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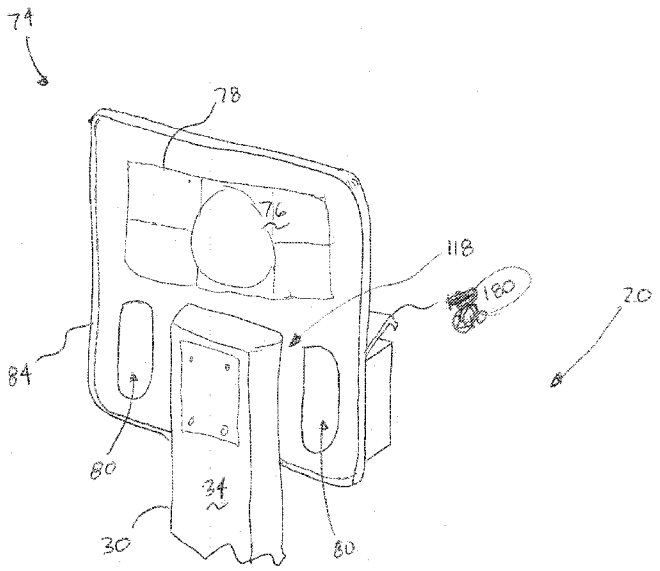

FIG. 7

(57) Abstract: A system (20) includes a display structure (74) removably attached to a support structure (30). The display structure (74) includes a first wall defining a wall opening (80) and a second wall spaced apart from the first wall. A cavity is defined between the first wall and the second wall, wherein the cavity is configured to contain a hygiene item such that the hygiene item is dispensed from the display structure (74) through the wall opening (80). Another example includes a display structure (74) configured to display information (78). Yet another example includes a hygiene system (20) including a display structure (74) removably attached to a support structure (30).

[Continued on next page]

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HYGIENE SYSTEM

TECHNICAL FIELD

[0001] The instant application is generally directed towards a hygiene system. For example, the instant application is directed towards a display structure for a hygiene system.

BACKGROUND

[0002] Dispensing systems can dispense a sanitizing material to a user. Dispensing systems can be used, for example, in schools, hospitals, nursing homes, factories, restaurants, etc. Many existing dispensing systems are configured to dispense a single material, such as sanitizer. Other dispensing systems lack space to provide information or advertising opportunities. As a result, improvements are desired in dispensing systems to enable improved access to multiple dispensed materials in one dispensing system while having space to communicate information to users.

SUMMARY

[0003] This summary is provided to introduce a selection of concepts in a simplified form that are further described below in the detailed description. This summary is not intended to identify key factors or essential features of the claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter.

[0004] In one aspect of the present disclosure, a system includes a display structure removably attached to a support structure. The display structure includes a first wall defining a wall opening and a second wall spaced apart from the first wall. A cavity is defined between the first wall and the second wall, wherein the cavity is configured to contain a hygiene item such that the hygiene item is dispensed from the display structure through the wall opening.

[0005] In another aspect of the present disclosure, a system includes a display structure removably attached to a support structure. The display structure includes a first wall defining a wall opening and a second wall spaced apart from the first wall. A cavity is defined between the first wall and the second wall, wherein the cavity is configured to accommodate a hygiene item such that the hygiene item is dispensed from

the display structure through the wall opening. The display structure also includes a display placard configured to display information.

[0006] In another aspect of the present disclosure, a hygiene system for dispensing a hygiene product includes a support structure and a product dispenser coupled to the support structure configured to dispense the hygiene product. The hygiene system also includes a display structure removably attached to the support structure. The display structure includes a first wall defining a wall opening and a second wall spaced apart from the first wall to define a cavity between the first wall and the second wall. The display structure also includes a hygiene item removably received within the cavity. The display structure is configured to dispense the hygiene item through the wall opening.

[0007] The following description and annexed drawings set forth certain illustrative aspects and implementations. These are indicative of but a few of the various ways in which one or more aspects can be employed. Other aspects, advantages, and/or novel features of the disclosure will become apparent from the following detailed description when considered in conjunction with the annexed drawings.

DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is a front elevation view of an example hygiene system according to at least one aspect of the present disclosure;

[0009] FIG. 2 is a rear elevation view of the example hygiene system of FIG. 1;

[0010] FIG. 3 is a side elevation view of the example hygiene system of FIG. 1;

[0011] FIG. 4 is a top view of a stand of the example hygiene system of FIG. 1;

[0012] FIG. 5 is a detail view of a top area of a support structure of the hygiene system of FIG. 1 showing a display placard being inserted into a pair of slots;

[0013] FIG. 6 is similar to FIG. 5 and shows the display placard fully inserted into the pair of slots;

[0014] FIG. 7 is a perspective view of a display structure attached to the support structure;

[0015] FIG. 8 is a detail view of an attachment structure of the display structure of the example hygiene system of FIG. 1;

[0016] FIG. 9 is similar to FIG. 7, showing the display structure separated from the support structure;

[0017] FIG. 10 shows an example container used on the display structure of FIG. 7;

[0018] FIG. 11 shows an example of multiple containers to be used on the display structure of FIG. 7;

[0019] FIG. 12 is a perspective view of a rear side of the example hygiene system of FIG. 1 showing the containers in an open position; and

[0020] FIG. 13 is a perspective view of an example container and positioning structure within.

DETAILED DESCRIPTION

[0021] The claimed subject matter is now described with reference to the drawings, wherein like reference numerals are generally used to refer to like elements throughout. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide an understanding of the claimed subject matter. It is evident, however, that the claimed subject matter can be practiced without these specific details. In other instances, structures and devices are illustrated in block diagram form in order to facilitate describing the claimed subject matter. Relative size, orientation, etc. of parts, components, etc. may differ from that which is illustrated while not falling outside of the scope of the claimed subject matter.

[0022] Referring now to FIG. 1, a front elevation view of an exemplary hygiene system 20 for dispensing a hygiene product is illustrated. In an example, the hygiene system 20 comprises a support structure 24. The support structure 24 can rest upon a surface 26, such as the ground, the floor, a desk, etc. In one example, the support structure 24 may be fixed with respect to the surface 26 (e.g., with adhesives, fasteners, locking structures, etc.). The support structure 24 is not so limited, however, and in one example, may comprise a base 28 that rests upon the surface 24, with the base 28 being movable with respect to the surface 24.

[0023] In one example, the support structure 24 comprises a stand 30 that may be attached to the base 28. In one example, the stand 30 can extend substantially perpendicularly to the base 28 and/or to the surface 26 upon which the support structure 24 rests. The stand 30 can extend upwardly from the base 28 and, in an example, can have a height that is between about 3 feet (91 cm) to about 5 feet (152 cm) tall.

