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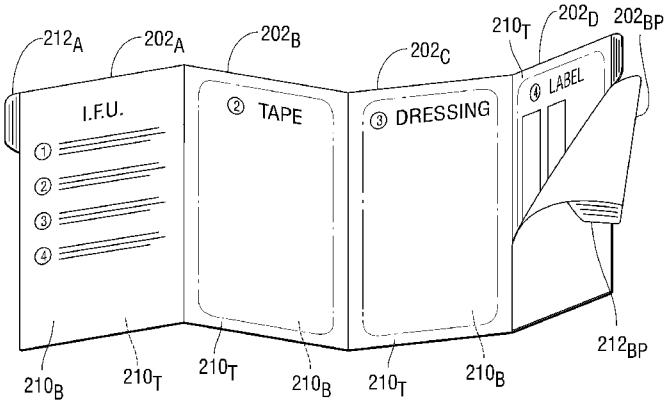



FIG. 15

(57) **Abstract**: The present disclosure relates to medical packaging for the accommodation of medical supplies. The medical packaging discussed herein has a plurality of panels, including a first panel, a second panel, and a third panel, that are releasably secured together to establish a first sterile environment between the first panel and the second panel for the retention of a first medical supply, and a second sterile environment between the second panel and the third panel for the retention of a second medical supply. The panels are configured for relative movement such that movement of the first panel relative to the second panel reveals the first medical supply without compromising the second sterile environment, and movement of the second panel relative to the third panel reveals the second medical supply. The panels are arranged for sequential separation in accordance with the steps of the procedure in which the medical supplies are employed.

# FOLDABLE PACKAGE

## BACKGROUND

### 1. Technical Field

[0001] The present disclosure relates generally to a foldable package. More specifically, the present disclosure relates to a foldable package for the accommodation of medical supplies.

### 2. Background of Related Art

[0002] The packaging of medical supplies presents a particular concern given the general necessity to maintain such supplies in a sterile environment. The packaging must not only preserve the sterility of the medical supplies at all times during transport, but must also protect the medical supplies from damage that may be sustained during handling and/or storage. Any rupturing, piercing, or damage to the packaging may compromise the integrity of the sterile environment, thus resulting in the use of a potentially unsafe product, the communication of undesirable substances or agents to a patient, and perhaps even infection.

[0003] Generally, medical supply packaging will include the instruments that will be used during the course of the procedure, in addition to the corresponding instruction-for-use (I.F.U.). Either prior to, or during the medical procedure, the packaging is opened to expose the instruments, and the I.F.U. is generally removed and set aside for later reference by a practitioner. However, accessing the instruments and the I.F.U. in this way unnecessarily exposes the entire contents of the package to the ambient, and clutters the work environment by

separating the medical instruments from the I.F.U. and the packaging. Accordingly, there exists a need in the art for improved packaging that will address these issues.

## SUMMARY

**[0004]** In one aspect of the present disclosure, a medical package is disclosed that is configured and dimensioned to accommodate medical supplies employable during a medical procedure. The medical package has a plurality of panels, including a first panel, a second panel, and a third panel.

**[0005]** The panels are releasably secured together to establish a first sterile environment between the first panel and the second panel for retention of a first medical supply, and a second sterile environment is established between the second panel and the third panel for retention of a second medical supply. The panels are configured for relative movement such that movement of the first panel relative to the second panel reveals the first medical supply without compromising the second sterile environment, and movement of the second panel relative to the third panel reveals the second medical supply. The panels are arranged for sequential separation in accordance with a plurality of steps performed during the medical procedure that are described in corresponding instructions for use supported on the first panel.

**[0006]** The first panel is movable relative to the second panel in a first direction, and the second panel is movable relative to third panel in a second direction, wherein the first direction and the second direction are different. To facilitate manual manipulation of the panels, the first

panel may include a first tab, the second panel may include a second tab, and the third panel may include a third tab.

**[0007]** The plurality of panels may be fixedly attached to one another, or alternatively, at least one of the plurality of panels may be removable from the medical package. Additionally, it is envisioned that the plurality of panels may be foldably interconnected, e.g., through a plurality of living hinges.

**[0008]** In an alternative embodiment, the medical package further includes a fourth panel that is releasably secured to the third panel to establish a third sterile environment therebetween for retention of a third medical supply. To reveal the third medical supply, the third panel is configured for movement relative to the fourth panel in the second direction. The fourth panel may include a fourth tab configured to facilitate manual manipulation of the fourth panel.

**[0009]** In another embodiment, the medical package further includes a fifth panel that is releasably secured to the fourth panel such that a fourth sterile environment is established therebetween for retention of a fourth medical supply. The fourth panel is configured for movement relative to the fifth panel in the second direction to reveal the fourth medical supply. The fifth panel may include a fifth tab configured to facilitate manual manipulation of the fifth panel. In this embodiment, the third panel is configured for movement relative to the fourth panel to reveal the third medical supply without compromising the fourth sterile environment.

**[0010]** In another aspect of the present disclosure, a medical package is disclosed that is configured and dimensioned to accommodate medical supplies employable during a medical procedure. The medical package has a plurality of panels including a first panel, a second panel, and a third panel. The first and second panels are releasably secured together to establish a first sterile environment therebetween for retention of a first medical supply, and the second and third panels are releasably secured together such that a second sterile environment is established therebetween for retention of a second medical supply. The first panel is movable relative to the second panel from a first position, in which the first medical supply remains concealed within the first sterile environment, to a second position, in which the first medical supply is revealed, and the second panel is movable relative to the third panel from a first position, in which the second medical supply remains concealed within the second sterile environment, to a second position, in which the second medical supply is revealed. The plurality of panels are arranged for sequential separation in accordance with a plurality of steps performed during the medical procedure.

**[0011]** In a final aspect of the present disclosure, a medical procedure is disclosed that includes the step of providing a medical package with a plurality of panels including at least a first panel, a second panel, and a third panel. The plurality of panels are releasably secured together to establish a first sterile environment between the first panel and the second panel for retention of a first medical supply, and a second sterile environment between the second panel and the third panel for retention of a second medical supply. The plurality of panels are configured for relative movement such that movement of the first panel relative to the second

panel reveals the first medical supply without compromising the second sterile environment, and movement of the second panel relative to the third panel reveals the second medical supply.

**[0012]** In addition, the method includes the steps of moving the first panel relative to the second panel to reveal the first medical supply, using the first medical supply, moving the second panel relative to the third panel to reveal the second medical supply, and using the second medical supply.

**[0013]** These and other features of the medical packaging and procedure disclosed herein will become more readily apparent to those skilled in the art through reference to the detailed description of the various embodiments of the present disclosure below.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0014]** The accompanying drawings, which are incorporated in, and constitute a part of this specification, illustrate various exemplary embodiments of the present disclosure. Together with the general description given above, and the detailed description of the embodiments given below, the accompanying drawings serve to explain the principles of the medical packaging and method disclosed herein.

**[0015]** FIG. 1 is a top, perspective view of one embodiment of a medical package, in accordance with the principles of the present disclosure, that includes a top panel, a bottom, panel, and a plurality of intermediate panels positioned therebetween for the accommodation of medical supplies;

**[0016]** FIG. 2 is a top, perspective view of the medical package of FIG. 1 after lifting the top panel to expose a first intermediate panel, and a swab positioned thereon, for using during a surgical procedure;

**[0017]** FIG. 3 is a top, perspective view of the medical package seen in FIG. 1 illustrating movement of the first intermediate panel to expose a second intermediate panel;

**[0018]** FIG. 4 is a top, perspective view of the medical package seen in FIG. 3 illustrating the second intermediate panel, and a first collection of securement tape positioned thereon, for using during the surgical procedure;

**[0019]** FIG. 5 is a top, perspective view of the medical package seen in FIG. 4 illustrating movement of the second intermediate panel to expose a third intermediate panel;

**[0020]** FIG. 6 is a top, perspective view of the medical package seen in FIG. 5 illustrating the third intermediate panel, and a dressing positioned thereon, for using during the surgical procedure;

**[0021]** FIG. 7 is a top, perspective view of the medical package seen in FIG. 6 illustrating movement of the third intermediate panel to expose the bottom panel;

**[0022]** FIG. 8 is a top, perspective view of the medical package seen in FIG.7 illustrating the bottom panel, and a second collection of securement tape, together with a label, positioned thereon, for using during the surgical procedure;

**[0023]** FIG. 9 is a top, perspective view of another embodiment of a medical package, in accordance with the principles of the present disclosure, that includes a plurality of panels for the accommodation of medical supplies;

**[0024]** FIG. 10 is a top, perspective view of the medical package seen in FIG. 9 after lifting a first panel and illustrating a bottom face of a third panel, and a swab positioned thereon, for use during a surgical procedure;

**[0025]** FIG. 11 is a top, perspective view of the medical package seen in FIG. 10 illustrating movement of the third panel to expose a top face of a second panel;

**[0026]** FIG. 12 is a top, perspective view of the medical package seen in FIG. 11 illustrating the top face of the second panel, a first collection of securement tape positioned on the top face of the second panel for use during the surgical procedure, and a bottom face of a fourth panel;

**[0027]** FIG. 13 is a top, perspective view of the medical package seen in FIG. 12 illustrating movement of the fourth panel to expose a top face of the third panel and a backing panel positioned on a top face of the fourth panel;

**[0028]** FIG. 14 is a top, perspective view of the medical package seen in FIG. 13 illustrating the top face of the third panel, a dressing positioned on the top face of the third panel for use during the surgical procedure, and the backing panel;

**[0029]** FIG. 15 is a top, perspective view of the medical package seen in FIG. 14 illustrating movement of the backing panel to expose the top face of the fourth panel; and

**[0030]** FIG. 16 is a top, perspective view of the medical package seen in FIG. 15 illustrating the top face of the fourth panel, and a second collection of securement tape, together with a label, positioned thereon, for use during the surgical procedure.

## DESCRIPTION OF VARIOUS EMBODIMENTS

**[0031]** Various embodiments of the presently disclosed medical packaging and procedure will now be described in detail with reference to the foregoing figures wherein like reference characters identify similar or identical elements.

**[0032]** In the figures, and in the description which follows, the various embodiments of the disclosed medical packaging and procedure will be discussed in connection with an intravenous (IV) catheter protection system. However, one skilled in the art will envision that the medical packaging discussed herein below may be used in connection with any medical instruments or supplies, either presently known or later devised, without departing from the scope and spirit of the present disclosure.

