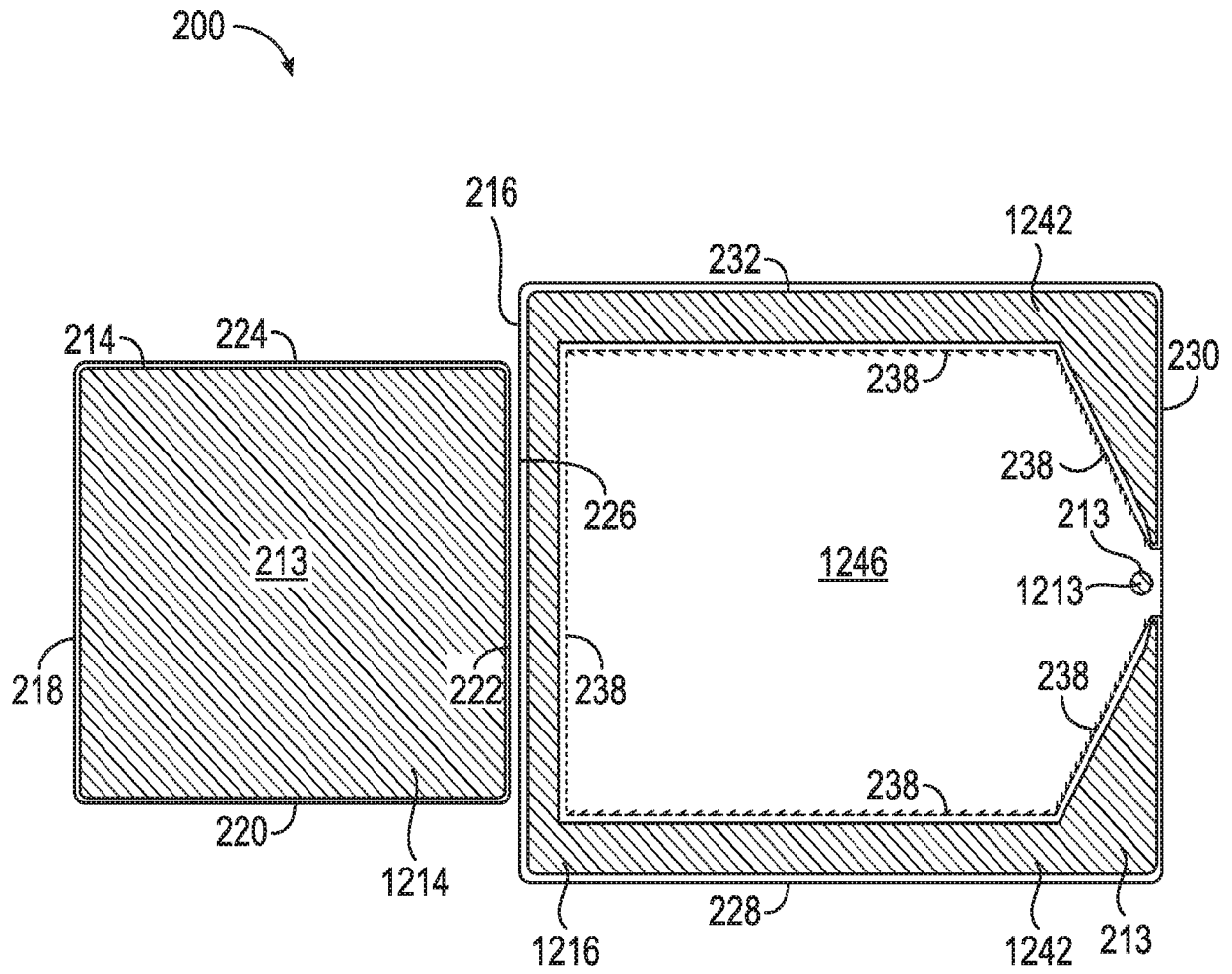


FIG. 27

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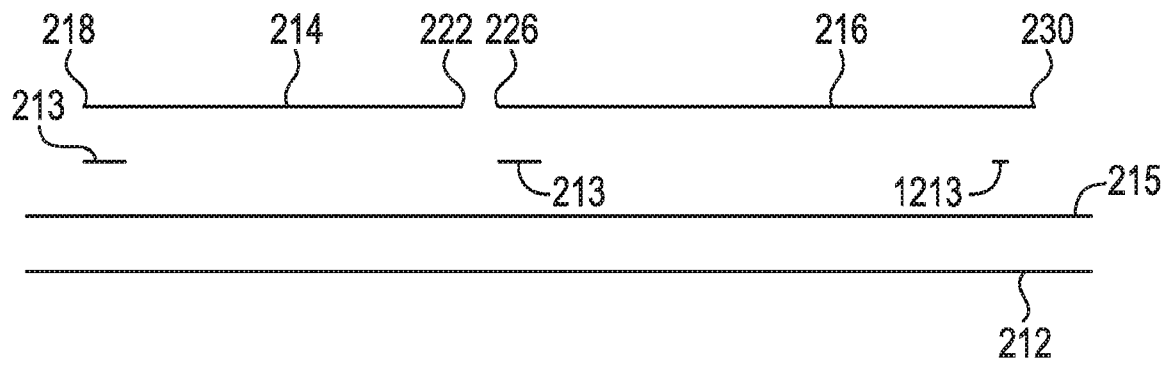


FIG. 28

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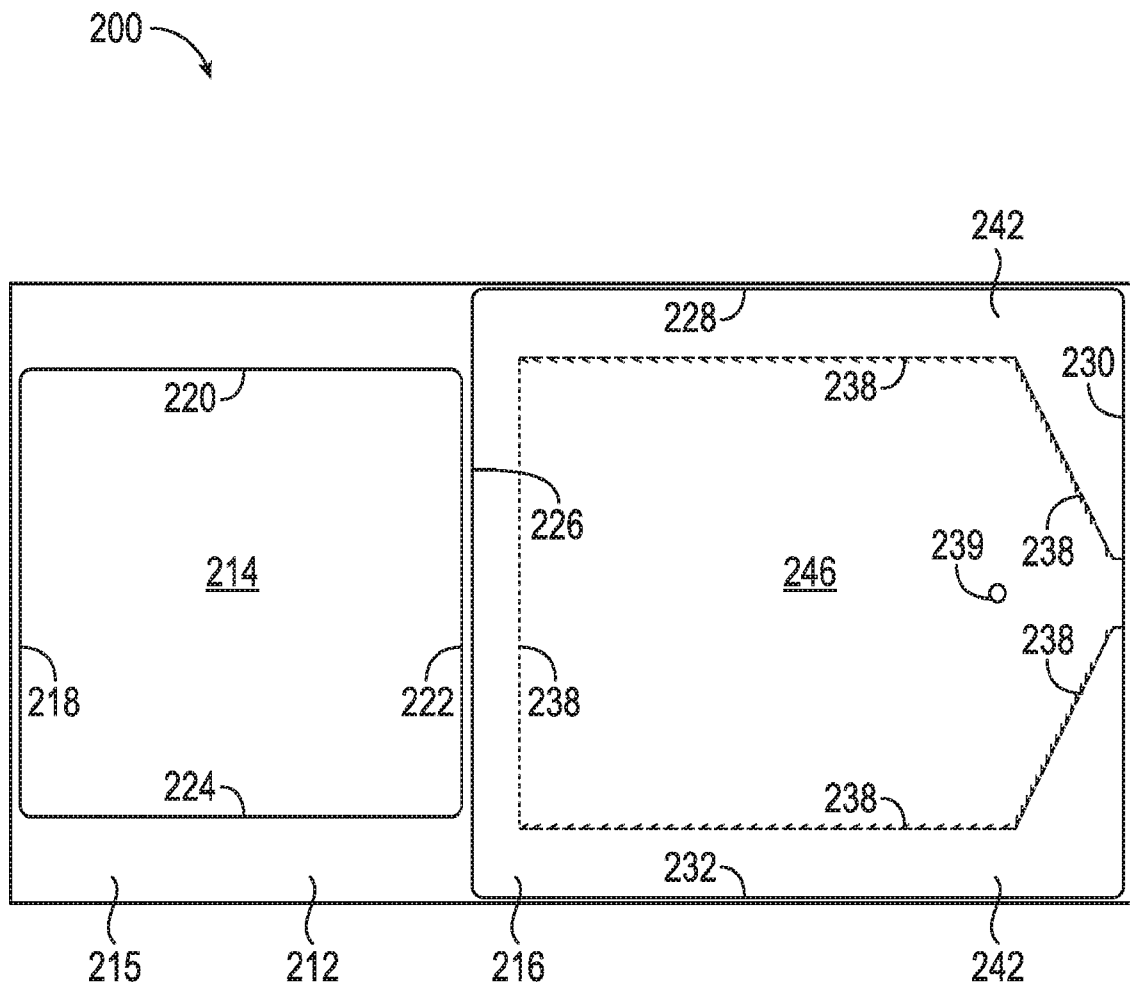