[0024] Turning to FIG. 2, a rear elevation view of the example hygiene system 20 is shown. Similar to FIG. 1, the hygiene system 20 is shown with the support structure 24 having a stand 30 that extends upwardly from the base 28. Two example containers are shown to the rear side of the hygiene system 20, and these containers will be described below.

[0025] Turning to FIG. 3, a side elevation view of the example hygiene system 20 is represented to show the relationship of the constituent components from the front side of the hygiene system 20 to the rear side of the hygiene system 20.

[0026] Turning to FIG. 4, a top down view of the stand 30 is shown. The stand 30 can have a front surface 34 and a rear surface 36. Conceptually, the front surface 34 faces a user who is located on the front side of the hygiene system 20. Conversely, the rear side 36 faces away from a user on the front side of the hygiene system 20. A product dispenser 38 can be coupled to the front surface 34 of the stand 30 of the support structure 24. In one example, the product dispenser 38 can be used for storing and/or dispensing a hygiene product. The hygiene product comprises any type of liquid, semi-liquid, gel, powder, foam based materials, etc. The hygiene product may comprise, for example, cleaning materials such as disinfectants, sanitizers, antiseptics, soaps, moisturizers, alcohol-infused liquids, or the like. In one example, the hygiene product comprises water or other non-cleaning liquid materials. Indeed, the hygiene product is not specifically limited to these examples, and could include other types of materials. The product dispenser 38 can be coupled to the stand 30 in any number of ways, such as with mechanical fasteners, locking structures, adhesives, etc. FIG. 9 shows one example of mounting structure for the product dispenser 38. In this example, a combination of hooks and pegs are used to positively locate the product dispenser to the front surface 34 to the stand 30. The shown hooks can be molded into a plastic front surface 34, stamped into a metal front surface 34, etc. This

example is not meant to be limiting, and any suitable attachment structure and method are permissible.

[0027] Returning to FIG. 4, at the rear surface 36 of the stand 30, the stand 30 comprises one or more attachment walls. For example, the stand 30 may include a first attachment wall 40, a second attachment wall 44, a third attachment wall 46, and a fourth attachment wall 48. In one example, the first attachment wall 40 and the third attachment wall 46 can extend substantially co-planar and substantially vertically, while the second attachment wall 44 and the fourth attachment wall 48 can extend substantially co-planar and substantially vertically. In another example, the first attachment wall 40 and the third attachment wall 46 may extend substantially parallel to the second attachment wall 44 and the fourth attachment wall 48. For the purposes of this disclosure, the term "substantially co-planar" includes the walls being co-planar, the walls being parallel and located on planes within about one-inch of each other, and the walls being on planes that intersect, the planes being rotated less than about 5 degrees from one another. The term "substantially vertically" includes the walls being within about 5 degrees of a vertical plane. The term "substantially parallel" is intended to include the walls being within about 5 degrees or less of being parallel to one another.

[0028] In an example, the first attachment wall 40 may be spaced a distance (represented by dimension 50) apart from the second attachment wall 44 to define a first channel 54 therebetween. Similarly, the third attachment wall 46 may be spaced a distance (represented by dimension 56) apart from the fourth attachment wall 48 to define a second channel 58 therebetween. In an example, the first attachment wall 40 may be spaced a distance (represented by dimension 60) apart from the third attachment wall 46 to define a gap, a space, an opening, a slot, etc. The first channel 54 and the second channel 58 can extend along a distance of the stand (e.g., from a bottom to a top of the stand 30). As described, this arrangement can create a vertical slot or channel 54, 58 that extends along the rear face 36 of the stand 30.

[0029] In an example, as illustrated in FIG. 5, a display placard 64 can be selectively attached to the stand 30. For example, the display placard 64 can be inserted within the first channel 54 and the second channel 58. In this way, the display placard 64 can be held between the first attachment wall 40 and the second attachment wall 44 within the first channel 54. Likewise, the display placard 64 can

be held between the third attachment wall 46 and the fourth attachment wall 48 within the second channel 58. The display placard 64 can display one or more advertisements or other information 66 that may be visible to a user. In an example, the display placard 64 can be removably attached to the stand 30, such as by being inserted into and/or removed from the channels 54, 58. As shown in FIG. 5, the display placard 64 can be inserted into the channels 54, 58 in a generally downward direction as represented by arrow 68. In another example, the display placard 64 can be mounted in a single one of the channels 54, 58. In yet another example, the display placard 64 can be attached by any other suitable means to the rear face 36 of the stand 30.

[0030] Turning to FIG. 6, the display placard 64 is shown in a fully inserted position, in other words, the right and left edges of the display placard 64 are located within the channels 54, 58. At the behest of a user, the display placard 64 can be removed by urging the display placard 64 in a generally upward direction, represented by arrow 70. The display placard 64 can be changed, altered, or replaced to suit the desire of a user who wishes to communicate a differing message or differing information to other users of the hygiene system 20. As is to be understood, the display placard 64 can be removed and replaced as needed to suit a desired message or communication of information.

[0031] Referring to FIG. 7, an example of the display structure 74 is illustrated. The display structure 74 can comprise a display placard 76 that can display information 78, including, but not limited to: text, images, one or more advertising or identifying marks, etc.

[0032] As shown in FIG. 7, the display placard 76 has openings 80 enabling passage of objects through a portion of the display placard 76. This will be discussed below. The display structure 74 can also include a frame 84, and the frame can extend around the exterior perimeter of the display placard 76. In one example, the frame can also include cross members that are hidden by the display placard 76. In a further example, the display placard 76 faces a front side of the hygiene system 20 while a rear display placard can be placed within the frame 84 to face a rear side of the hygiene system 20. Advantageously, the combination of the display placard 76 and a rear display placard can also conceal all or most of any cross members of the frame 84.

[0033] Turning to FIG. 8, the display structure 74 may comprise an attachment structure 86. The attachment structure 86 can serve a number of purposes, including enabling attachment between the display structure 74 and the support structure 24. The attachment structure 86 can comprise a substantially planar structure 88 that may be similar to the display placard 76 with respect to size and/or flatness. The width from side to side of the planar structure 88 is generally about the same as a distance between the second attachment wall 44 and the fourth attachment wall 48 as shown in FIG. 4.

[0034] Two sections 100 are located on the right and left sides of the substantially planar structure 88. The sections 100 are positioned at generally right angles to the planar structure 88. Tabs 104 extend laterally away from the sections 100, and the tabs 104 can be generally parallel to the substantially planar structure 88. The bottom of the attachment structure 86 can include a section 106 which extends away from the substantially planar structure 88 at generally a right angle toward the rear of the hygiene system 20. In one example, section 106 provides a portion of the attachment structure 86 that can attach to a bottom portion of the frame 84 of the display structure 74. At the top of the attachment structure 86, a section 108 extends away from the substantially planar structure 88 in the same direction as section 106. Section 110 is attached to section 108 and is positioned at a generally right angle to section 108 to be in a substantially vertical orientation. In one example, section 110 provides a mounting location between the attachment structure 86 and an interior cross bar member of the frame 84 as previously mentioned. Tabs 114 can be located at each of the top sides of the tabs 104 and will be discussed below in greater detail.