**[0033]** FIGS. 1-8 illustrate one embodiment of a medical package 100 that houses and accommodates the aforementioned IV catheter protection system in a sterile environment until the medical package 100 is opened by a practitioner. The IV catheter protection system includes a swab 10 (FIG. 2), a first collection of securement tape 12 (FIG. 4), a dressing 14 (FIG. 6), and

a second collection of securement tape 16 (FIG. 8) in addition to a label 18. The method of use corresponding to the IV catheter protection system includes four steps that are outlined for the practitioner on instructions-for-use I.F.U. (FIGS. 2-8) that are supplied with the medical package 100.

**[0034]** The medical package 100 may be formed from any suitable material, including but not limited to paperboard, coated papers, polymer films, spunbound polymer fibetrs (e.g., Tyvek®), metalized polymer films, foils, and the like, either exclusively or in combination, and includes a plurality of panels 102 (FIG. 1) extending from a top edge 104 to a bottom edge 106 to define a length "L." In the specific embodiment illustrated in FIGS. 1-8, the medical package 100 includes a top panel 108, a bottom panel 110, and plurality of intermediate panels 112.

**[0035]** As can be ascertained through reference to FIGS. 1 and 2, the top panel 108 is connected to the bottom panel 110 along the length "L" through the employ of a living hinge 118 such that the top panel 108 is movable in the direction indicated by arrow 1. However, in alternative embodiments of the medical package 100, any binding suitable for the intended purpose of facilitating opening and closing of the medical package 100 may be used. Prior to opening the medical package 100, the respective top and bottom panels 108, 110 are releasably secured along the peripheries thereof. The respective top and bottom panels 108, 110 may be secured together in any manner suitable for the intended purpose of establishing and maintaining a sterile environment therebetween until such time that a practitioner intentionally opens the medical package 100. For example, it is envisioned that the respective top and bottom panels

108, 110 may be attached through the use of a medical grade, sterile adhesive (not shown). The top and bottom panels 108, 110 include tabs $114_T$ and $114_M$, respectively, which are each configured for grasping by the practitioner to facilitate separation of the top panel 108 from the bottom panel 110, and thus opening of the medical package 100.

**[0036]** The top panel 108 defines a bottom face $116_B$ (FIG. 2) that accommodates the I.F.U. outlining the use of the IV catheter protection system. The I.F.U. may be either removably attached to the bottom face $116_B$ of the top panel 108, or alternatively, the I.F.U. may be fixedly or integrally formed therewith. For example, the I.F.U. may be fastened to the bottom face $116_B$ of the top panel 108, e.g., through the use of sterile adhesive, or the I.F.U. may be written or inscribed thereon. Positioning the I.F.U. on the bottom face $116_B$ of the top panel 108 allows the I.F.U. to remain visible to the practitioner at all times during the medical procedure, as will be discussed in further detail below.

**[0037]** Referring again to FIGS. 1-8, the aforementioned intermediate panels 112 are positioned between the top panel 108 and the bottom panel 110. The intermediate panels 112 are arranged such that they are exposed sequentially according to the order in which the steps of the corresponding medical procedure are performed, as outlined in the I.F.U. The intermediate panels 112 support a number of the medical supplies included in the medical package 100. As such, in the embodiment of the medical package 100 seen in FIGS. 1-8, the intermediate panels 112 support individual components of the intravenous (IV) catheter protection system. Specifically, the intermediate panels 112 include a first intermediate panel $112_A$ (FIG. 2)

supporting the swab 10, a second intermediate panel $112_B$ (FIG. 4) supporting the first collection of securement tape 12, and a third intermediate panel $112_C$ (FIG. 6) supporting the dressing 14. In alternate embodiments of the medical package 100, however, greater or fewer numbers of intermediate panels 112 may be included depending upon the number of individual medical supplies accommodated by the medical package 100. The final component of the IV catheter protection system, i.e., the second collection of securement tape 16 and the label 18, are supported on a top face $116_T$ of the bottom panel 110, rather than on an additional intermediate panel 112, to reduce the overall number of components in the medical package 100, and thus, decrease manufacturing costs. However, an embodiment of the medical package 100 including a plurality of intermediate panels 112 corresponding in number to the number of components housed by the medical package 100, i.e., an embodiment wherein the top face $116_T$ (FIG. 3) of the bottom panel 110 does not support any medical supplies, is not beyond the scope of the present disclosure.

**[0038]** The first intermediate panel $112_A$ includes a tab $114_A$, the second intermediate panel $112_B$ includes a tab $114_B$, and the third intermediate panel $112_C$ includes a tab $114_C$. As discussed above with respect to the tabs $114_T$, $114_M$ respectively included on the top and bottom panels 108, 110, the tabs $114_A$, $114_B$, $114_C$ are each configured for grasping by the practitioner to facilitate separation of the respective first, second, and third intermediate panels $112_A$, $112_B$, $112_C$, and thus, exposure of the components of the IV catheter protection system retained within the medical package 100 in accordance with the procedure set forth below.

**[0039]** When the medical package 100 is assembled, a bottom face $116_B$ (FIG. 3) of the first intermediate panel $112_A$ is releasably secured to a top face $116_T$ of the second intermediate panel $112_B$, a bottom face $116_B$ (FIG. 5) of the second intermediate panel $112_B$ is releasably secured to a top face $116_T$ of the third intermediate panel $112_C$, and a bottom face $116_C$ (FIG. 7) of the third intermediate panel $112_C$ is releasably secured to the top face $116_T$ of the bottom panel 110. It is also envisioned that intermediate panel $112_A$ may be larger in size than intermediate panel $112_B$ and that intermediate panel intermediate panel $112_B$ may be larger in size than intermediate panel $112_C$ such that intermediate panels $112_A$, $112_B$, $112_C$ are each releasably secured to the top face $116_T$ of the bottom panel 110. As discussed above with respect to the top panel 108 and the bottom panel 110, the respective first, second, and third intermediate panels $112_A$, $112_B$, $112_C$, and the bottom panel 110, may be attached in any manner suitable for the intended purpose of establishing and maintaining a sterile environment therebetween, e.g., through the use of a medical grade, sterile adhesive (not shown). In the embodiment of the medical package 100 seen in FIGS. 1-8, the intermediate panels $112_A$, $112_B$, $112_C$ are connected to each other, and/or to the bottom panel 110, at one or more points along the top edge 104 such that the intermediate panels $112_A$, $112_B$, $112_C$ can be moved in the direction indicated by arrow 2. To facilitate movement of the intermediate panels $112_A$, $112_B$, $112_C$ in the direction of arrow 2, the tabs $114_A$, $114_B$, $114_C$ may be positioned in the lower right-hand corners 120 of the respective first, second, and third intermediate panels $112_A$, $112_B$, $112_C$, as seen in FIGS. 2-8, or in any other suitable location.

**[0040]** In an alternative embodiment of the medical package 100, it is envisioned that the intermediate panels $112_A$, $112_B$, $112_C$ may be connected to each other, and/or the bottom panel 110, at one or more points along the bottom edge 106 such that the intermediate panels $112_A$, $112_B$, $112_C$ can be moved in the direction of arrow 3 (FIG. 3). In this embodiment, the tabs $114_A$, $114_B$, $114_C$ may be respectively positioned on the first, second, and third intermediate panels $112_A$, $112_B$, $112_C$ in any suitable location, such as an upper right-hand corner 122 of the intermediate panels $112_A$, $112_B$, $112_C$.

**[0041]** The connections between the intermediate panels $112_A$, $112_B$, $112_C$, and the bottom panel 110, may be fixed, such that the intermediate panels $112_A$, $112_B$, $112_C$ are simply folded in the direction of arrow 2, and thus remain integrally formed components of the medical package 100. Alternatively, however, the connections between the intermediate panels $112_A$, $112_B$, $112_C$, and the bottom panel 110, may detachable, such that the intermediate panels $112_A$, $112_B$, $112_C$ are removable from the medical package 100 after separation from an adjacent panel 102 and/or the bottom panel 110.

**[0042]** Referring still to FIGS. 1-8, use of the medical package 100 will be discussed. To open the medical package 100, the practitioner grasps the tab $114_T$ (FIG. 1) included on the top panel 108, and lifts the top panel 108 in the direction indicated by arrow 1 to thereby separate the top panel 108 from the bottom panel 110, and expose the swab 10 (FIG. 2). Following separation of the top panel 108 from the bottom panel 110, it should be appreciated that the integrity of the sterile environment established between the intermediate panels 112 and the

bottom panel 110 remains intact, and that the I.F.U. becomes exposed for reference by the practitioner. After opening the medical package 100, the practitioner can utilize the swab 10 to clean the site where the IV catheter (not shown) will be inserted.

**[0043]** Following use of the swab 10 and insertion of the IV catheter (not shown), as seen in FIGS. 2 and 3, the practitioner can grasp the tab $114_A$ included on the first intermediate panel $112_A$, and lift the first intermediate panel $112_A$ in the direction indicated by arrow 2 to thereby separate the first intermediate panel $112_A$ from the second intermediate panel $112_B$, and expose the first collection of securement tape 12 (FIG. 4). Following separation of the first intermediate panel $112_A$ from the second intermediate panel $112_B$, the sterile environment previously established between the intermediate panels $112_B$, $112_C$ and the bottom panel 110 remains uncompromised.

**[0044]** By positioning the I.F.U. on the bottom face $116_B$ (FIG. 2) of the top panel 108, and moving the first intermediate panel $112_A$ in the direction of arrow 2, the practitioner remains in plain view of the I.F.U. such that the practitioner can continually reference the I.F.U. and prepare for the next step in the medical procedure. Thereafter, the practitioner can utilize the first collection of securement tape 12 to limit relative movement between the IV catheter (not shown) and the patient's skin.

**[0045]** With reference to FIGS. 4 and 5, the practitioner can then grasp the tab $114_B$ included on the second intermediate panel $112_B$, and lift the second intermediate panel $112_B$ in the direction indicated by arrow 2 to thereby separate the second intermediate panel $112_B$ from

the third intermediate panel $112_C$, and expose the dressing 14 (FIG. 6). Following separation of the second intermediate panel $112_B$ from the third intermediate panel $112_C$, the sterile environment previously established between the third intermediate panel $112_C$ and the bottom panel 110 remains uncompromised, and the I.F.U. remains visible for reference by the practitioner. Thereafter, the practitioner can position the dressing 14 as desired.

**[0046]** Finally, referring to FIGS. 7 and 8, the practitioner can grasp the tab $114_C$ included on the third intermediate panel $112_C$, and lift the third intermediate panel $112_C$ in the direction indicated by arrow 2 to thereby separate the third intermediate panel $112_C$ from the bottom panel 110, and expose the second collection of securement tape 16 and the label 18 (FIG. 8). The practitioner can then use the second collection of securement tape 16 to further limit relative movement between the IV catheter (not shown) and the patient's skin, as well as the label 18.