FIG. 29

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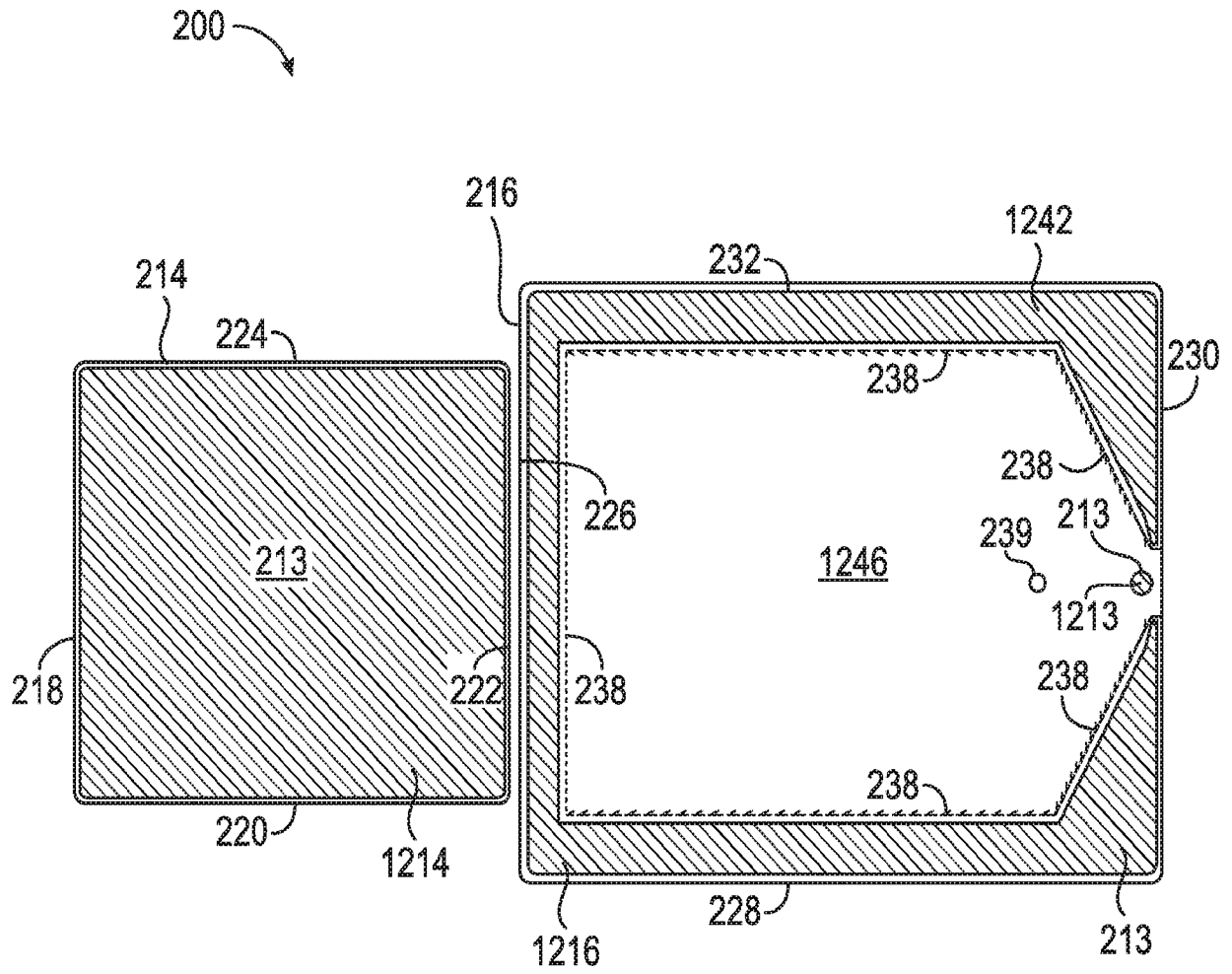


FIG. 30

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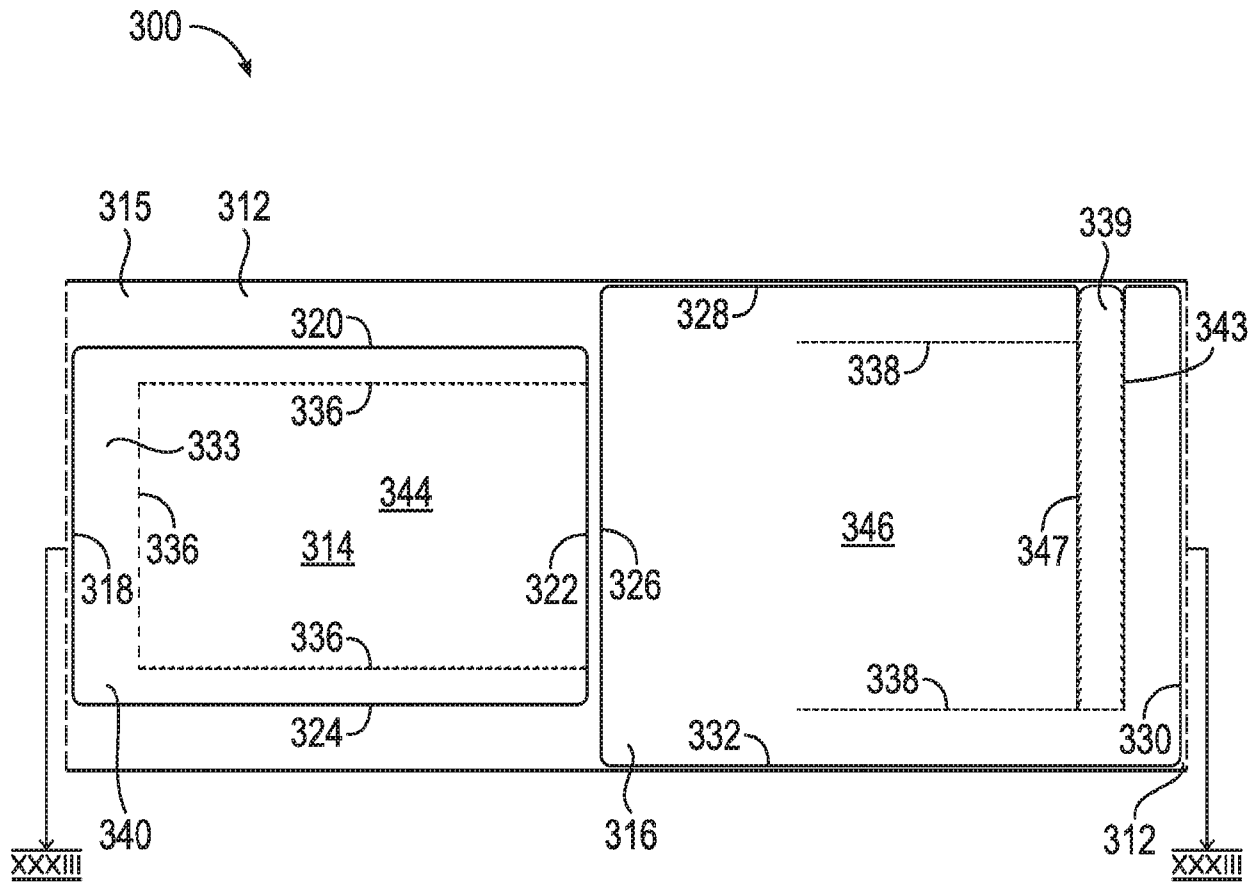