[0035] Turning to FIG. 9, the attachment structure 86 can be selectively inserted into the first channel 54 and the second channel 58 of the stand 30. The attachment structure 86 can be maintained within the first channel 54 and the second channel 58 by the first attachment wall 40, the second attachment wall 44, the third attachment wall 46, and the fourth attachment wall 48 of the stand 30. As is to be appreciated, the tabs 104 are configured to cooperate with the first channel 54 and the second channel 58. In one example, a top of the stand 118 can receive a bottom portion 120 of the attachment structure 86, such that the attachment structure 86 can be received within the support structure 24. In an example, as illustrated in FIG. 9, tabs 114 of the attachment structure 86 can contact one or more of the top of the support structure 24, the first attachment

wall 40, the third attachment wall 46, etc. so as to maintain a position of the display structure 74 relative to the support structure 24. It is to be appreciated that the display structure 74 can be selectively removed from the base 30 and placed back in the base 30 as is desired. Arrow 128 represents the direction of motion of removing and inserting the display structure 74 into the base 30 (generally an up and down motion). As such, the display structure 74 is removably attached to the support structure 24 through sliding engagement. Moreover, the force of gravity maintains the display structure 74 in the desired location.

[0036] Also, the display structure 74 is attached to the support structure 24 without the use of any tools. By tools, the disclosure is intended to mean that no traditional hand tools are required to secure the display structure 74 to the support structure 24, such as screwdrivers, wrenches, pliers, socket sets, etc. A user's hands and appendages are not included in the meaning of "hand tools."

[0037] In other words, the display structure 74 includes one of a tab 104 and a slot 54, 58 and the support structure 24 includes the other of a tab 104 and a slot 54, 58 such that the tab 104 and the slot 54, 58 cooperate to secure the display structure 74 in a desired location. It is to be understood that the support structure 24 can be engineered, designed, and constructed such that the weights and off-center moments provided by the addition of the display structure 74 do not encourage tipping or falling of the hygiene system 20.

[0038] Turning to FIG. 10, the display structure 74 can include a container 130. The container 130 can be located on the rear side of the display structure 74 as shown in FIGS. 2, 3, and 7. Returning to FIG. 10, the container 130 can include a first side 134 and opposing lateral sides 136, 138. Additionally, the container 130 can include a bottom side 140. Opposing the first side 134 is a second side 144, that can also be referred to as a second wall 144. The second wall 144 is spaced apart from the first wall 166 such that a cavity 149 is defined between the first wall 166 and the second wall 144. The cavity 149 is configured to contain a hygiene item such that the hygiene item is dispensed from the display structure 74 through the wall opening 80.

[0039] In one example, a lid 148 can be used to provide selective access the cavity 149 within the container 130, such as to insert or remove containers of hygiene products. As shown in FIG. 10, the first side 134 can define one or more apertures

150 that are configured to align with the openings 80 as shown in FIGS. 1, 7, and 9. This alignment enables a user to access objects located within the cavity 149 through the display placard 76. In another example, the first side 134 is simply not present in the container 130. In this case, the apertures 150 are not required, as there is no first side 134, and a user placing a hand through an opening 80 will be able to access the cavity 149.

[0040] Turning to FIG. 11, the display structure 74 can include more than one container as shown by first container 154 and second container 156. Multiple containers are also shown in FIG. 2. The containers may be attached to the display placard 76 or to the frame 84 (best seen in FIG. 7), such as by a pivot structure 158. In one example, the pivot structure 158 can be a hinge. In another example, the pivot structure 158 can be a piano hinge. In yet another example, the pivot structure 158 can work in cooperation with an urging device that is configured to urge the wall of the container 154, 156 to a closed position. In one example, the urging device may be a spring located on pivot structure 158. In this way, the containers 154, 156 can be pivoted between an opened position (e.g., as illustrated in FIG. 12), and a closed position (e.g., as illustrated in FIG. 2).

[0041] The containers 154, 156 can define a cavity 160 so as to receive a hygiene item 164, such as a dispensing box containing sanitary masks, gloves, napkins, etc. In the event that a hygiene item 164 is contained within a dispensing box (as illustrated in FIG. 11), the dispensing box has a set of dispensing box exterior dimensions less than a corresponding set of cavity 149, 160 interior dimensions such that the dispensing box can be located within the cavity 149, 160.

[0042] The containers 154, 156 may face a first wall 166 of the display placard 76. In one example, the first wall 166 may be substantially planar and can define one or more wall openings 80 (best seen in FIG. 9). In one example, display placard 76 can act as the first wall 166. In another example, the frame 84 can act as the first wall 166. For example, the first wall 166 can define a wall opening 80 that is aligned with the first container 156, and a second wall opening 170 that is aligned with the second container 158. The wall opening 80 and the second wall opening 170 can allow for a user to access and/or remove the hygiene items from the containers (e.g., by pulling the sanitary masks, gloves, napkins, etc. through the wall opening 80 and/or the second wall opening 170).

[0043] The containers 154, 156 may comprise a second wall 174 that faces the first wall 166. In an example, the second wall 174 can be spaced apart from the first wall 166 to define the cavity 160 between the first wall 166 and the second wall 174. In the closed position (e.g., as illustrated in FIG. 2), the second wall 174 can extend substantially parallel to the first wall 166. The container 154, 156 may comprise a third wall 176 and a fourth wall 178. The third wall 176 and the fourth wall 178 may be spaced apart to define the cavity 160 of the container 154, 156. In an example, the third wall 176 and the fourth wall 178 can extend at an angle (e.g., non-parallel to) with respect to the first wall 166 and/or the second wall 174. The containers 154, 156 may comprise a top wall 180 and a bottom wall 184. The top wall 180 and the bottom wall 184 may be spaced apart to define top and bottom sides of the cavity 160 of the container 154, 156. In an example, the top wall 180 and the bottom wall 184 can extend at an angle (e.g., non-parallel to) with respect to the first wall 166, the second wall 174, the third wall 176, and/or the fourth wall 178.

[0044] It will be appreciated that the container 154, 156 is not limited to being attached by the pivot structure 158. That is, the container 154, 156 is not limited to being moved between the opened and closed positions by the pivot structure 158. Rather, in an example, one or more of the walls 174, 176, 178, 180, and 184 can be movably attached with respect to the container 160 so as to allow for the wall(s) 174, 176, 178, 180, and 184 to move between an opened position and a closed position. For example, as illustrated in FIGS. 7 and 10, a top wall 180 of the container 130 may be movable between the opened and closed positions. For example, the top wall (lid 148) can be pivotably attached to the first wall 166 and/or to the display placard 76. The top wall 148 can pivot upwardly (e.g., to the opened position) to allow for user access to the cavity 149 of the container 130. The top wall 148 can pivot downwardly (e.g., to the closed position) to restrict user access to the cavity 149. In an example, a single top wall 148 can cover the top portions of both containers 154, 156. In another example, each container 154, 156 can have its own top wall 148, 180.