**[0047]** With reference now to FIGS. 9-16, an alternative embodiment of the medical package, referred to generally by the reference character 200, will be discussed. The medical package 200 is substantially similar to the medical package 100 discussed above with respect to FIGS. 1-8, and accordingly, will only be discussed with respect to its differences therefrom.

**[0048]** The medical package 200 includes a plurality of panels 202 extending from a top edge 204 to a bottom edge 206 to define a length "L," as well as a backing panel $202_{BP}$ (FIGS. 14 and 15). In the embodiment of the medical package seen in FIGS. 9-16, the medical package 200 houses the components of the IV catheter protection system discussed above, and is thus

illustrated as including a first panel $202_A$, a second panel $202_B$, a third panel $202_C$, and a fourth panel 202D, in addition to the aforementioned backing panel $202_{BP}$. However, alternate embodiments of the medical package 200 are also envisioned that may include greater or fewer numbers of panels 202 dependent upon the medical supplies intended to be accommodated thereby.

**[0049]** The first panel $202_A$ includes a bottom face $210_B$, a top face $210_T$, and a tab $212_A$, the second panel $202_B$ includes an bottom face $210_B$ and a top face $210_T$, the third panel $202_C$ includes a bottom face $210_B$ having a tab $212_C$ affixed thereto and a top face $210_T$, and the fourth panel $202_D$ includes a bottom face $210_B$ having a tab $212_D$ affixed thereto and a top face $210_T$. As seen in FIGS. 14 and 15, the fourth panel $202_D$ also includes the aforementioned backing panel $202_{BP}$. The backing panel $202_{BP}$ has a tab $212_{BP}$ affixed thereto, and is releasably attached to the top face $210_T$ of the fourth panel $202_D$ such that a sterile environment is established therebetween, e.g., through the use of a medical grade, sterile adhesive (not shown). The plurality of panels 202 are connected along their length "L" (FIG. 1) through the employ of a plurality of living hinges 214, which are best seen in FIG. 16. However, any binding suitable for the intended purpose of facilitating opening and closing of the medical package 200 may be used.

**[0050]** The bottom face $210_B$ of the first panel $202_A$ accommodates the I.F.U. pertaining to use of the IV catheter protection system, which may be either releasably connected to the bottom face $210_B$, or integrally formed therewith, as discussed above with respect to the medical

package 100 illustrated in FIGS. 1-8. The top face $210_T$ of the second panel $202_B$ accommodates the first collection of securement tape 12 (FIG. 12), the top face $210_T$ of the third panel $202_C$ accommodates the dressing 14 (FIG. 14), the top face $210_T$ of the fourth panel $202_D$ accommodates the second collection of securement tape 16 and the label 18 (FIG. 16), which are positioned beneath the backing panel $202_{BP}$ secured to the fourth panel $202_D$, and the bottom face $210_B$ of the third panel $202_C$ accommodates the swab 10 (FIG. 10).

**[0051]** As discussed above with respect to the medical package 100 seen in FIGS. 1-8, the medical package 200 is assembled such that the practitioner will sequentially expose the components of the IV catheter protection system according to the order in which the steps of the corresponding medical procedure are performed, as outlined in the I.F.U. Specifically, in the embodiment of the medical package seen in FIGS. 9-16, the medical package 200 is assembled such that the bottom face $210_B$ of the first panel $202_A$ is releasably attached to the bottom face $210_B$ of the third panel $202_C$, the top face $210_T$ of the second panel 202 is releasably attached to the bottom face $210_B$ of the fourth panel $202_D$, and the top face $210_T$ of the third panel 202 is releasably attached to the top face $210_T$ of the fourth panel $202_D$. However, additional arrangements for the medical package 200 are not beyond the scope of the present disclosure.

**[0052]** The panels 202 may be attached in any manner suitable for the intended purpose of establishing and maintaining a sterile environment between adjacent panels 202 (FIG. 1), e.g., through the use of a medical grade, sterile adhesive (not shown), until such time that the practitioner intentionally separates adjacent panels 202 to open the medical package 200.

**[0053]** With continued reference to FIGS. 9-16, use of the medical package 200 will be discussed. To open the medical package 200, the practitioner grasps the tab $212_A$ included on the first panel $202_A$, and lifts the first panel $202_A$ in the direction indicated by arrow 1 (FIG. 9) to separate the top face $210_T$ of the first panel $202_A$ from the bottom face $210_B$ of the third panel $202_C$, and thereby expose the swab 10 (FIG. 2) and the I.F.U. for reference by the practitioner during the medical procedure. Thereafter, the practitioner can utilize the swab 10 to clean the site where the IV catheter (not shown) will be inserted.

**[0054]** With specific reference to FIGS. 10 and 11, following use of the swab 10 and insertion of the IV catheter (not shown), the practitioner can grasp the tab $212_C$ included on the bottom face $210_B$ of the third panel $202_C$, and use the tab $212_C$ to move the third panel $202_C$ in the direction indicated by arrow 2. Referring now to FIG. 12 as well, movement of the third panel $202_C$ in the direction of arrow 2 separates the bottom face $210_B$ of the fourth panel $202_D$ from the top face $210_T$ of the second panel $202_B$, and exposes the first collection of securement tape 12 without obscuring the practitioner's view of the I.F.U., thereby allowing the practitioner to continually reference the I.F.U., if necessary. The practitioner can then utilize the first collection of securement tape 12 to limit relative movement between the IV catheter (not shown) and the patient's skin.

**[0055]** After placement of the first collection of securement tape 12, with reference now to FIGS. 12-14, the practitioner can grasp the tab $212_D$ included on the bottom face $210_B$ of the fourth panel $202_D$, and use the tab $212_D$ to move the fourth panel $202_D$ in the direction indicated

by arrow 2. Movement of the fourth panel $202_D$ in the direction of arrow 2 separates the top face $210_T$ of the third panel $202_C$ from the top face $210_T$ of the fourth panel $202_D$, and exposes the dressing 14 without obscuring the practitioner's view of the I.F.U. When the third panel $202_C$ is separated from the fourth panel $202_D$, the backing panel $202_{BP}$ maintains the sterile environment previously established for the second collection of securement tape 16 and the label 18. The practitioner can then position the dressing 14 as desired.

**[0056]** Finally, and with reference to FIGS. 15 and 16, the practitioner can grasp and use the tab $212_{BP}$ (FIG. 14) included on the backing panel $202_{BP}$ to move the separate the backing panel $202_{BP}$ from the top face $210_T$ of the fourth panel $202_D$ to thereby expose the second collection of securement tape 16 and the label 18. The backing panel $202_{BP}$ can be either removably connected to the top face $210_T$ of the fourth panel $202_D$ as shown in FIG. 15 such that the backing panel $202_{BP}$ can be completely removed from the medical package 200, or alternatively, the backing panel $202_{BP}$ can be fixedly secured to the top face $210_T$ of the fourth panel $202_D$ at one or more locations such that the backing panel $202_{BP}$ remains attached to the medical package 200. Following separation of the backing panel $202_{BP}$ from the top face $210_T$ of the fourth panel $202_D$, the practitioner can use the second collection of securement tape 16 to further limit relative movement between the IV catheter (not shown) and the patient's skin, for example, as well as the label 18.

**[0057]** As illustrate in FIGS. 10-16, the tabs $212_C$, $212_D$ are respectively attached to the bottom face $210_B$ of the third and fourth panels $202_C$, $202_D$ at the upper left-hand corner 216

thereof, and the tab $212_{BP}$ is attached to the upper left-hand corner 216 of the backing layer $202_{BP}$ such that the panels $202_C$, $202_D$ are movable in the direction of arrow 2. It should be appreciated, however, that the tabs $212_C$, $212_D$, $212_{BP}$ can be alternately positioned in any location suitable for the intended purpose of facilitating movement of the third panel $202_C$, the fourth panel $202_C$, and the backing panel $202_{BP}$ to expose the components of the IV catheter protection system as discussed above.

**[0058]** While the above is a complete description of the various embodiments of the medical package and method disclosed herein, various alternatives, modifications, and equivalents are also envisioned that do not depart from the scope or spirit of the present disclosure. For example, the features illustrated or described in connection with one exemplary embodiment may be combined with the features of other embodiments. Those skilled in the art will understand that the embodiments discussed above are intended to be non-limiting and exemplary only, and accordingly, that the present disclosure is not to be limited by what has been particularly shown and described, except as indicated by the appended claims.

**WHAT IS CLAIMED IS:**

1. A medical package configured and dimensioned to accommodate medical supplies employable during a medical procedure, the medical package comprising:

a plurality of panels including a first panel, a second panel, and a third panel, the plurality of panels being releasably secured together such that a first sterile environment is established between the first panel and the second panel for retention of a first medical supply and a second sterile environment is established between the second panel and the third panel for retention of a second medical supply, the plurality of panels being configured for relative movement such that movement of the first panel relative to the second panel reveals the first medical supply without compromising the second sterile environment and movement of the second panel relative to the third panel reveals the second medical supply.

2. The medical package of claim 1, wherein the plurality of panels are arranged for sequential separation in accordance with a plurality of steps performed during the medical procedure and described in instructions for use.

3. The medical package of claim 2, wherein the first panel is configured and dimensioned to support the instructions for use.

4. The medical package of claim 2, wherein the first panel is movable relative to the second panel in a first direction and the second panel is movable relative to third panel in a

second direction different from the first direction.

5. The medical package of claim 4, wherein the first panel includes a first tab, the second panel includes a second tab, and the third panel includes a third tab, the first tab being configured to facilitate manual manipulation of the first panel, the second tab being configured to facilitate manual manipulation of the second panel, and the third tab being configured to facilitate manual manipulation of the third panel.

6. The medical package of claim 4, further including a fourth panel releasably secured to the third panel such that a third sterile environment is established between the third panel and the fourth panel for retention of a third medical supply.

7. The medical package of claim 6, wherein the third panel is configured for movement relative to the fourth panel to reveal the third medical supply.

8. The medical package of claim 7, wherein the third panel is movable relative to the fourth panel in the second direction.

9. The medical package of claim 6, wherein the fourth panel includes a fourth tab configured to facilitate manual manipulation of the fourth panel.

10. The medical package of claim 8, further including a fifth panel releasably secured to the fourth panel such that a fourth sterile environment is established between the fourth panel and the fifth panel for retention of a fourth medical supply.

11. The medical package of claim 10, wherein the fourth panel is configured for movement relative to the fifth panel to reveal the fourth medical supply.

12. The medical package of claim 11, wherein the fourth panel is movable relative to the fifth panel in the second direction.

13. The medical package of claim 10, wherein the fifth panel includes a fifth tab configured to facilitate manual manipulation of the fifth panel.

14. The medical package of claim 10, wherein the third panel is configured for movement relative to the fourth panel to reveal the third medical supply without compromising the fourth sterile environment.