FIG. 31

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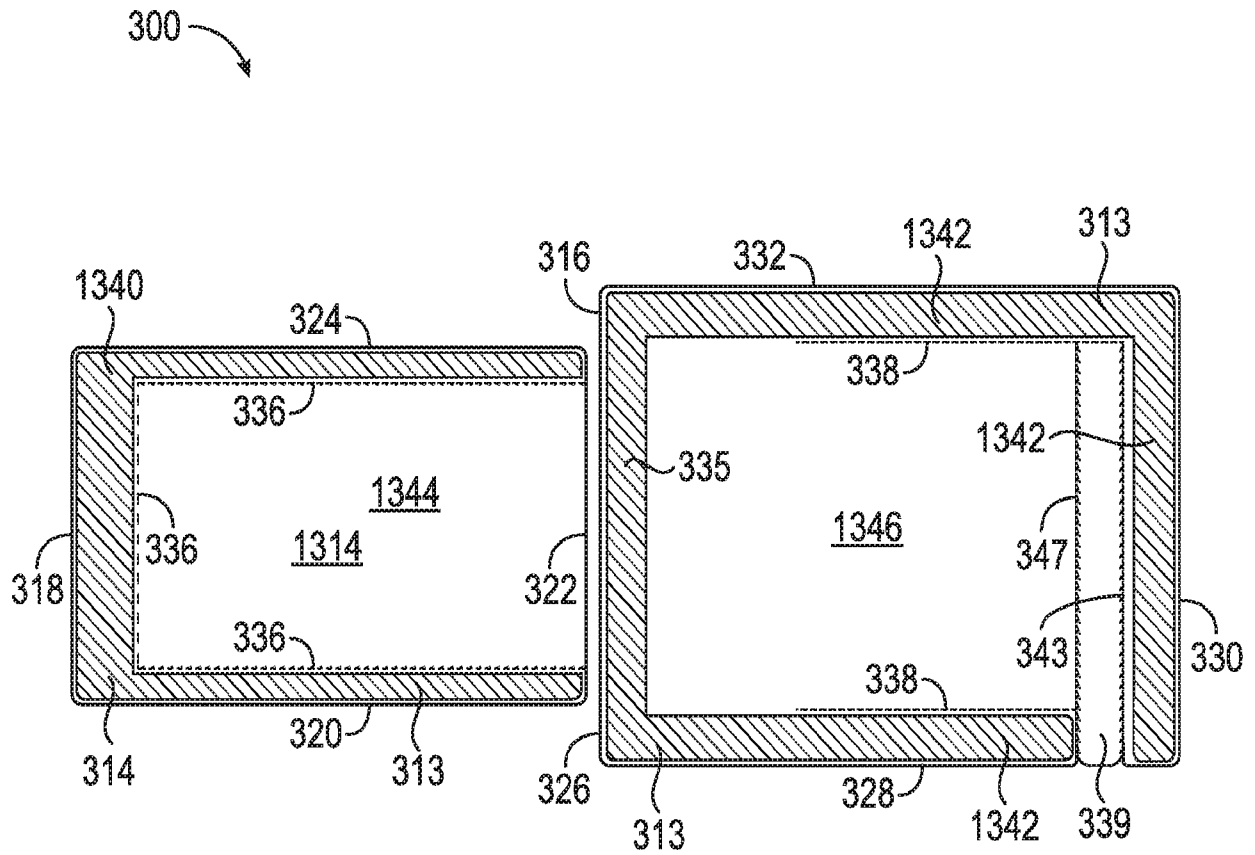


FIG. 32

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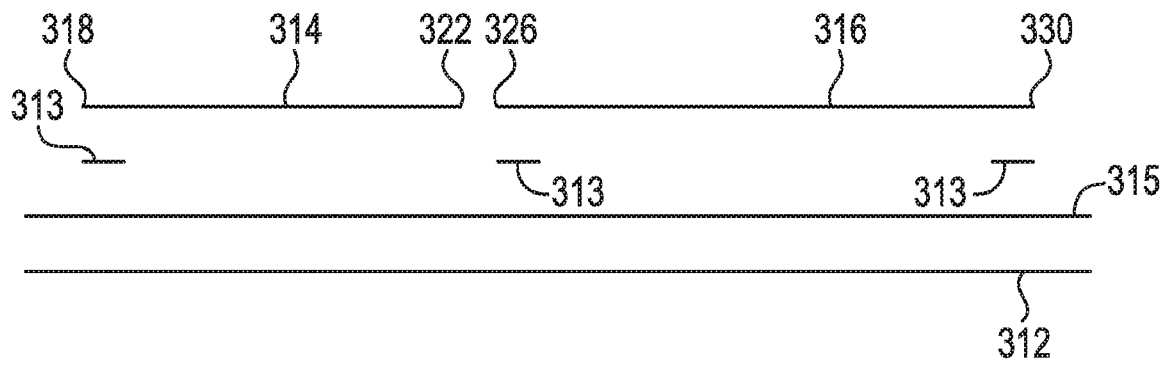


FIG. 33

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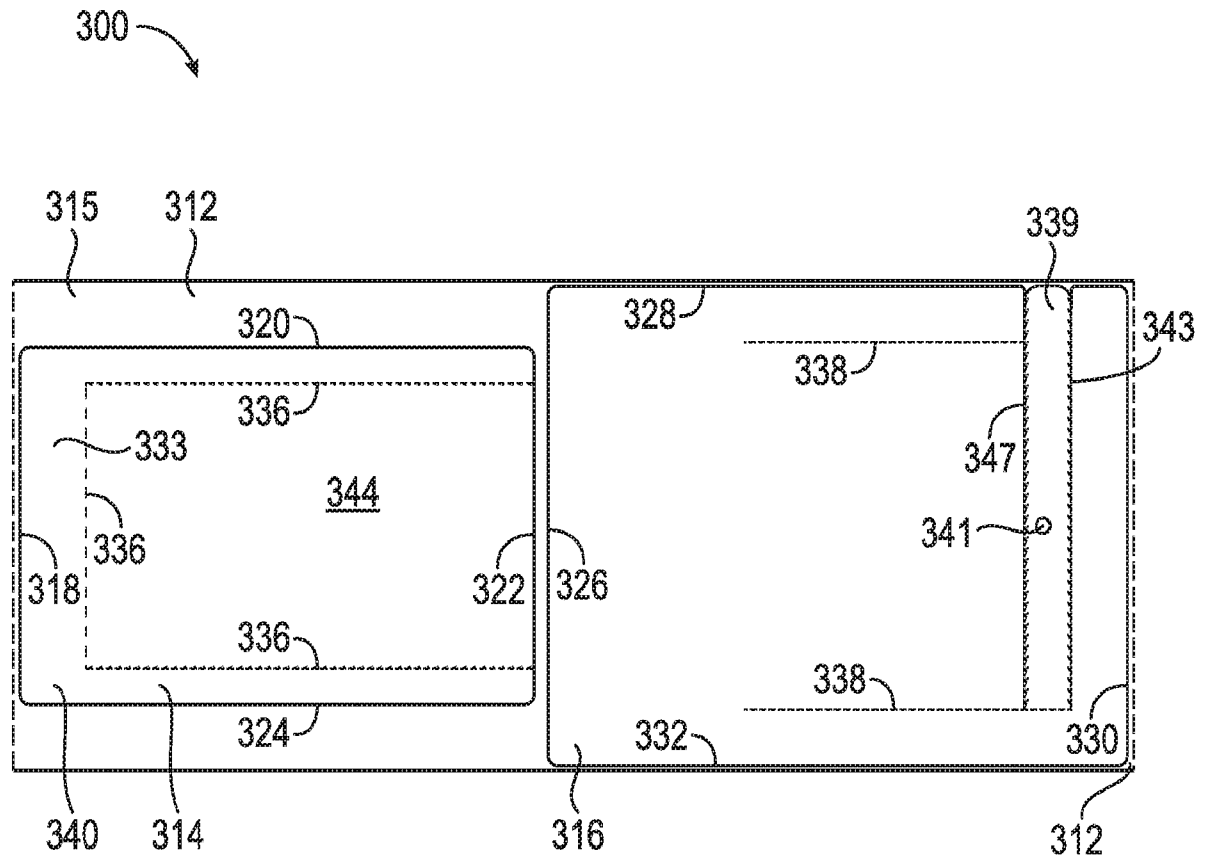