[0045] Turning to FIG. 12, the hygiene system 20 is shown from the rear side with containers 154, 156 both in an open position. Each of the containers 154, 156 can include a ball or shaft detent aperture 190. The apertures 190 are configured to interact with the ball or shaft detent 192 that is attached to the display structure 74. The apertures 190 and the detents 192 act together as a latch. As the container 154,

156 is urged to the closed location, the detent encounters the tab 194 located on the top wall 180 of the containers 154, 156. This encounter urges the detent to flex downward and pass under the tab 194 until it is aligned with the aperture 190, wherein it springs back into position and a portion of the detent 192 passes through the aperture 190 to secure the container 154, 156 in the closed position. In one example, the detents 192 are attached to the frame 84 of the display structure 74 and a cooperating cut-out in the display placard 76 enables the detent 192 to pass through the display placard 76.

[0046] Referring to FIG. 13, an example of the container 154, 156 is illustrated. In this example, the container 154, 156 can comprise one or more structures 196 to assist in positioning the hygiene item 164 with respect to the wall opening 80, 170. This positioning can allow for easier user access to the hygiene item 164 (best seen in FIG. 11) through the wall opening 80, 174. In an example, the hygiene item 164 may comprise a box containing masks, gloves, tissues, etc. The hygiene item 164 may comprise one or more walls (e.g., substantially rectangular shape illustrated in FIG. 5).

[0047] To accommodate for hygiene items 164 and/or boxes that are smaller than the cavity of the container 130, 154, 156, the container 130, 154, 156 can include one or more adjustment mechanisms 196, 198, 200, 204 to orient the hygiene item 164 with respect to the wall opening 80, 170. For example, the adjustment mechanisms 130, 154, 156 may comprise springs, biasing devices, or other structures that can be positioned between a wall or side of the container 130, 154, 156 and a wall of the hygiene item 164. The adjustment mechanisms 196, 198, 200, 204 can further comprise a holding structure 166. In one example, a spring can be attached at one end to a wall of the container, and at another end to a holding structure 166. The holding structure 166 can abut and/or contact a wall of the hygiene item 164. A holding structure 164 can slide in a track, be moved into different slots, etc. to be positioned at different locations between a wall of the container and the hygiene item 164 (e.g., different distances from the wall of the container). The holding structure 166 can, for example, be maintained a particular distance from a wall of the container 130, 154, 156 by being located in slot, groove, etc. where the slot, groove, etc. is defined (e.g., in the container) the particular distance from the wall of the container.

[0048] In one example, a spring can be positioned between the third wall of the container and a holding structure, with the holding structure configured to contact a side of the hygiene item. A second spring 198 can be positioned between the fourth wall of the container and a holding structure, with the holding structure configured to contact a side of the hygiene item. A third spring 200 can be positioned between the bottom wall of the container and a holding structure, with the holding structure configured to contact a side of the hygiene item. A fourth spring 204 can be positioned between the top wall of the container and a holding structure, with the holding structure configured to contact a side of the hygiene item. In this way, the springs can bias the holding structures and, thus, the hygiene item, towards a center of the container, such that the hygiene item may be aligned with the wall opening. In an example, a fifth adjustment 206 can be positioned between a rear wall (e.g., the second wall 144 illustrated in FIG. 12) and a fifth holding structure, so as to bias the hygiene item towards the wall opening 80.

[0049] Returning to FIG. 13, the second wall 144 is on the far side of the figure and its exterior side faces the rear of the hygiene system 20. In this figure, the side of the container opposite the second wall 144 is not present, and it aligns with the wall opening 80. In this example, the second wall 144 defines a wall opening 220. This wall opening 220 can be used to dispense hygiene products from the back side of the hygiene system 20 as well as the front. In this example, the set of cavity interior dimensions enables more than one dispensing box 164 to be located within the cavity 149 at a given time, one facing the front side of the hygiene system 20 in a back-to-back arrangement with another dispensing box 164 facing the rear side of the hygiene system 20.

[0050] Returning to FIG. 4, a portion of the display structure 74 or the support structure 24 is configured to interact with an associated hygiene system in order to create a particular arrangement when placed adjacent the associated system. In other words, parts of the hygiene system 20 can be configured at certain angles, such as the side 230 of stand 30. When placed next to an associated hygiene system, the angles can cooperate with each other to position the hygiene systems in a particular pattern, such as an "S" curve, or a semi-circle, or a desired logo. In many cases, the side 230 would be on the base 28.

[0051] The hygiene system illustrated and described herein can provide a number of benefits. For example, the display structure is designed as a retrofit so as to be removably attachable to the stand of the support structure. As such, an existing support structure can accommodate the display structure. In addition, the display structure can provide for improved health and/or sanitation due to the provision of the hygiene item. In an example, the hygiene item(s) comprises masks, gloves, tissues, etc. As such, while past hygiene systems may have only dispensed a product, the hygiene system illustrated and described herein can dispense the product along with the hygiene items. In addition, the display placard of the display structure is configured to display information such as advertisements, text, marketing information, graphics, etc. This information can be targeted to users and can provide an additional revenue stream. Additionally, the container is configured to remain attached to the hygiene system when replacing a hygiene item.

[0052] Although the subject matter has been described in language specific to structural features or methodological acts, it is to be understood that the subject matter defined in the appended claims is not necessarily limited to the specific features or acts described above. Rather, the specific features and acts described above are disclosed as example forms of implementing at least some of the claims.

[0053] Various operations of embodiments are provided herein. The order in which some or all of the operations described should not be construed to imply that these operations are necessarily order dependent. Alternative ordering will be appreciated having the benefit of this description. Further, it will be understood that not all operations are necessarily present in each embodiment provided herein. Also, it will be understood that not all operations are necessary in some embodiments.

[0054] Many modifications may be made to the instant disclosure without departing from the scope or spirit of the claimed subject matter. Unless specified otherwise, “first,” “second,” or the like are not intended to imply a temporal aspect, a spatial aspect, an ordering, etc. Rather, such terms are merely used as identifiers, names, etc. for features, elements, items, etc. For example, a first component and a second component generally correspond to component A and component B or two different or two identical components or the same component.

[0055] Moreover, "exemplary" is used herein to mean serving as an example,

instance, illustration, etc., and not necessarily as advantageous. As used in this application, "or" is intended to mean an inclusive "or" rather than an exclusive "or". In addition, "a" and "an" as used in this application are generally to be construed to mean "one or more" unless specified otherwise or clear from context to be directed to a singular form. Also, at least one of A and B or the like generally means A or B or both A and B. Furthermore, to the extent that "includes", "having", "has", "with", or variants thereof are used in either the detailed description or the claims, such terms are intended to be inclusive in a manner similar to "comprising".