15. The medical package of claim 1, wherein the plurality of panels are fixedly attached to one another.

16. The medical package of claim 1, wherein at least one of the plurality of panels is removable from the medical package.

17. The medical package of claim 1, wherein the plurality of panels are foldably interconnected.

18. The medical package of claim 17, wherein the plurality of panels are interconnected via a plurality of living hinges.

19. A medical package configured and dimensioned to accommodate medical supplies employable during a medical procedure, the medical package comprising:

a plurality of panels including a first panel, a second panel, and a third panel, the first and second panels being releasably secured together such that a first sterile environment is established therebetween for retention of a first medical supply, the second and third panels being releasably secured together such that a second sterile environment is established therebetween for retention of a second medical supply, wherein the first panel is movable relative to the second panel from a first position, in which the first medical supply remains concealed within the first sterile environment, to a second position, in which the first medical supply is revealed, and the second panel is movable relative to the third panel from a first position, in which the second medical supply remains concealed within the second sterile environment, to a second position, in which the second medical supply is revealed.

20. The medical package of claim 19, wherein the plurality of panels are arranged for sequential separation in accordance with a plurality of steps performed during the medical procedure.

21. A medical procedure including the steps of:

providing a medical package with a plurality of panels including at least a first panel, a second panel, and a third panel, the plurality of panels being releasably secured together such that a first sterile environment is established between the first panel and the second panel for retention of a first medical supply and a second sterile environment is established between the second panel and the third panel for retention of a second medical supply, the plurality of panels being configured for relative movement such that movement of the first panel relative to the second panel reveals the first medical supply without compromising the second sterile environment and movement of the second panel relative to the third panel reveals the second medical supply;

moving the first panel relative to the second panel to reveal the first medical supply;

using the first medical supply;

moving the second panel relative to the third panel to reveal the second medical supply; and

using the second medical supply.

22. The method of claim 21, wherein the step of providing a medical package includes providing a medical package having instructions for use that identify the steps of the medical procedure, the instructions for use being positioned on the first panel.