FIG. 34

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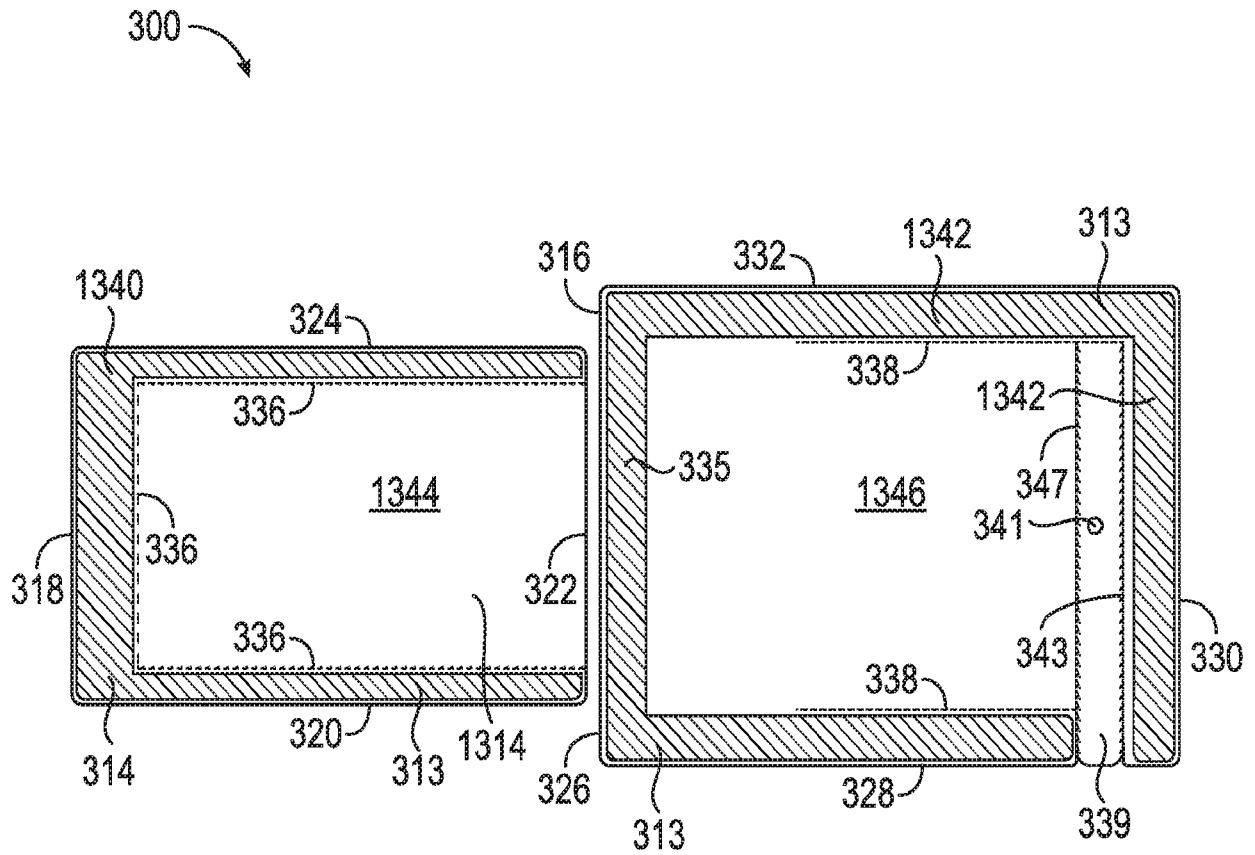


FIG. 35

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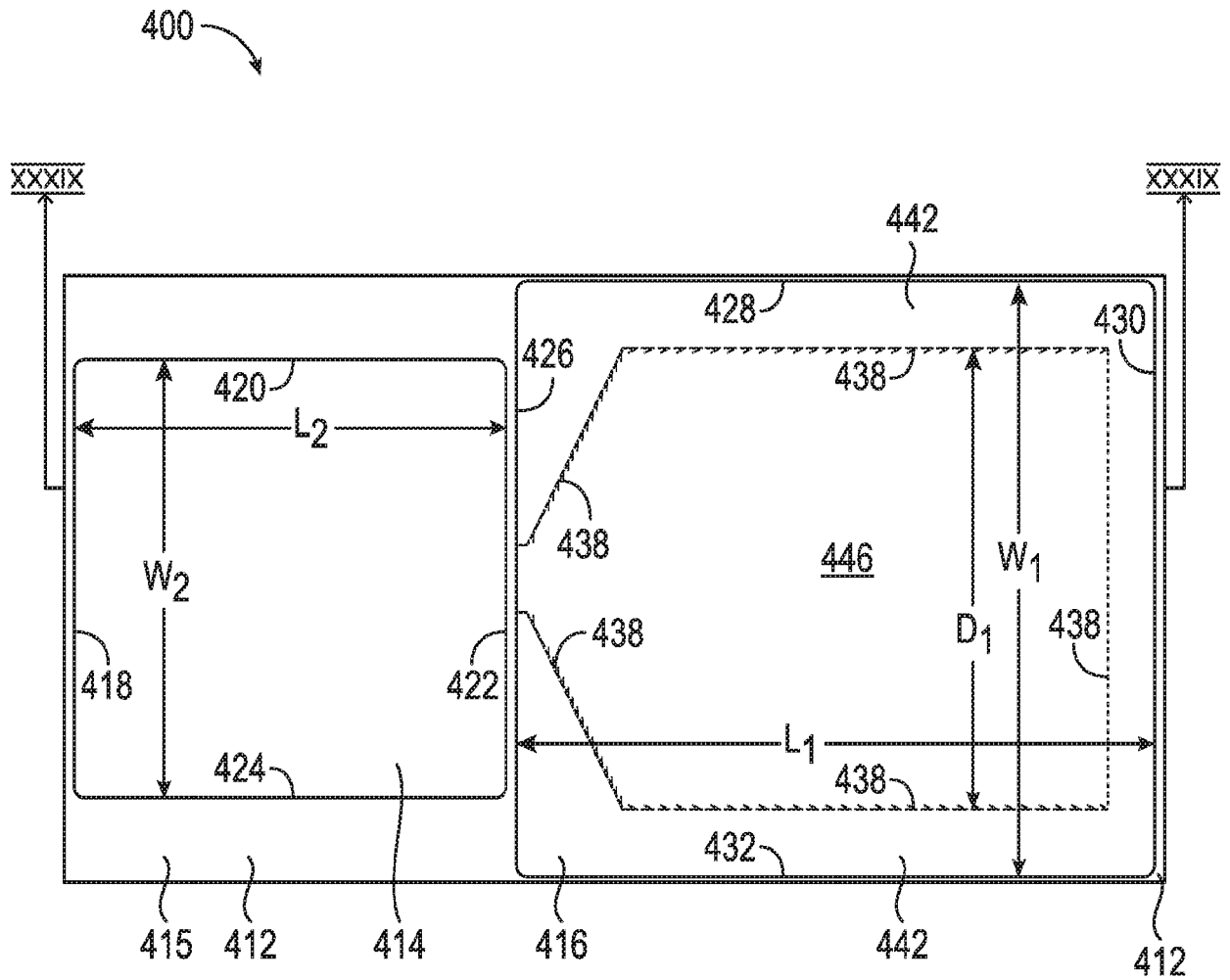