[0056] Also, although the disclosure has been illustrated and described with respect to one or more implementations, equivalent alterations and modifications will occur to others skilled in the art based upon a reading and understanding of this specification and the annexed drawings. The disclosure includes all such modifications and alterations and is limited only by the scope of the following claims. In particular regard to the various functions performed by the above described components (e.g., elements, resources, etc.), the terms used to describe such components are intended to correspond, unless otherwise indicated, to any component which performs the specified function of the described component (e.g., that is functionally equivalent), even though not structurally equivalent to the disclosed structure. In addition, while a particular feature of the disclosure may have been disclosed with respect to only one of several implementations, such feature may be combined with one or more other features of the other implementations as may be desired and advantageous for any given or particular application.

What is claimed is:

1. A system comprising:

a display structure removably attached to a support structure, the display structure comprising:

a first wall defining a wall opening; and

a second wall spaced apart from the first wall such that a cavity is defined between the first wall and the second wall, wherein the cavity is configured to contain a hygiene item such that the hygiene item is dispensed from the display structure through the wall opening.

2. The system according to claim 1, wherein the display structure further comprises one of a tab and a slot and the support structure comprises the other of a tab and a slot such that the tab and the slot cooperate to secure the display structure in a desired location.

3. The system according to claim 2, wherein one of the display structure and the support structure further comprise structure to positively locate the display structure with respect to the support structure.

4. The system according to claims 2-3, wherein the display structure is removably attached to the support structure through sliding engagement.

5. The system according to claims 2-4, wherein the force of gravity maintains the display structure in the desired location.

6. The system according to any of the previous claims, wherein the display structure is attached to the support structure without the use of any tools.

7. The system according to any of the previous claims, further comprising walls such that the cavity is substantially surrounded by walls on each of six sides to form a container that defines the cavity.

8. The system according to any of the previous claims, wherein the hygiene item is contained within a dispensing box, the dispensing box having a set of dispensing box exterior dimensions less than a corresponding set of cavity interior dimensions such that the dispensing box can be located within the cavity.

9. The system according to claim 8, wherein the set of cavity interior dimensions enables more than one dispensing box to be located within the cavity at a given time.

10. The system according to claims 7-9, further comprising a hinge, wherein one wall of the container is attached to the hinge and the hinge is attached to the display structure such that the wall of the container is configured to rotate with respect to the display structure.

11. The system according to claim 10, wherein the hinge is a piano hinge.

12. The system according to claim 10, further comprising an urging device, wherein the urging device is configured to urge the wall of the container to a closed position.

13. The system according to claims 7-12, further comprising a latch to secure the container in a desired position.

14. The system according to claim 13, further comprising a tab, wherein the tab is configured to interact with the latch during a closing operation.

15. The system according to any of the previous claims wherein a portion of the display structure or the support structure is configured to interact with an associated system in order to create a particular arrangement when placed adjacent the associated system.

16. A system comprising:

a display structure removably attached to a support structure, the display structure comprising:

a first wall defining a wall opening;

a second wall spaced apart from the first wall such that a cavity is defined between the first wall and the second wall, wherein the cavity is configured to accommodate a hygiene item such that the hygiene item is dispensed from the display structure through the wall opening; and

a display placard configured to display information.

17. The system of claim 16, wherein the display placard includes a front side and a rear side, and both the front side and the rear side are configured to display information.

18. The system of claims 16-17, wherein the second wall defines a wall opening.

19. A hygiene system for dispensing a hygiene product, the hygiene system comprising:

a support structure;

a product dispenser coupled to the support structure and configured to dispense the hygiene product; and

a display structure removably attached to the support structure, the display structure comprising:

a first wall defining a wall opening;

a second wall spaced apart from the first wall to define a cavity between the first wall and the second wall; and

a hygiene item removably received within the cavity, the display structure configured to dispense the hygiene item through the wall opening.

20. The hygiene system according to claim 19, further comprising a container, wherein the container is configured to hold a hygiene item and the container is further configured to remain attached to the hygiene system during a hygiene item replacement operation.