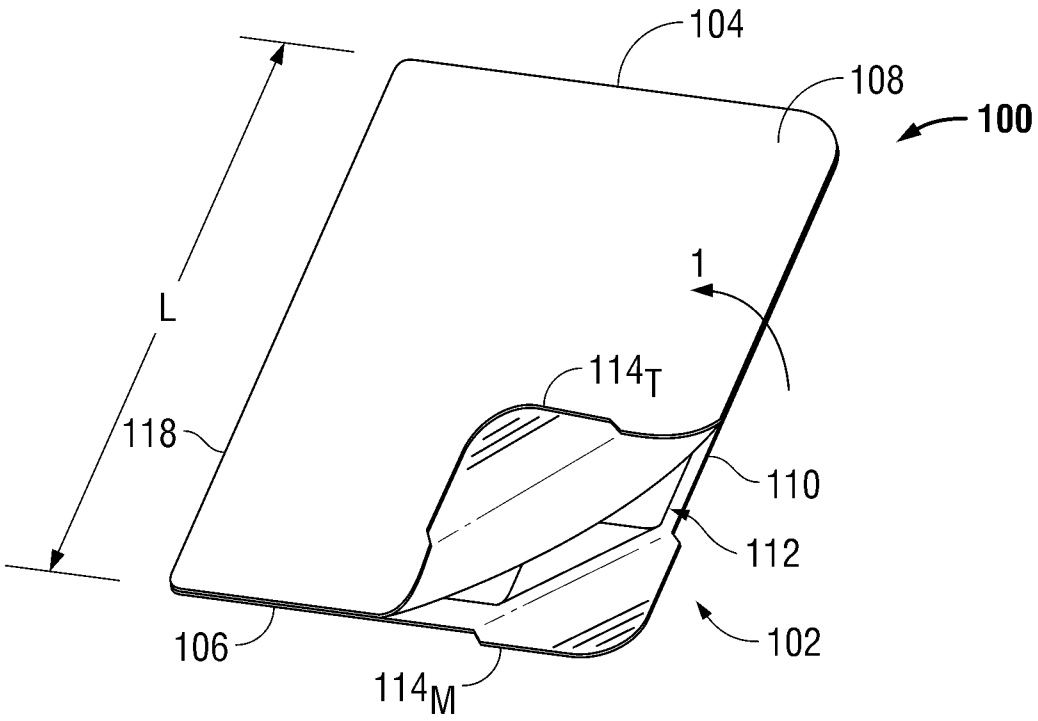

104
108
100
1
L
$114_T$
118
110
112
102
106
$114_M$

FIG. 1

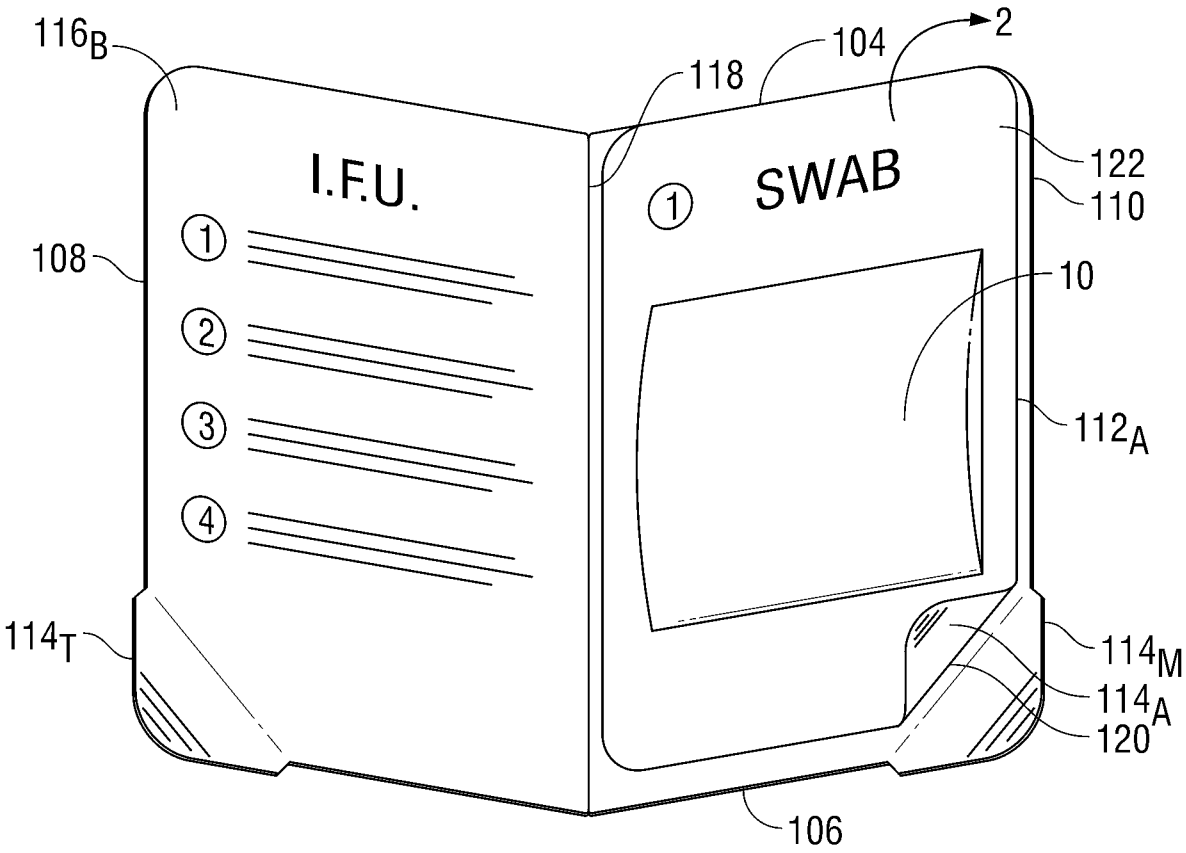

$116_B$
118
104
2
I.F.U.
SWAB
122
110
108
10
$112_A$
$114_T$
$114_M$
$114_A$
120
106

FIG. 2

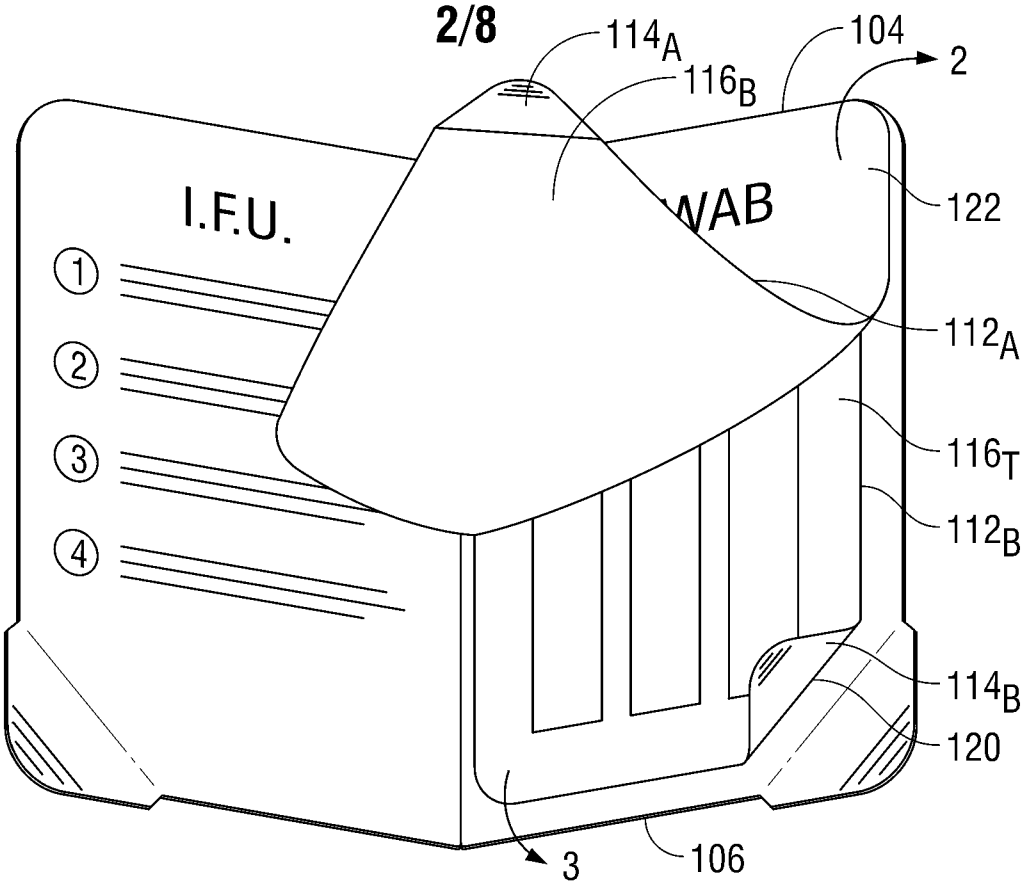

$114_A$
$116_B$
104
2
I.F.U.
WAB
122
$112_A$
$116_T$
$112_B$
$114_B$
120
3
106

FIG. 3

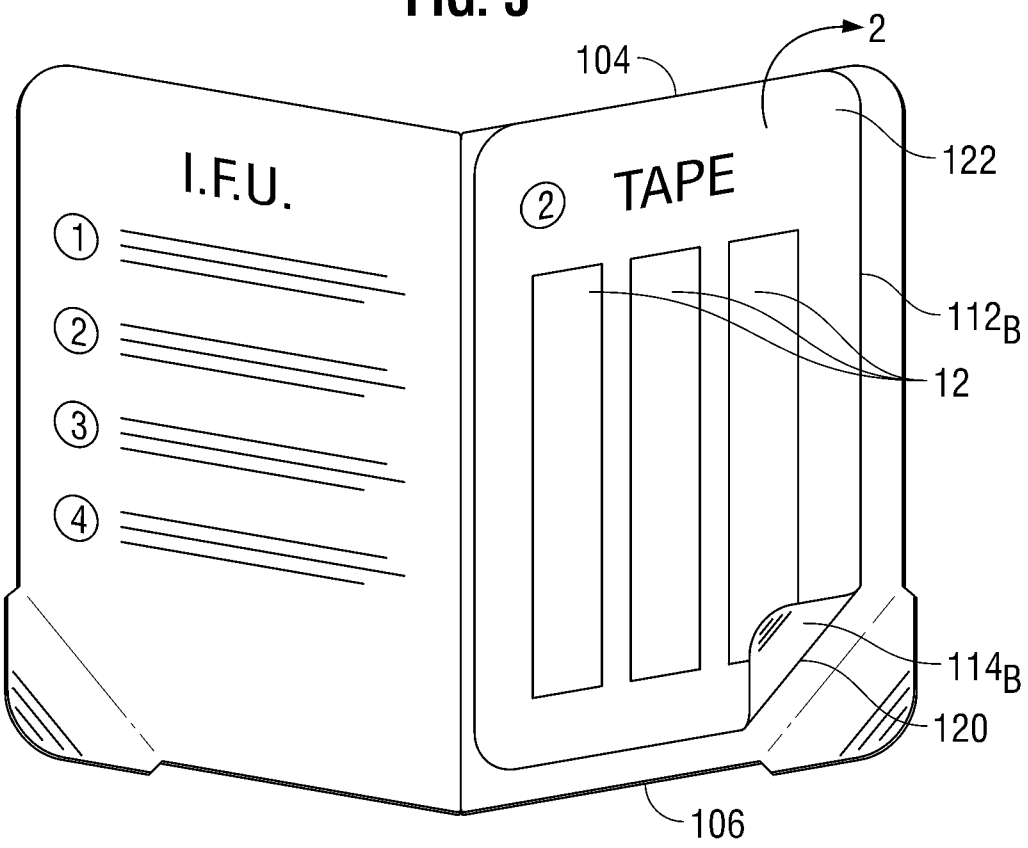

2
104
I.F.U.
② TAPE
122
$112_B$
12
$114_B$
120
106

FIG. 4

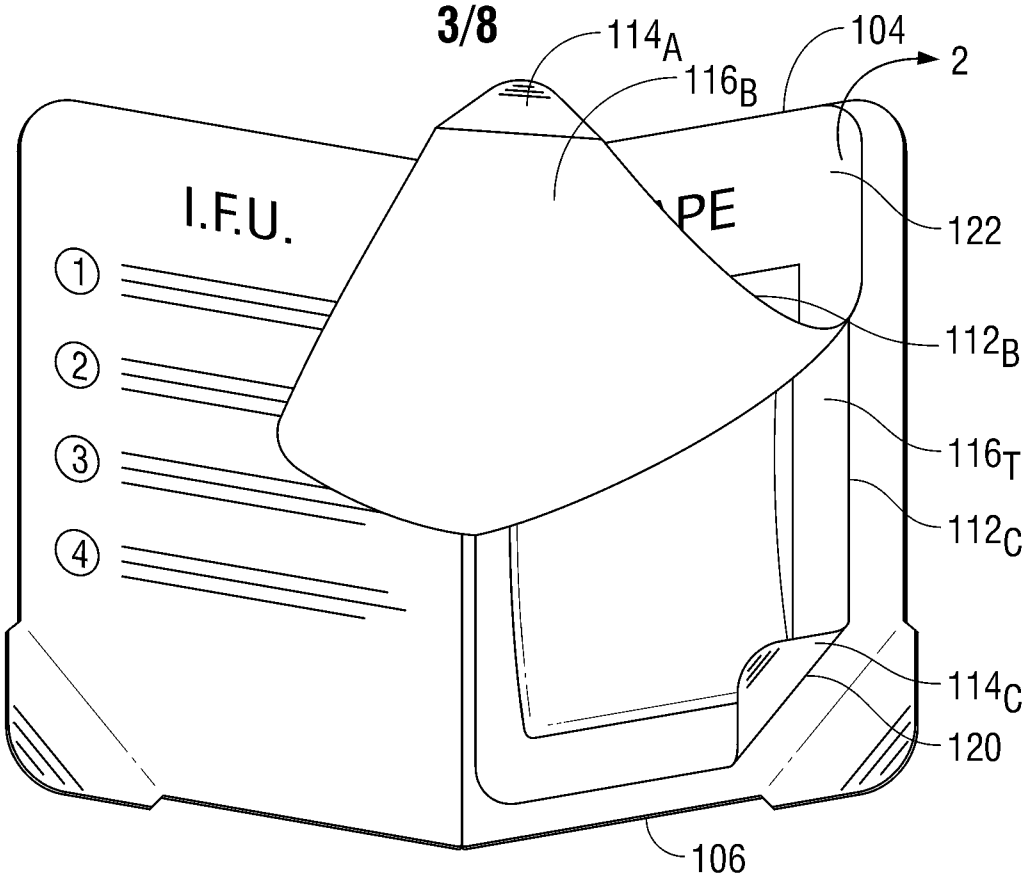

$114_A$
$116_B$
104
2
I.F.U.
PE
122
$112_B$
$116_T$
$112_C$
$114_C$
120
106

FIG. 5

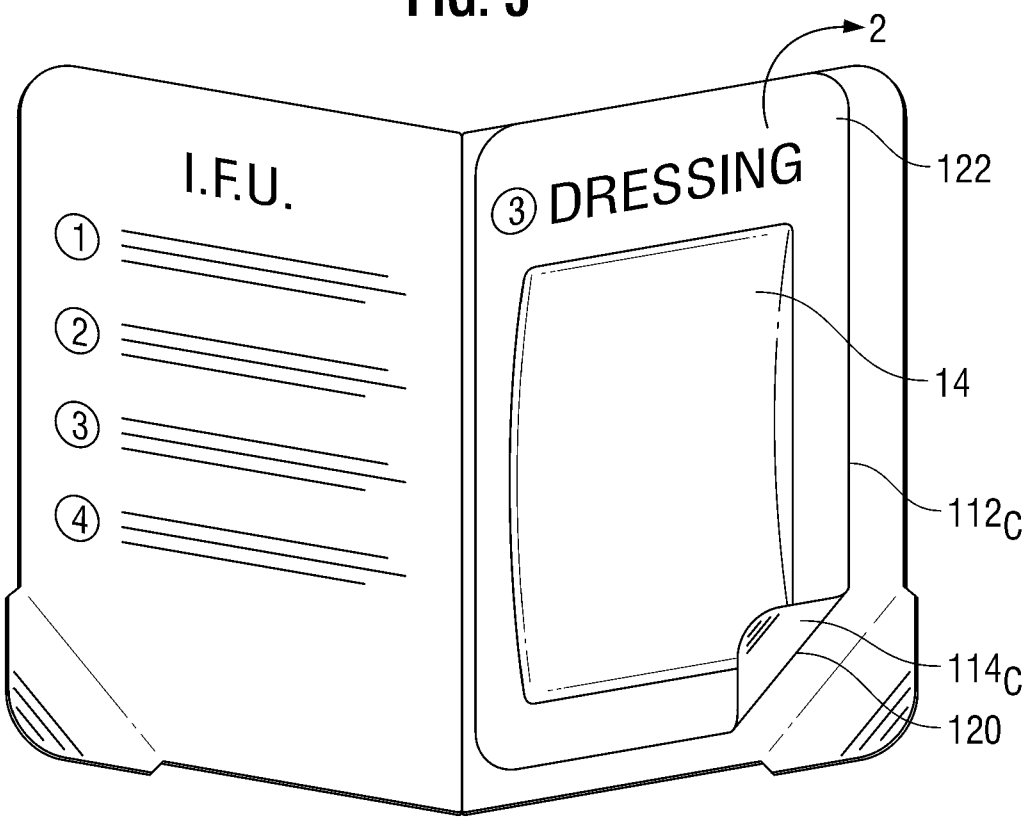

2
I.F.U.
③ DRESSING
122
14
$112_C$
$114_C$
120

FIG. 6

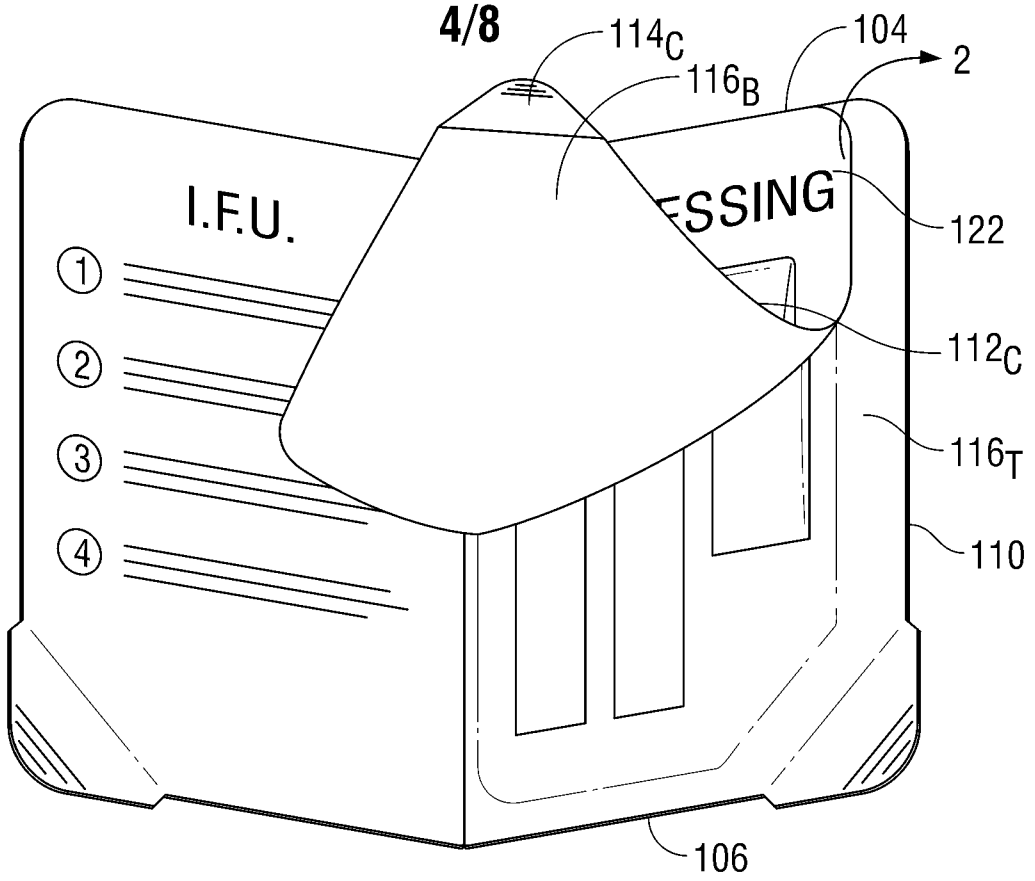

$114_C$
$116_B$
104
2
I.F.U.
ESSING
122
$112_C$
$116_T$
110
106

FIG. 7

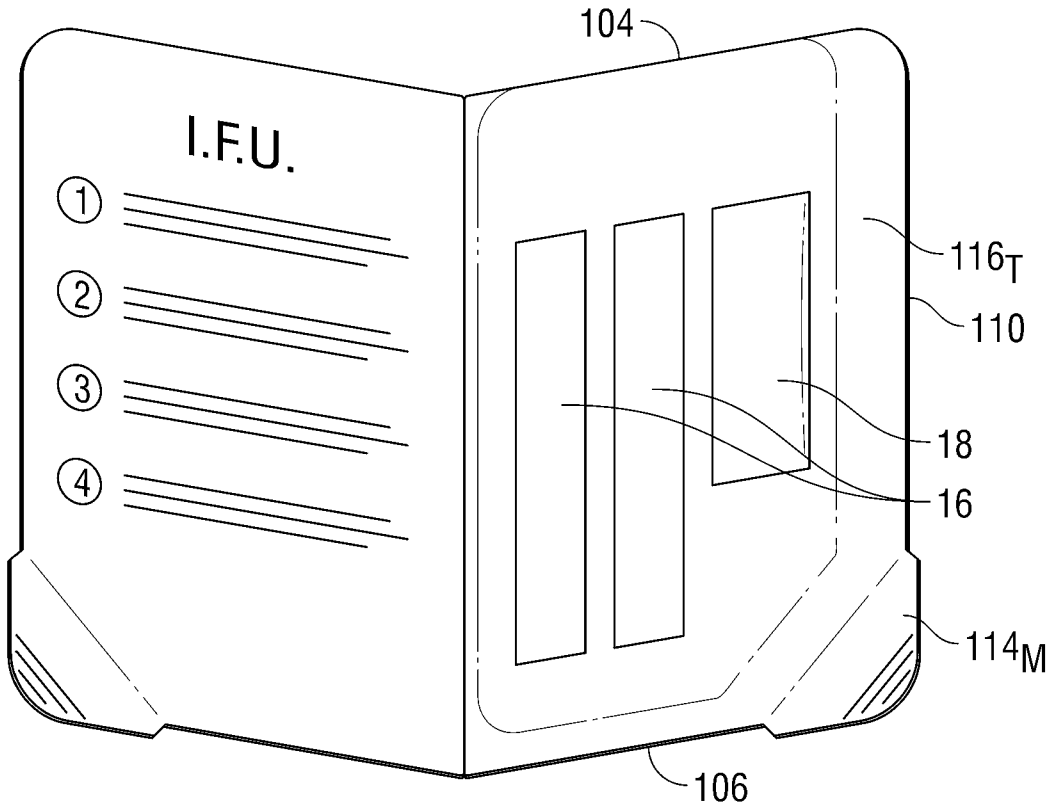

104
I.F.U.
$116_T$
110
18
16
$114_M$
106

FIG. 8

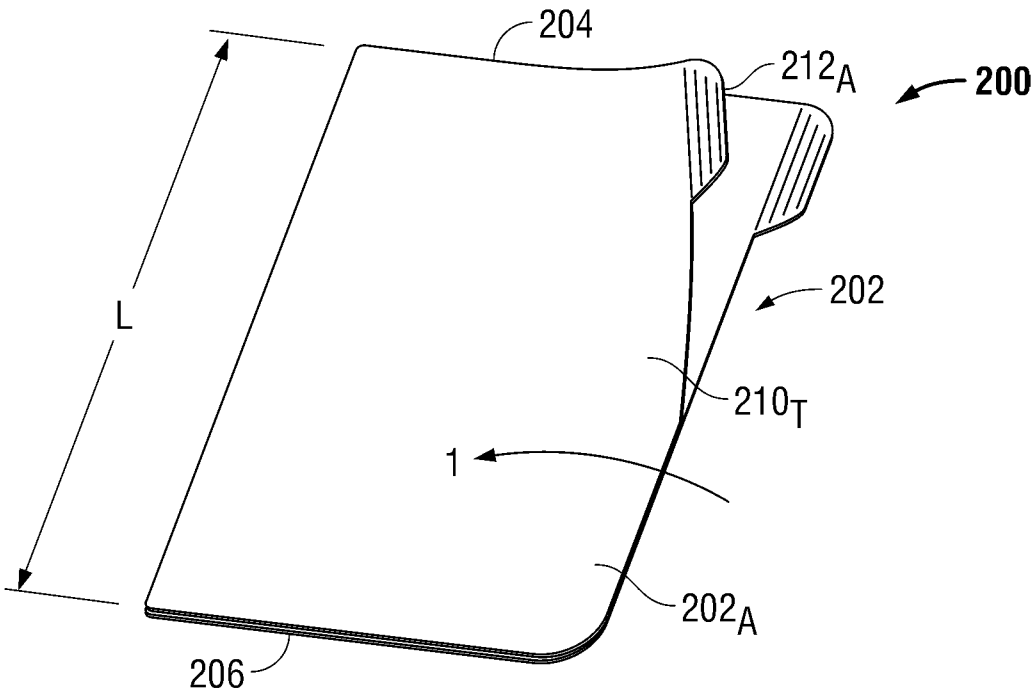

204
212A
200
L
202
210T
1
202A
206

FIG. 9