FIG. 37

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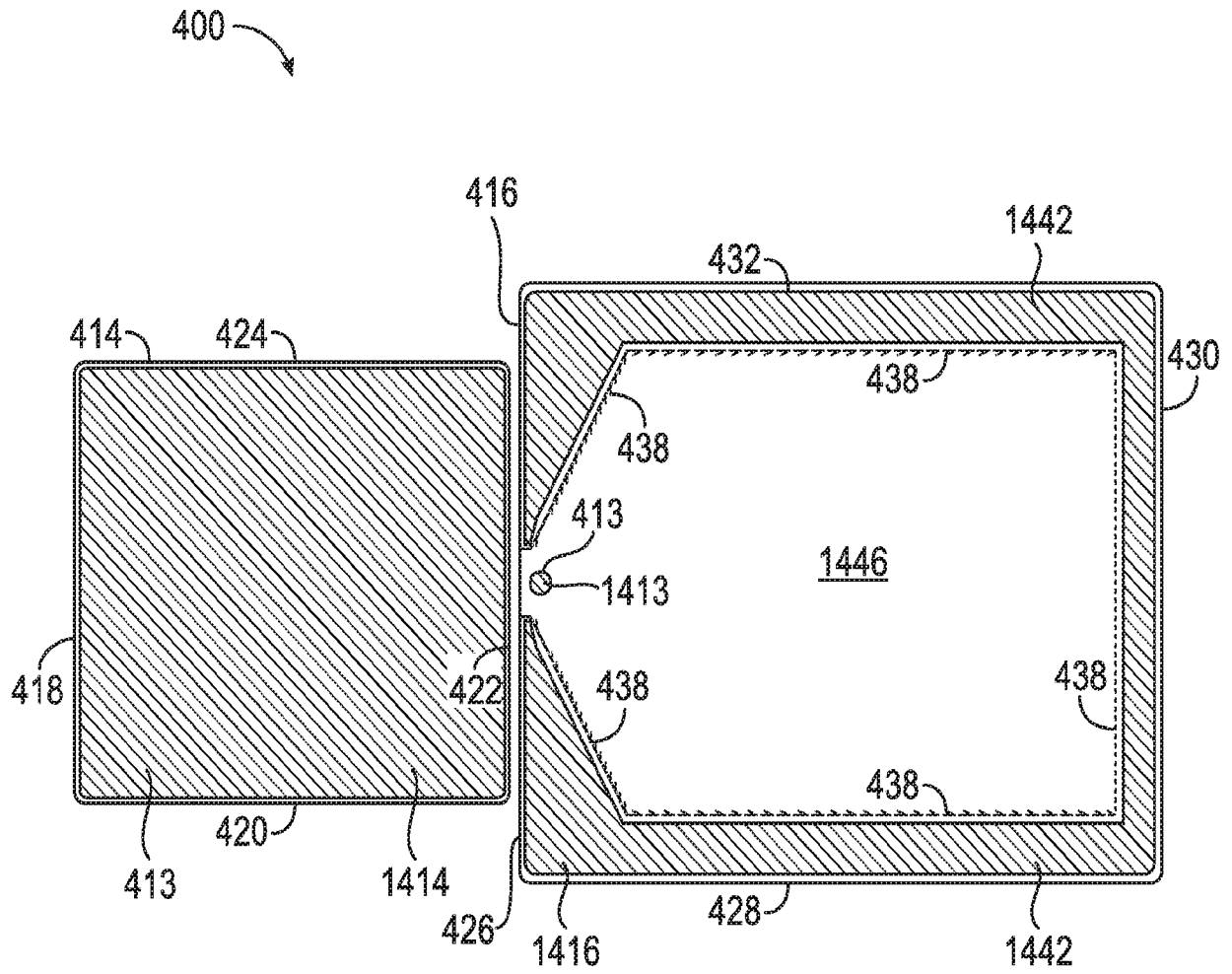


FIG. 38

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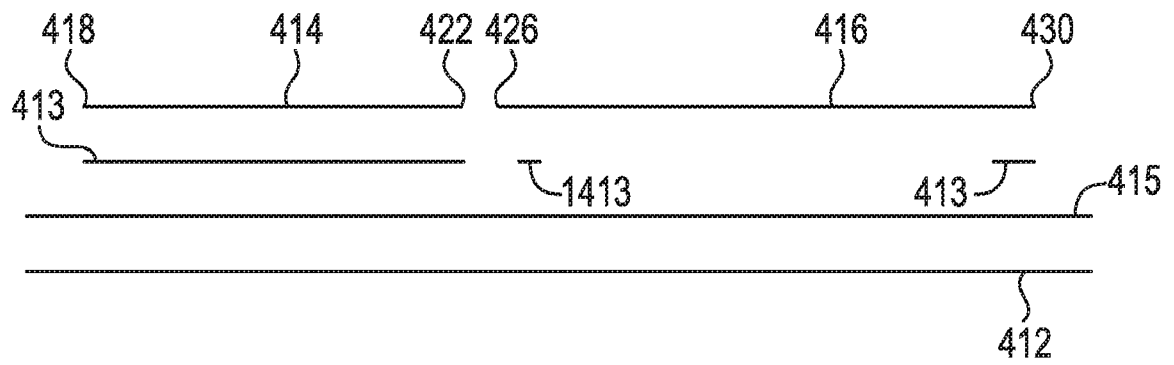