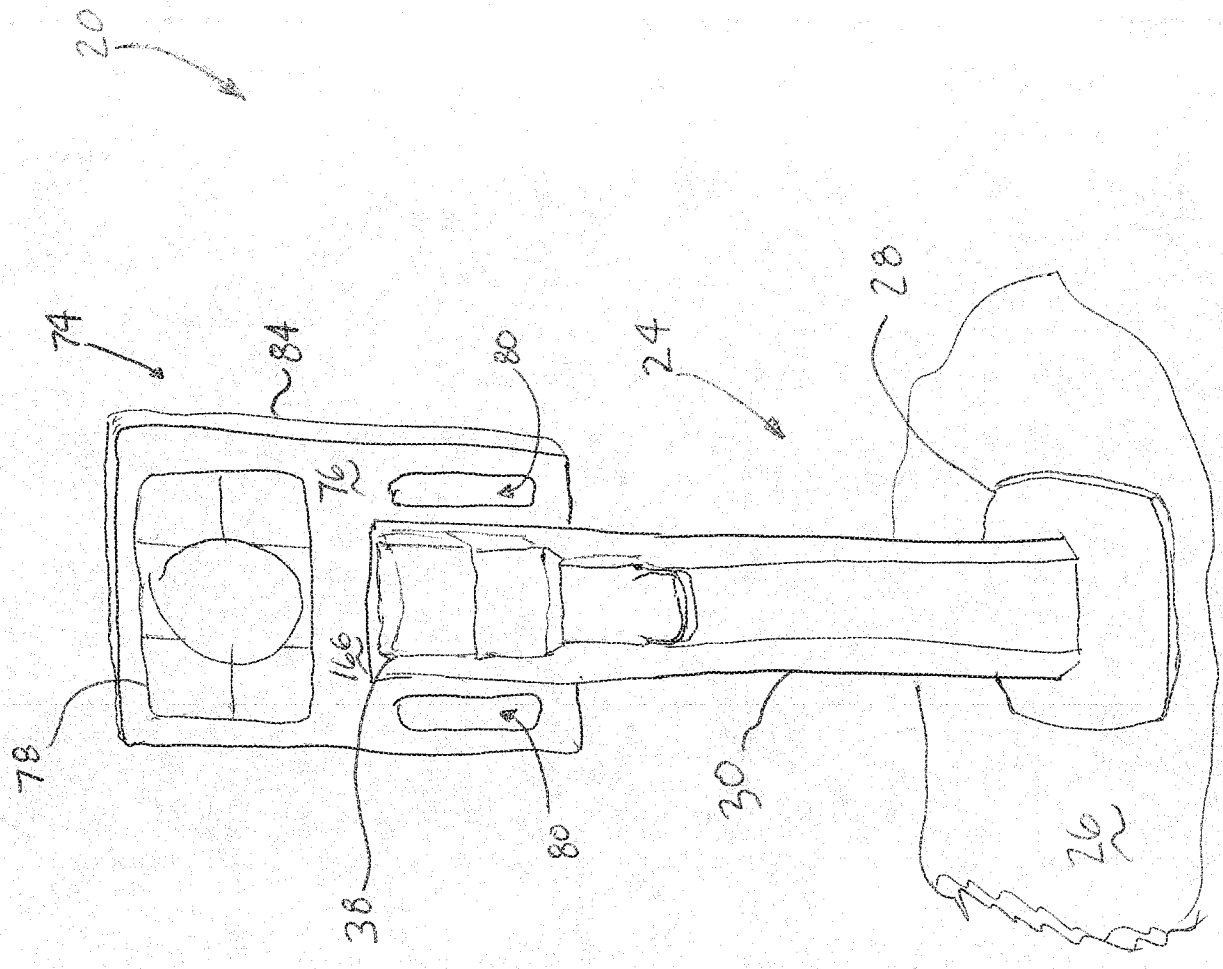

FIG. 1

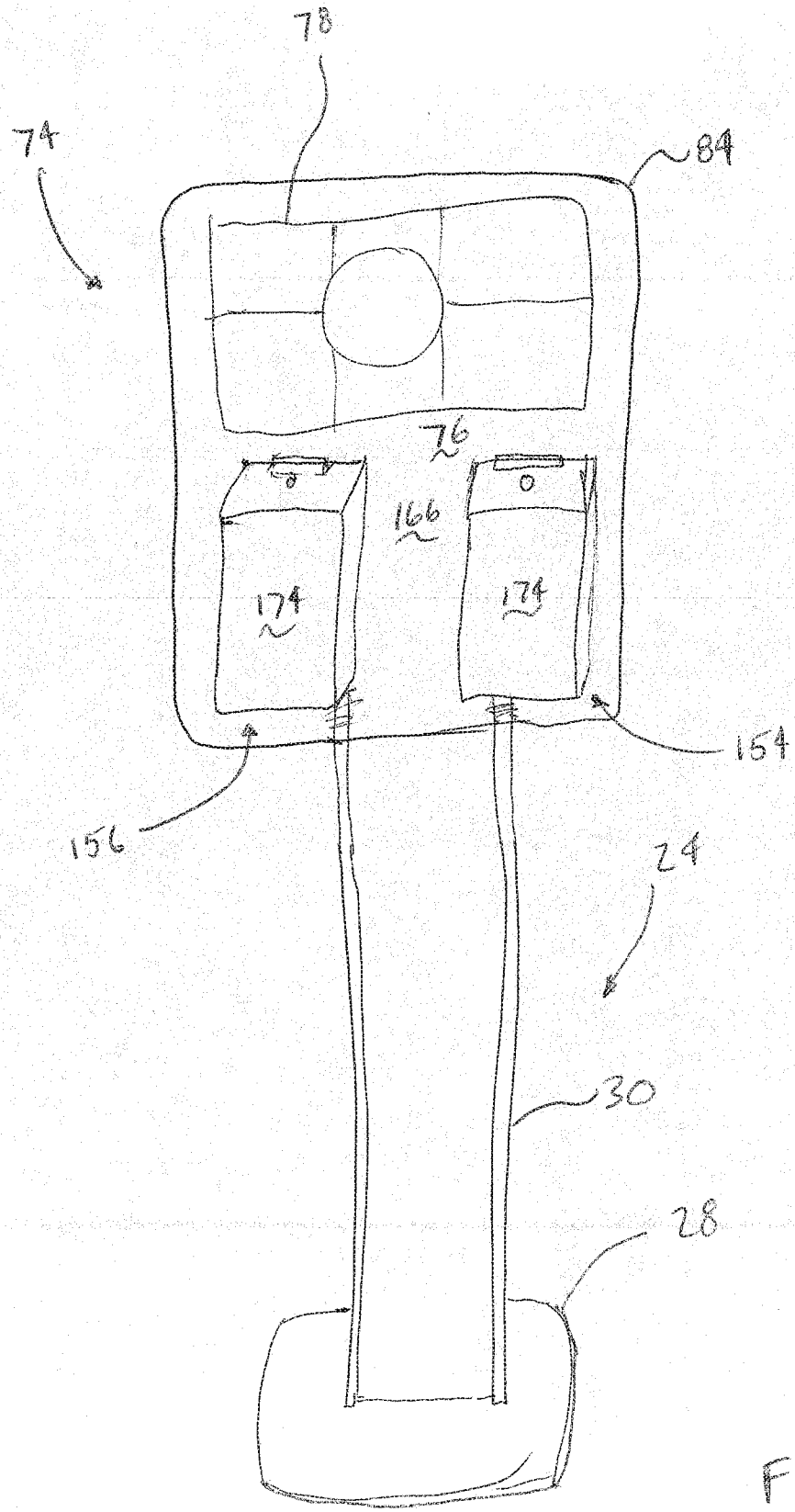

FIG. 2