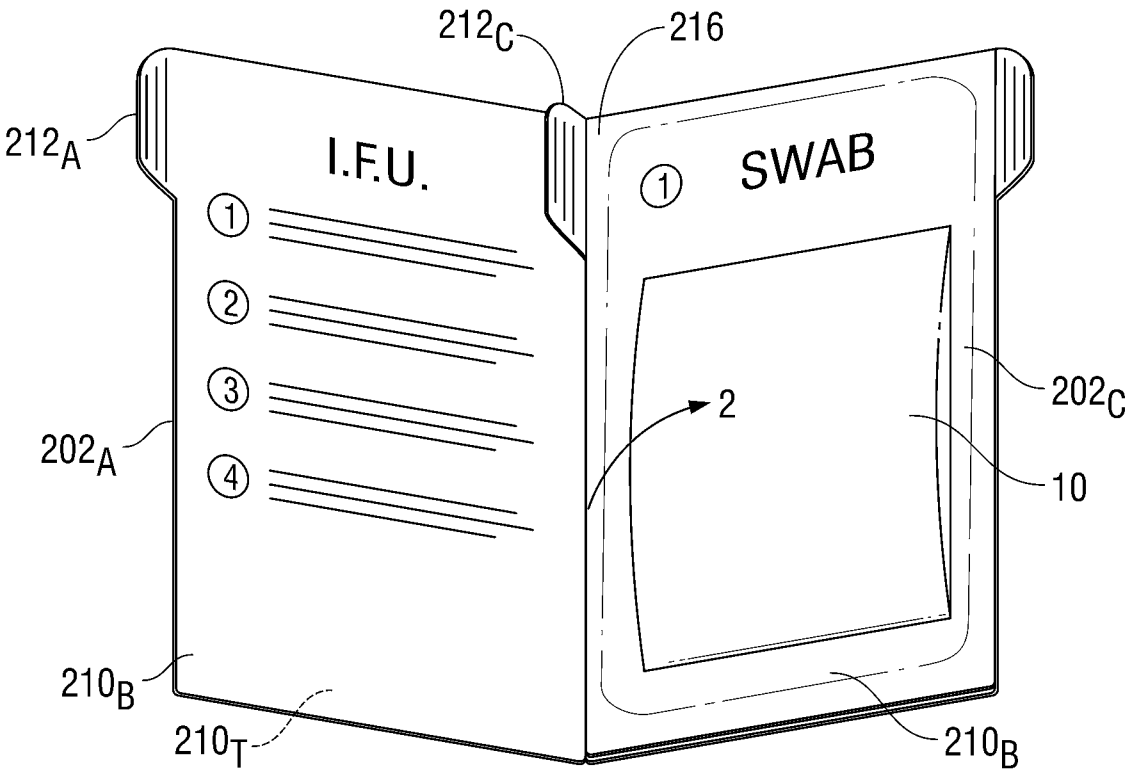

212C
216
212A
I.F.U.
SWAB
1
2
3
4
202C
2
202A
10
210B
210T
210B

FIG. 10

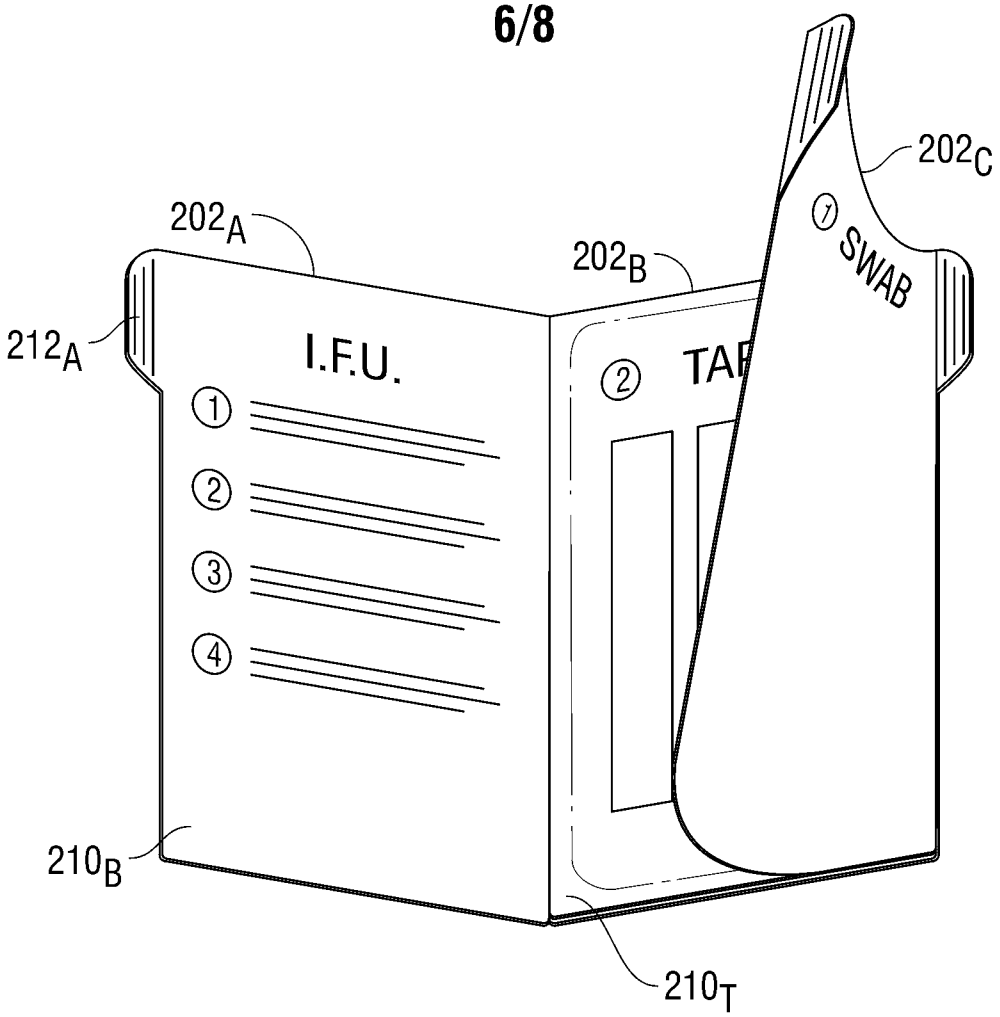

202C
202A
202B
212A
I.F.U.
1
2
3
4
1 SWAB
2 TAP
210B
210T

FIG. 11

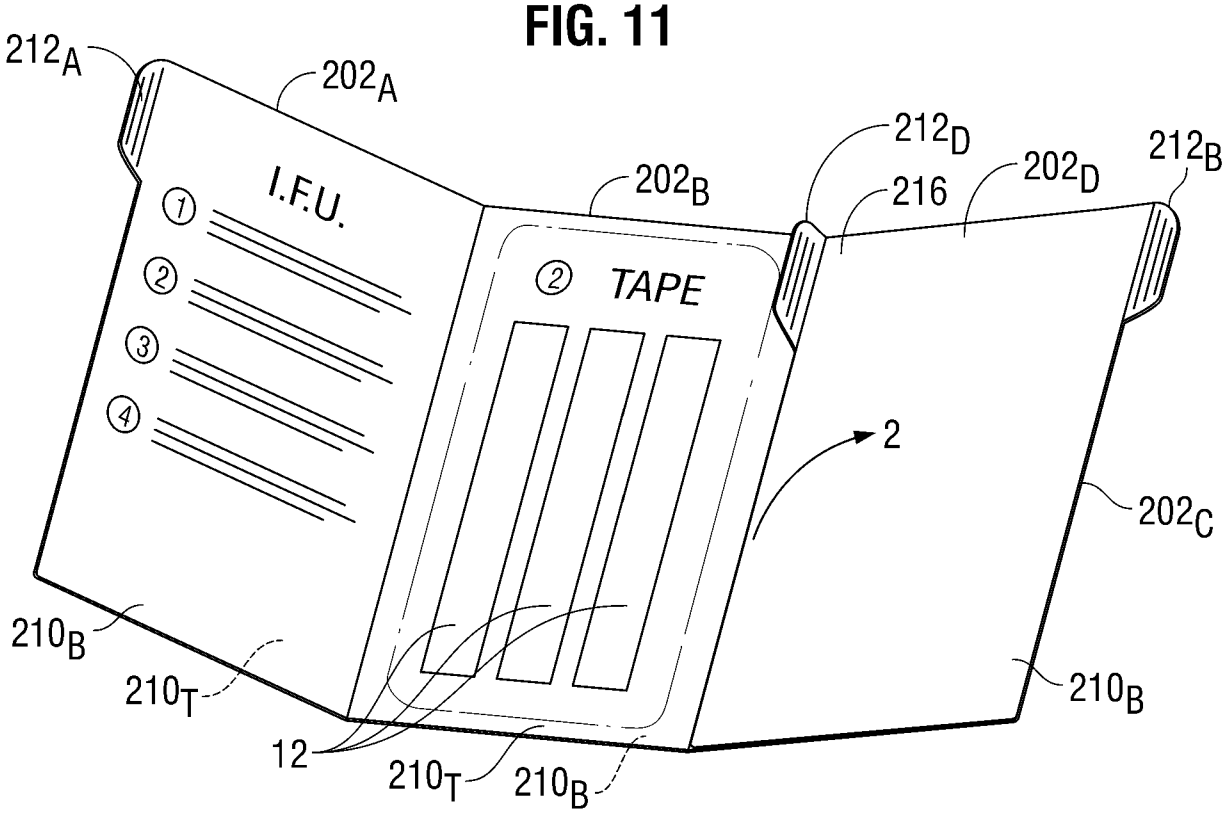

212A
202A
I.F.U.
1
2
3
4
202B
212D
216
202D
212B
2 TAPE
2
202C
210B
210T
12
210T
210B
210B

FIG. 12

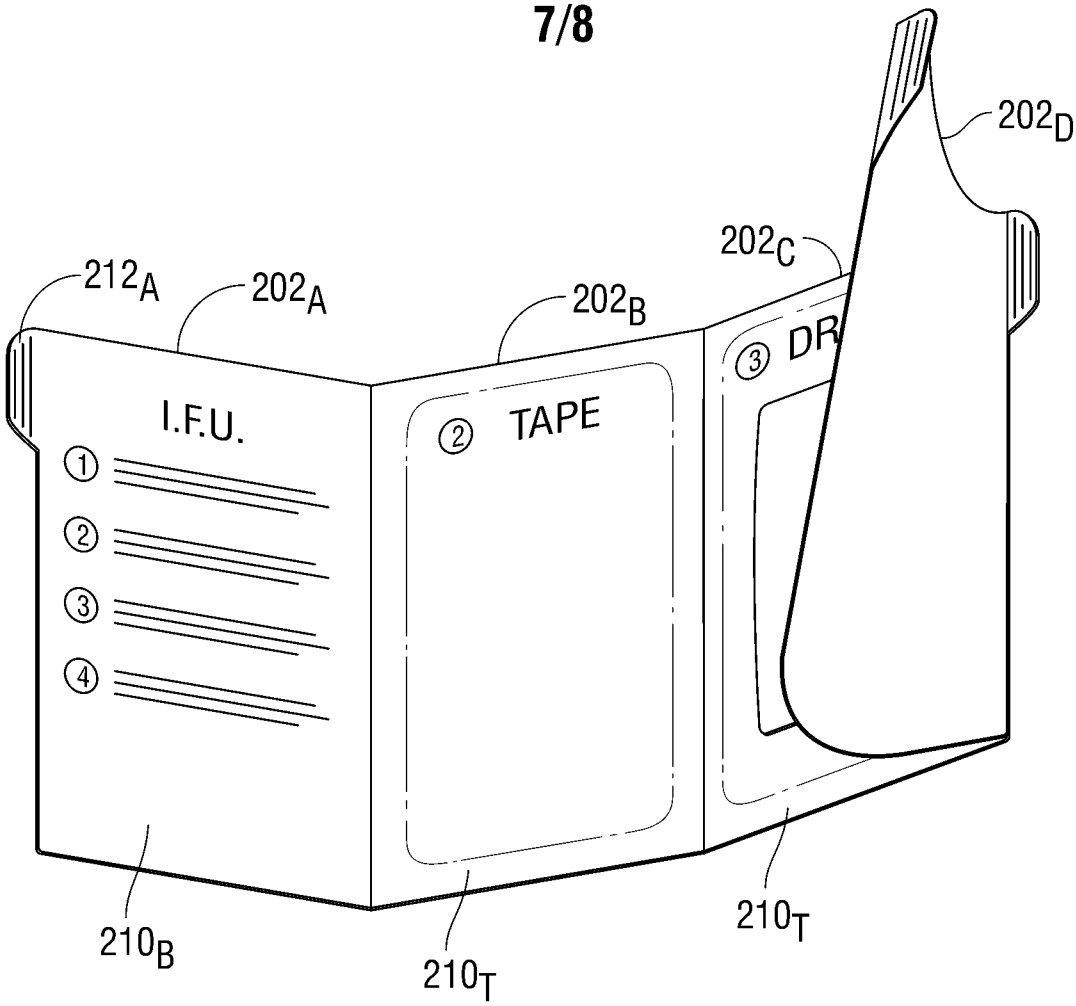

$202_D$
$202_C$
$212_A$
$202_A$
$202_B$
I.F.U.
① ② ③ ④
② TAPE
③ DR
$210_B$
$210_T$
$210_T$

FIG. 13

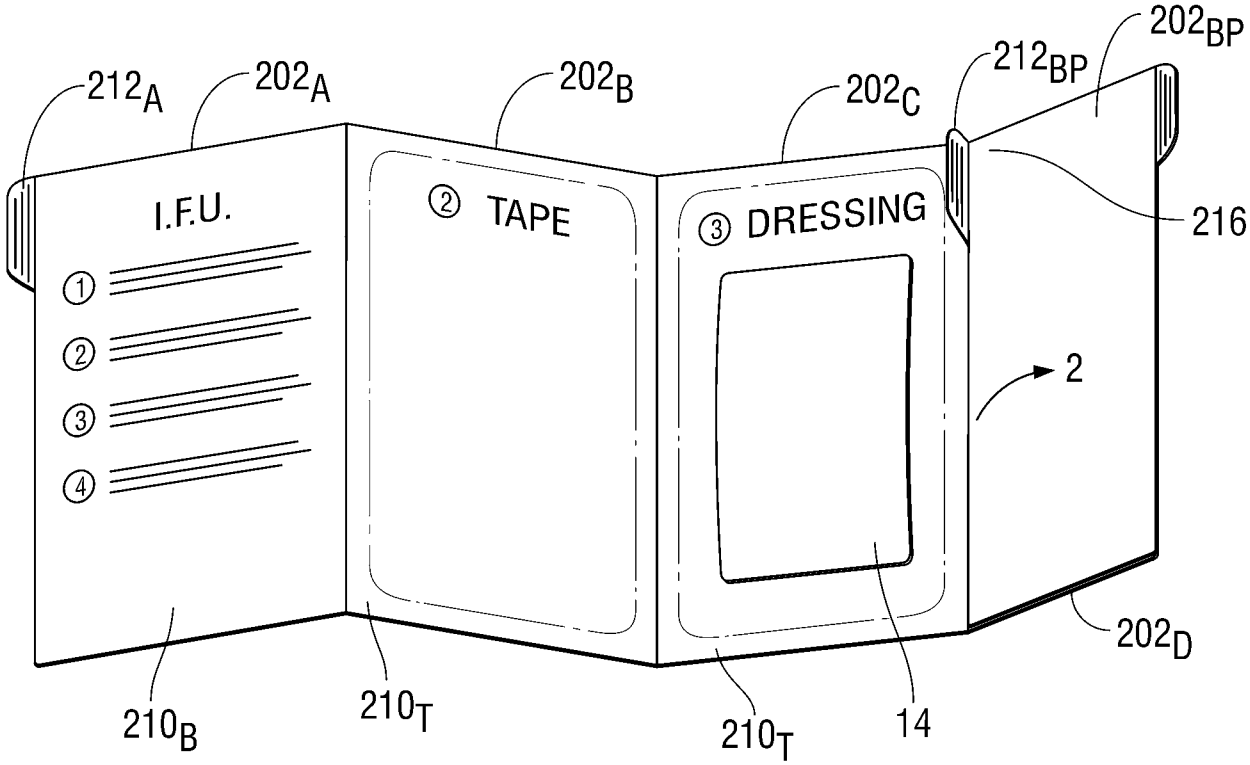

$202_{BP}$
$212_{BP}$
$212_A$
$202_A$
$202_B$
$202_C$
I.F.U.
① ② ③ ④
② TAPE
③ DRESSING
216
2
$202_D$
$210_B$
$210_T$
$210_T$
14

FIG. 14

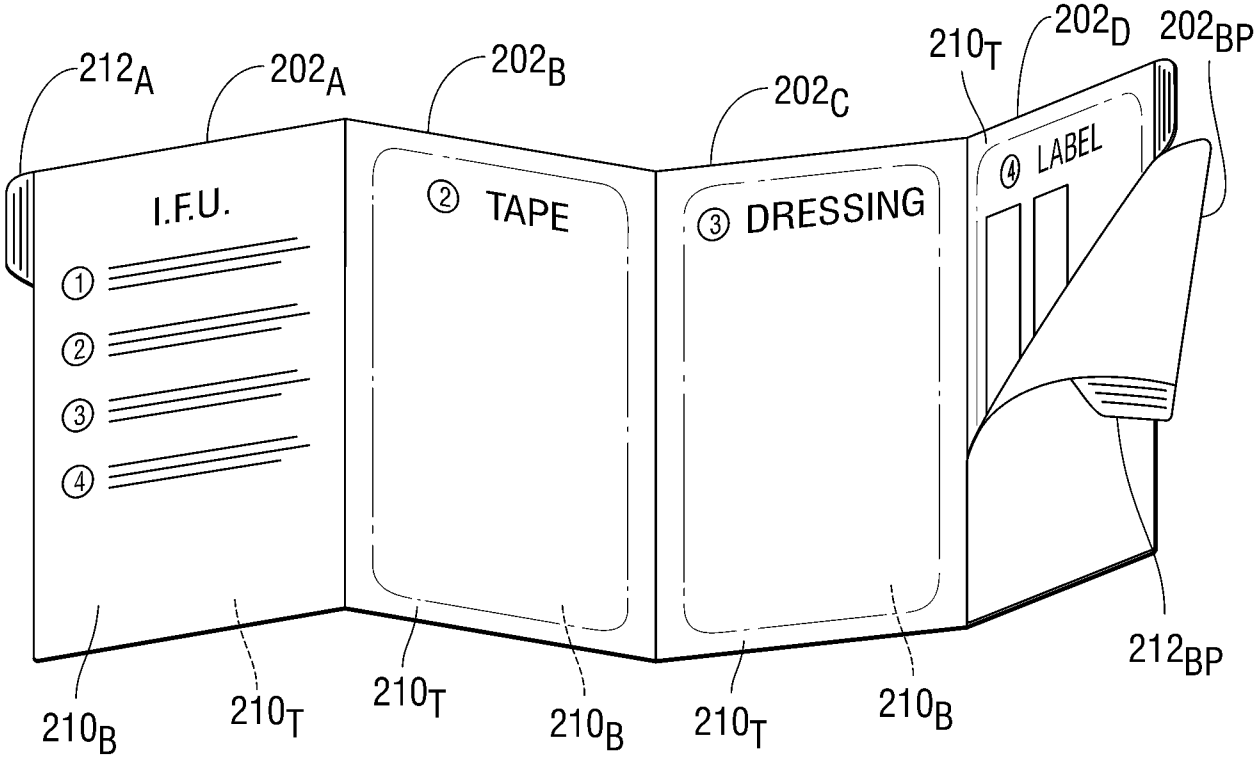

212A
202A
202B
202C
210T
202D
202BP
I.F.U.
① TAPE
② DRESSING
③ LABEL
④
210B
210T
210T
210B
210T
210B
212BP

FIG. 15

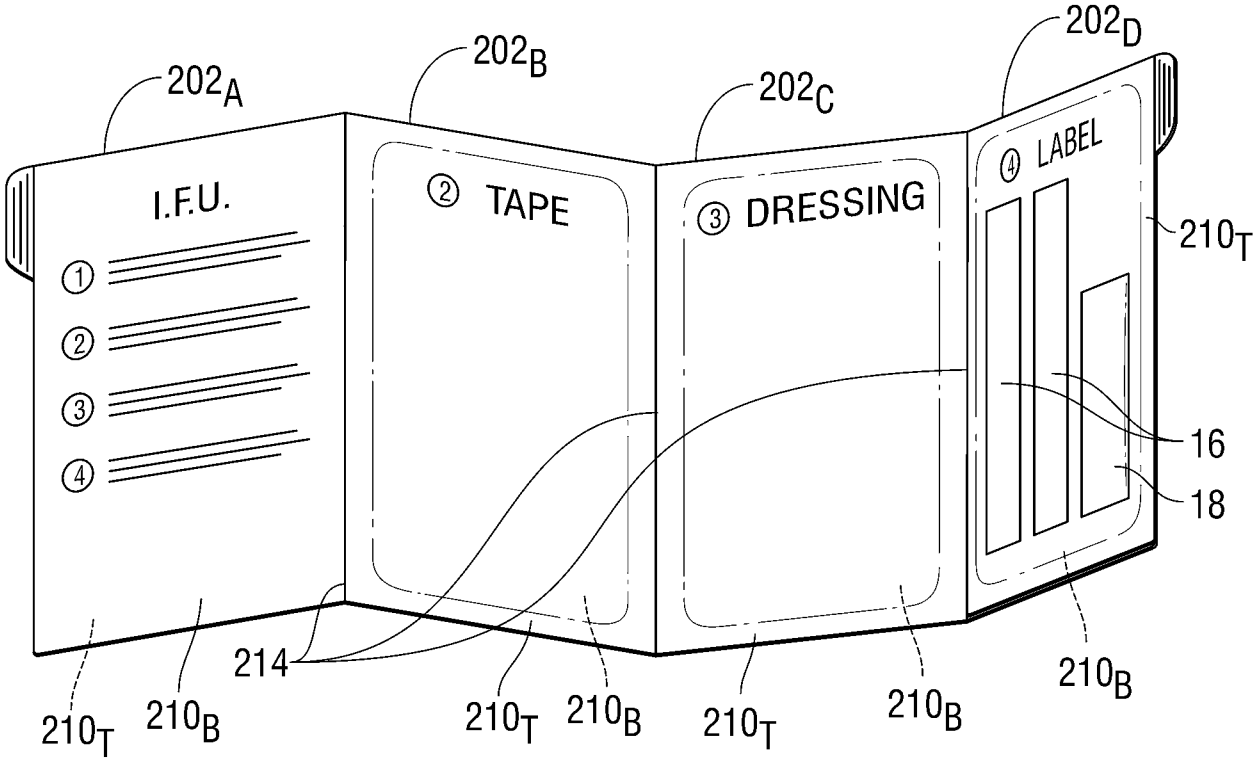

202A
202B
202C
202D
I.F.U.
① TAPE
② DRESSING
③ LABEL
④
210T
16
18
214
210T
210B
210T
210B
210T