FIG. 39

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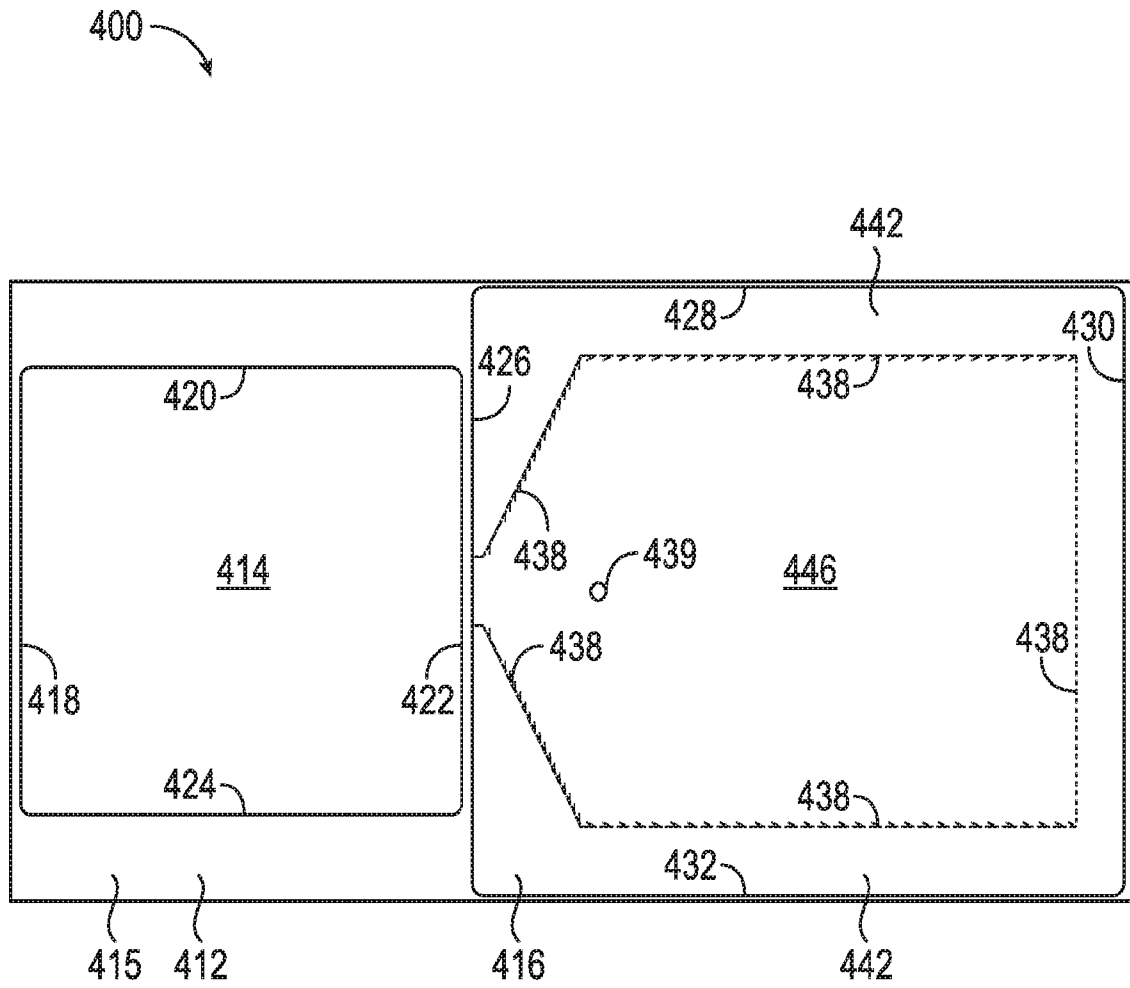
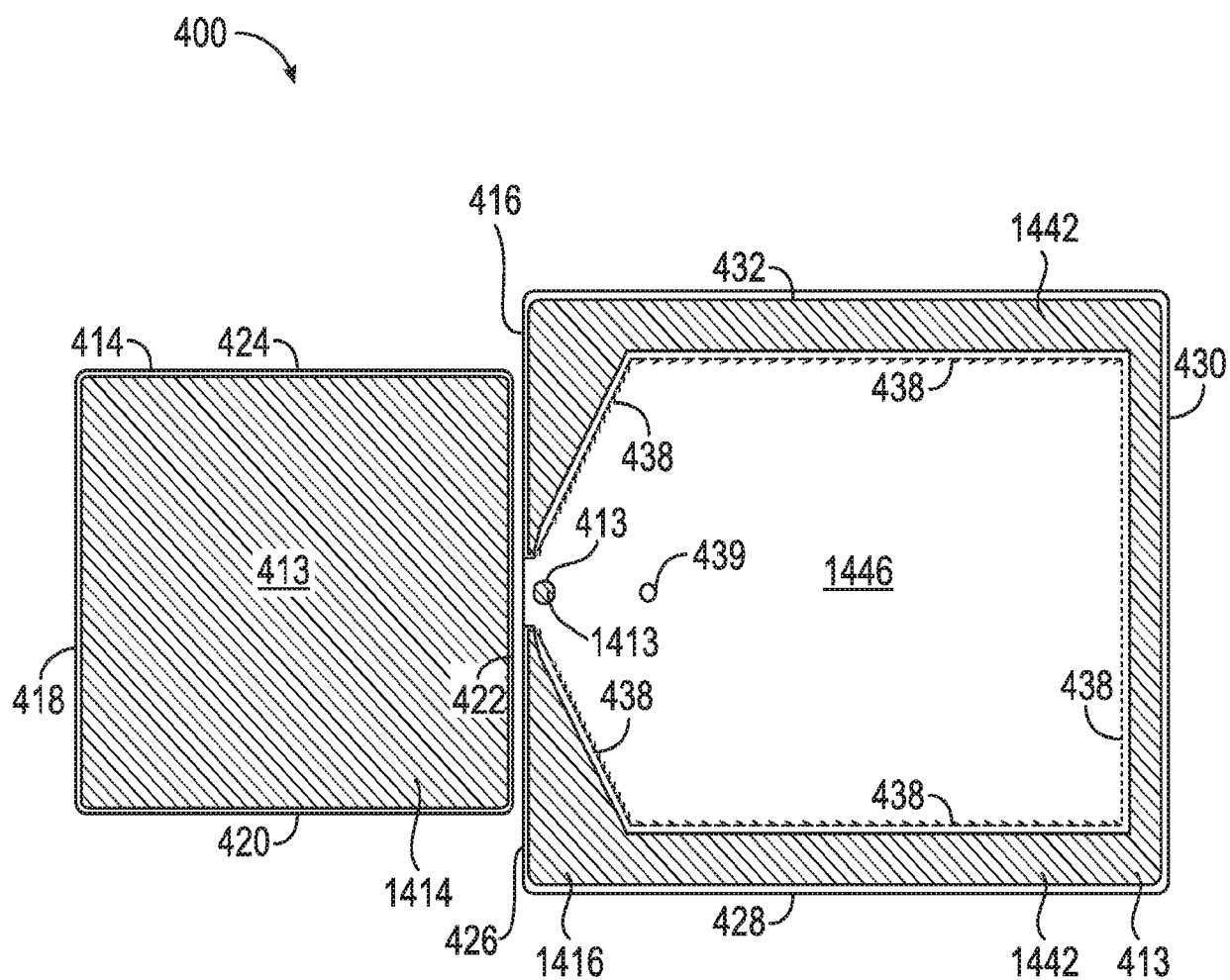