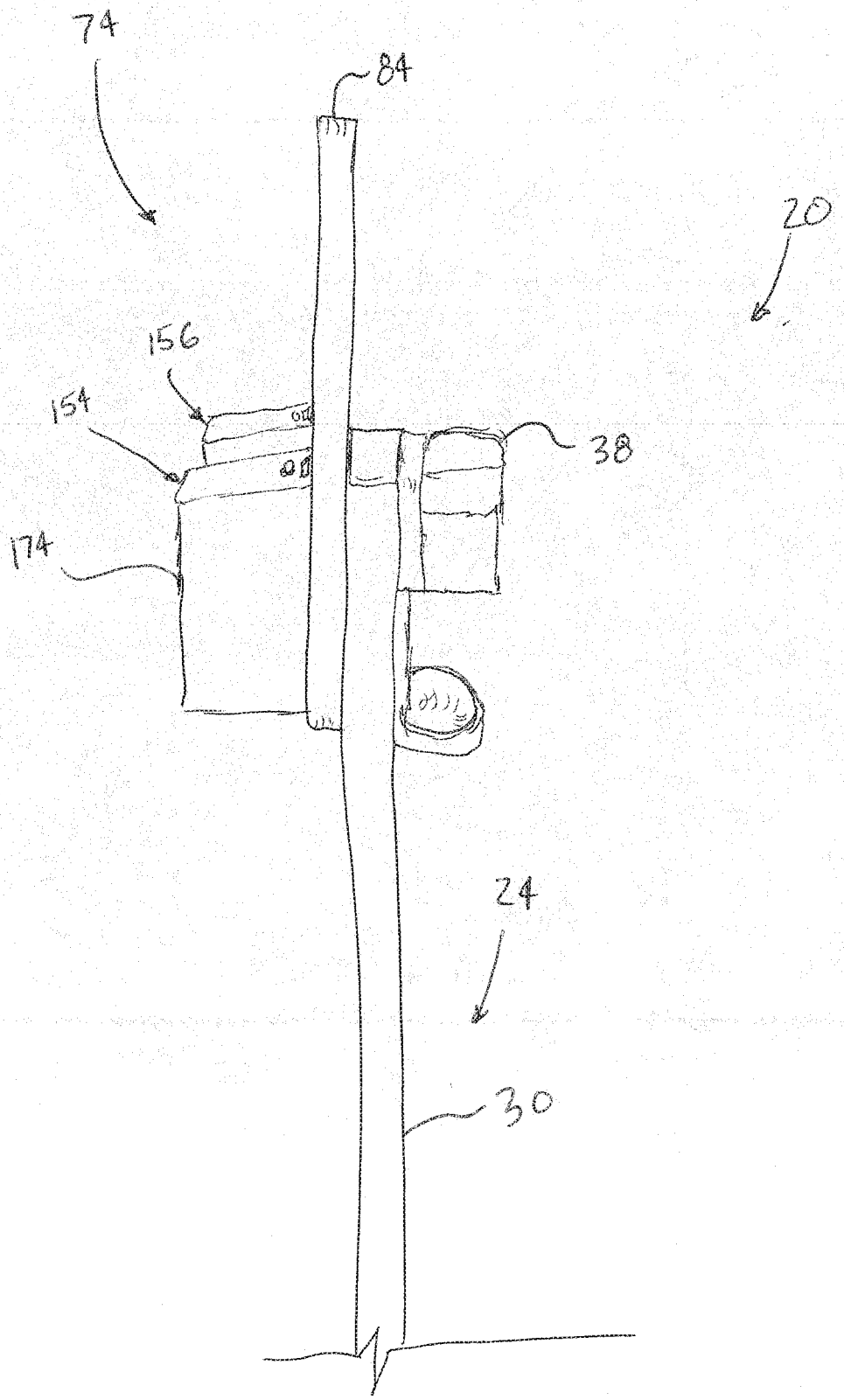

FIG. 3

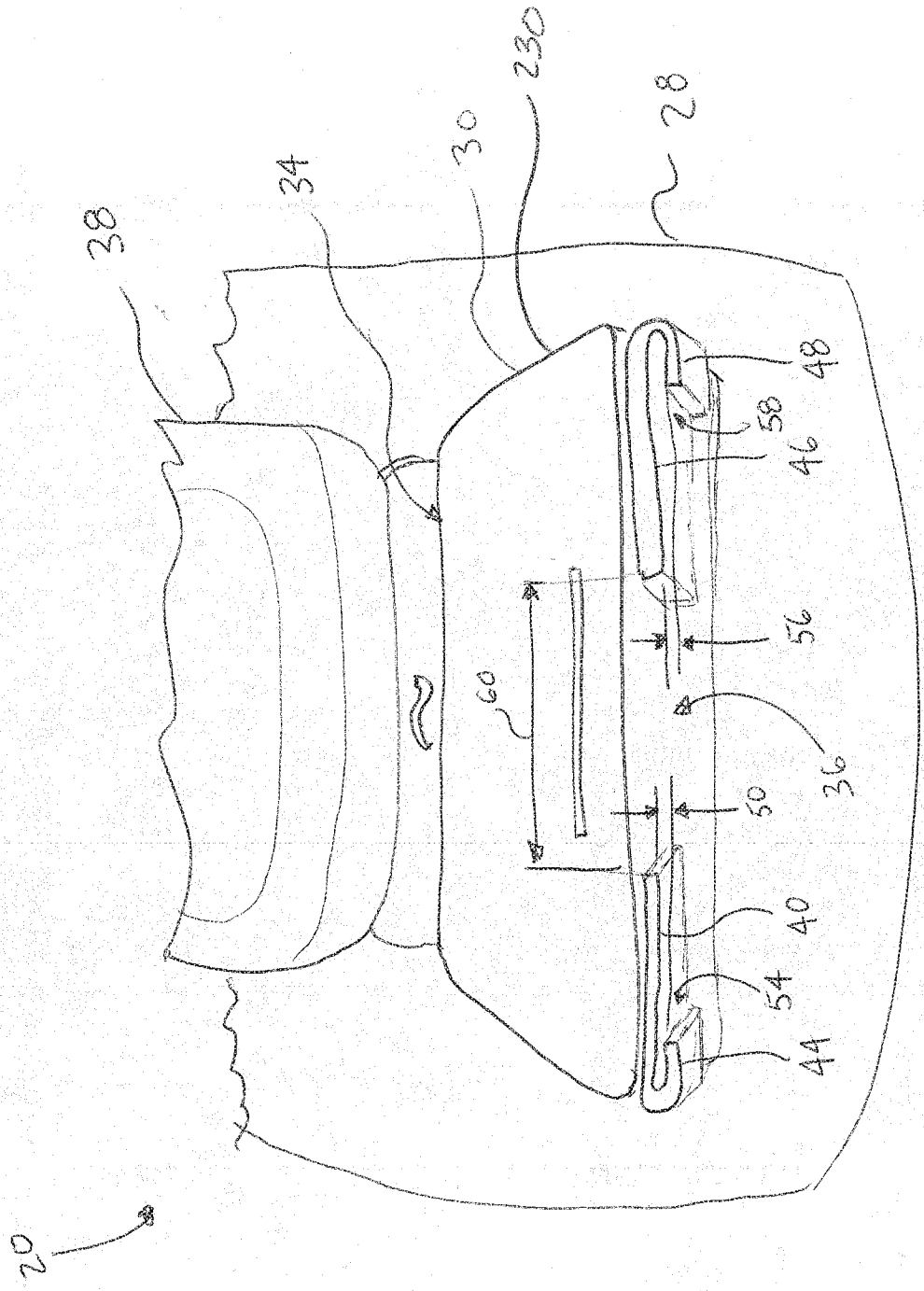

FIG. 4