210B
210B

FIG. 16

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 09/58683

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61B 19/02 (2009.01)
USPC - 206/438
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8): A61B 19/02 (2009.01)
USPC: 206/438

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8): A61B 17/06 (2009.01); A61B 19/02 (2009.01); A61L 15/00 (2009.01) (text search)
USPC: 206/370, 440, 438; 229/103.3, 108.1, 126, 68.1, 120.31 (text search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST(USPT,PGPB,EPAB,JPAB); Internet search via Google Web and Google Scholar search engines. Search Terms Used: sterile medical package foldable supply panel pull tab peelable container compartment environment pocket recess crease fold foldable unfold releasable surgery surgical medic kit roll wrap wrapper bandage

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| Y | US 5,931,303 A (Salvadori) 03 August 1999 (03.08.1999) col. 1 ln.12 to col. 4 ln.6, Fig. 1, 2 | 1-22 |
| Y | US 7,293,654 B1 (Wilson, Jr. et al.) 13 November 2007 (13.11.2007) col. 1 ln. 6 to col. 3 ln. 15, Fig. 1-8 | 1-22 |
| Y | US 6,740,068 B2 (Aruffo et al.) 25 May 2004 (25.05.2004) col. 3 ln. 57 to col. 4 ln. 14, Fig. 1 | 2-14 and 22 |
| Y | US 2006/0151347 A1 (Grossman) 13 July 2006 (13.07.2006) para. [0174], [0193] through [0195], Fig. 26B | 5, 9, 13 and 16 |
| A | US 6,012,586 A (Misra) 11 January 2000 (11.01.2000) entire document | 1-22 |

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
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"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 11 November 2009 (11.11.2009) | 20 NOV 2009 |
| Name and mailing address of the ISA/US<br>Mail Stop PCT, Attn: ISA/US, Commissioner for Patents<br>P.O. Box 1450, Alexandria, Virginia 22313-1450<br>Facsimile No. 571-273-3201 | Authorized officer:<br>Lee W. Young<br>PCT Helpdesk: 571-272-4300<br>PCT OSP: 571-272-7774 |

Form PCT/ISA/210 (second sheet) (July 2009)