FIG. 40

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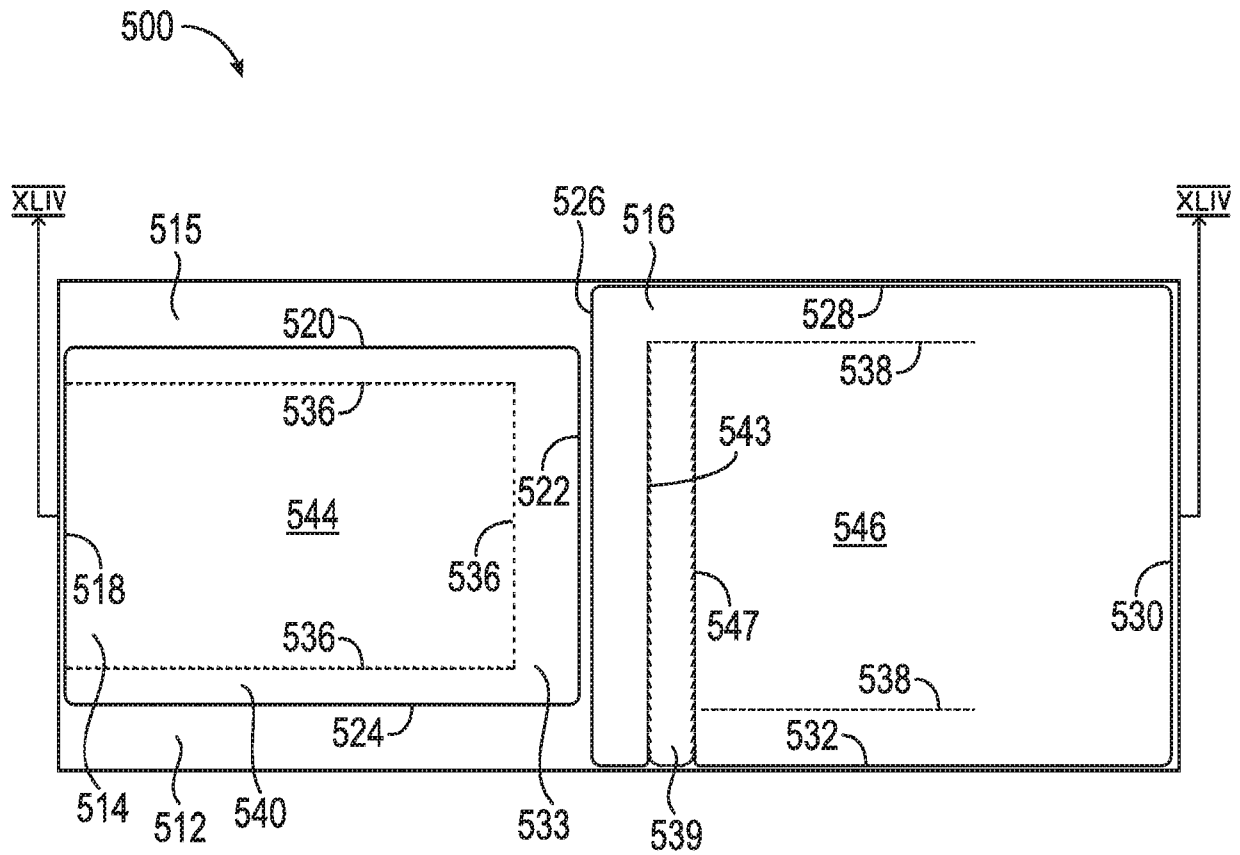


FIG. 42

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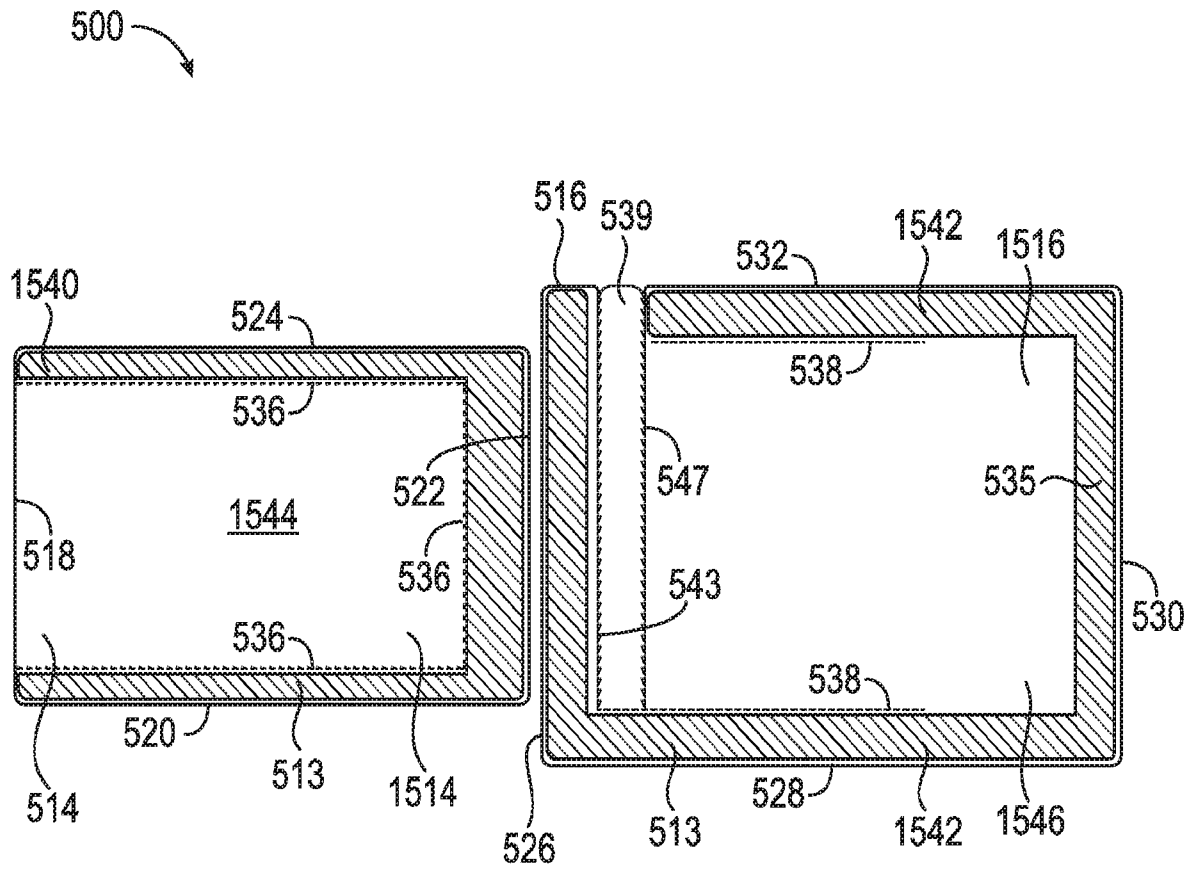


FIG. 43

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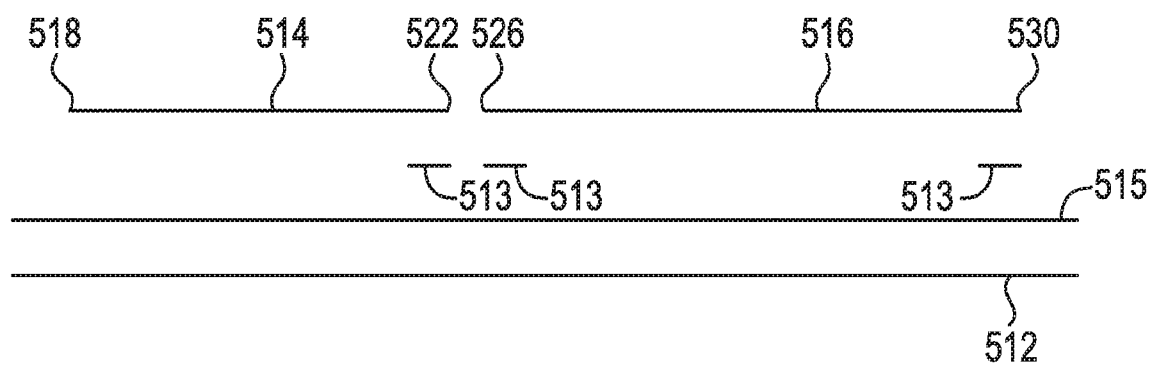


FIG. 44

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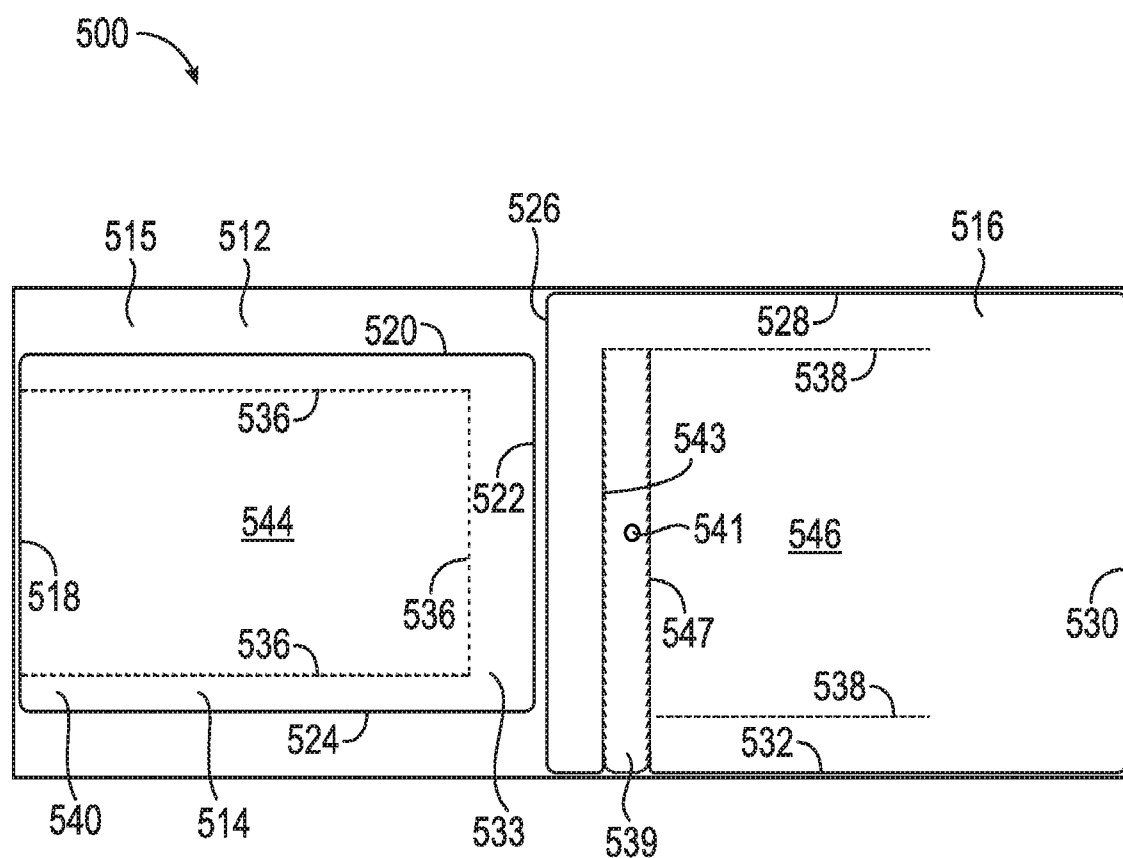


FIG. 45

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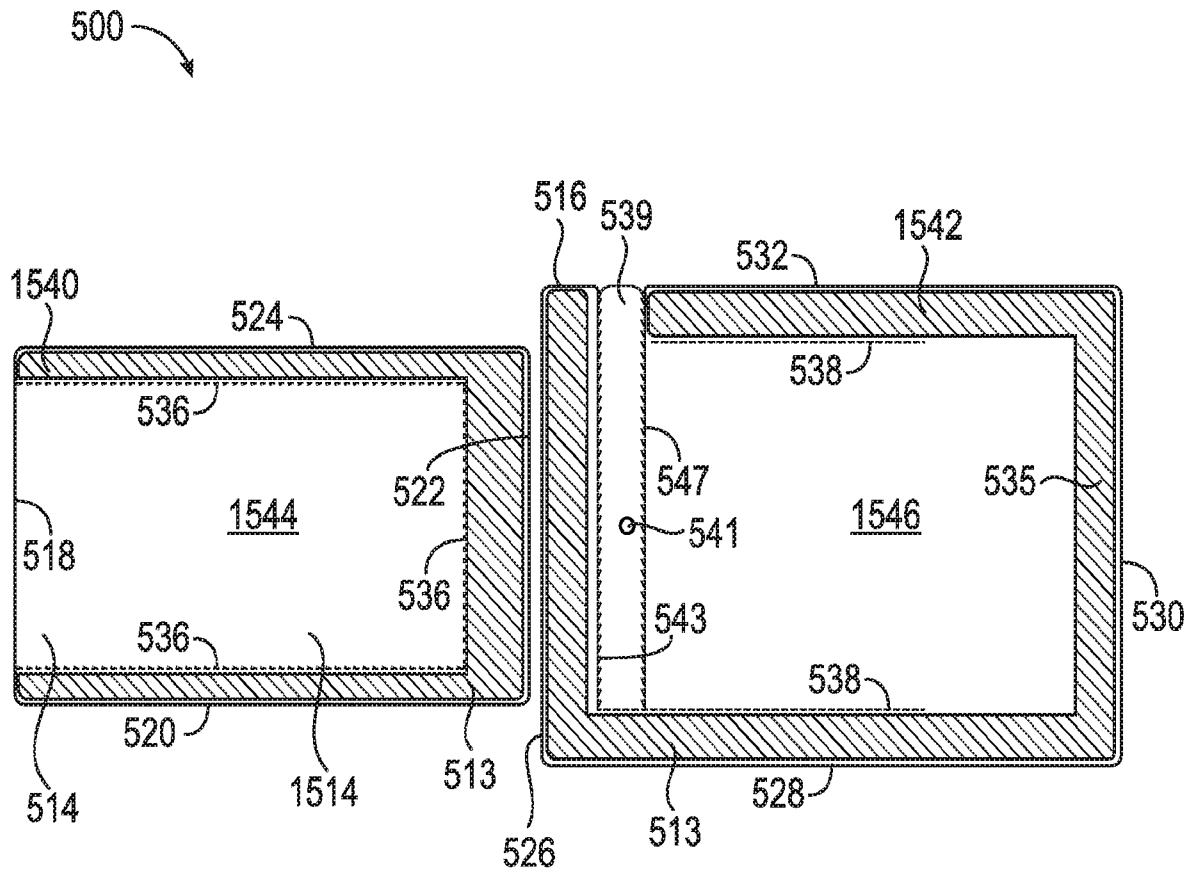


FIG. 46

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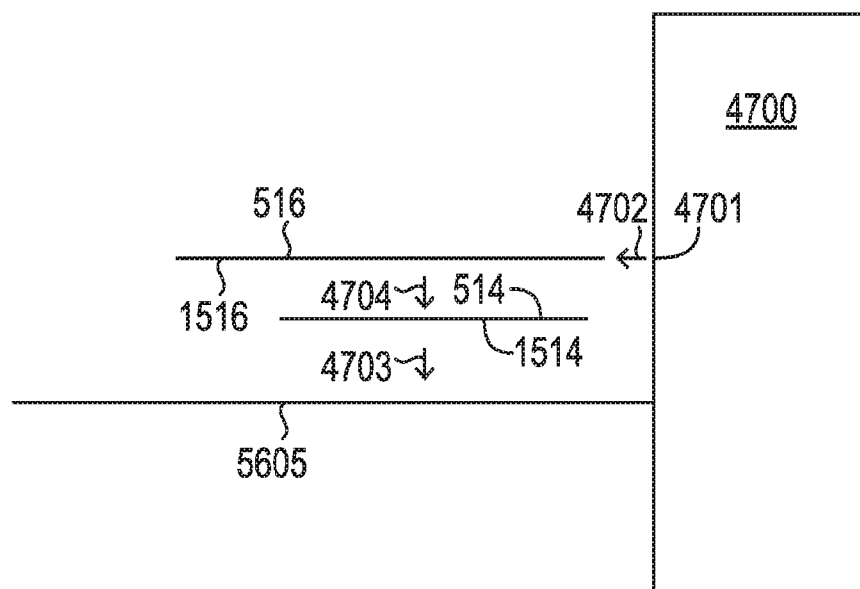


FIG. 47