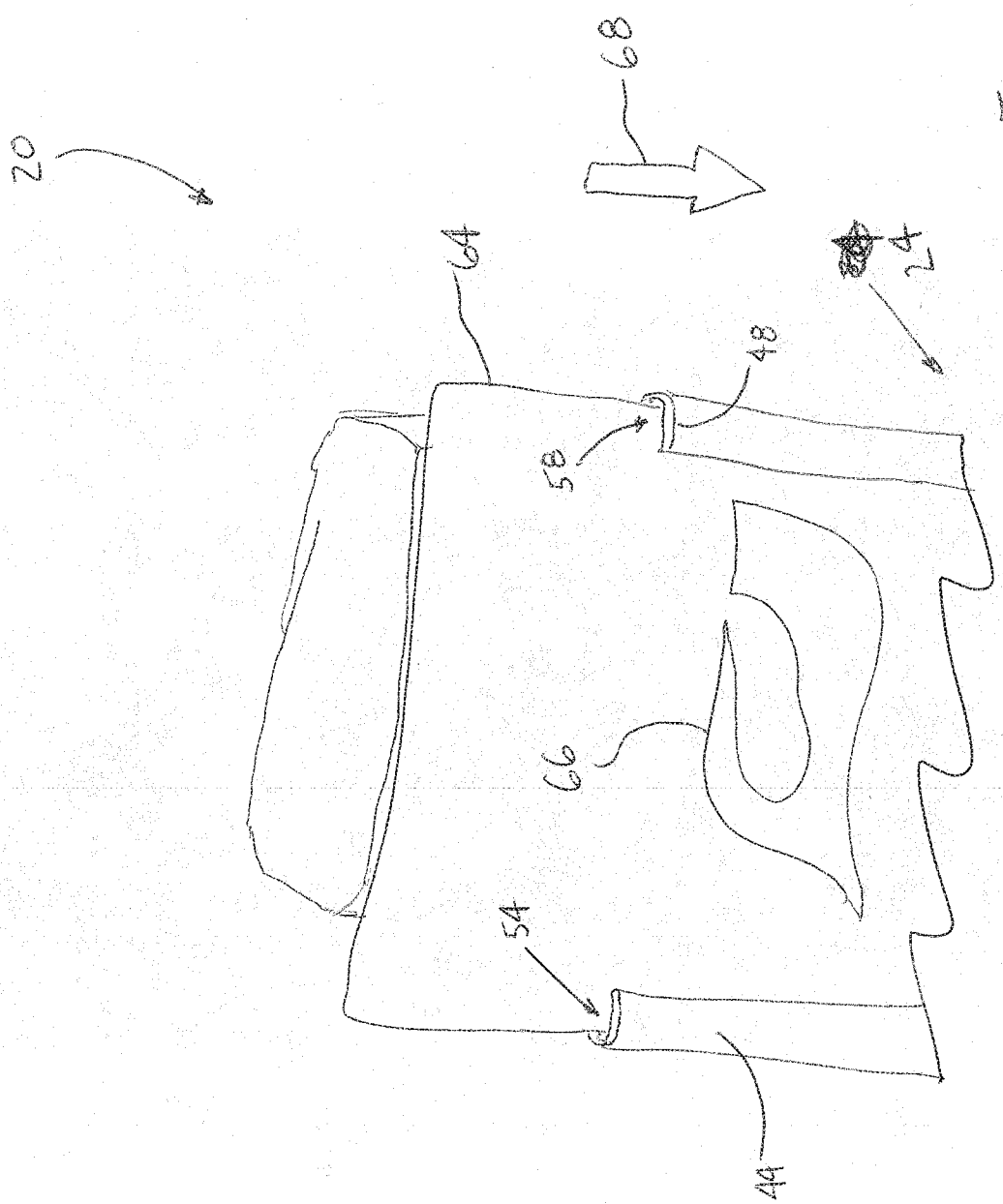

FIG. 5

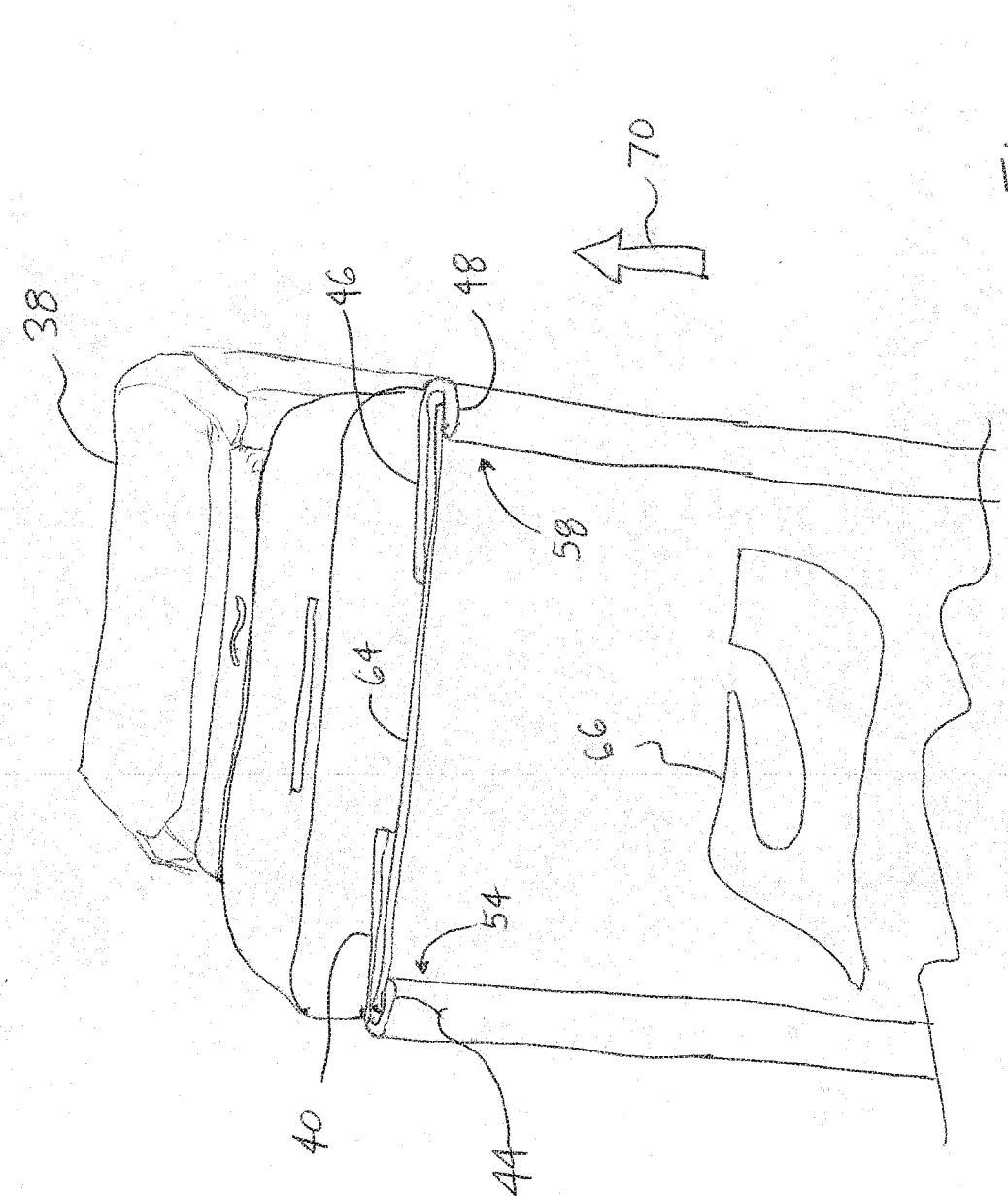

FIG. 6

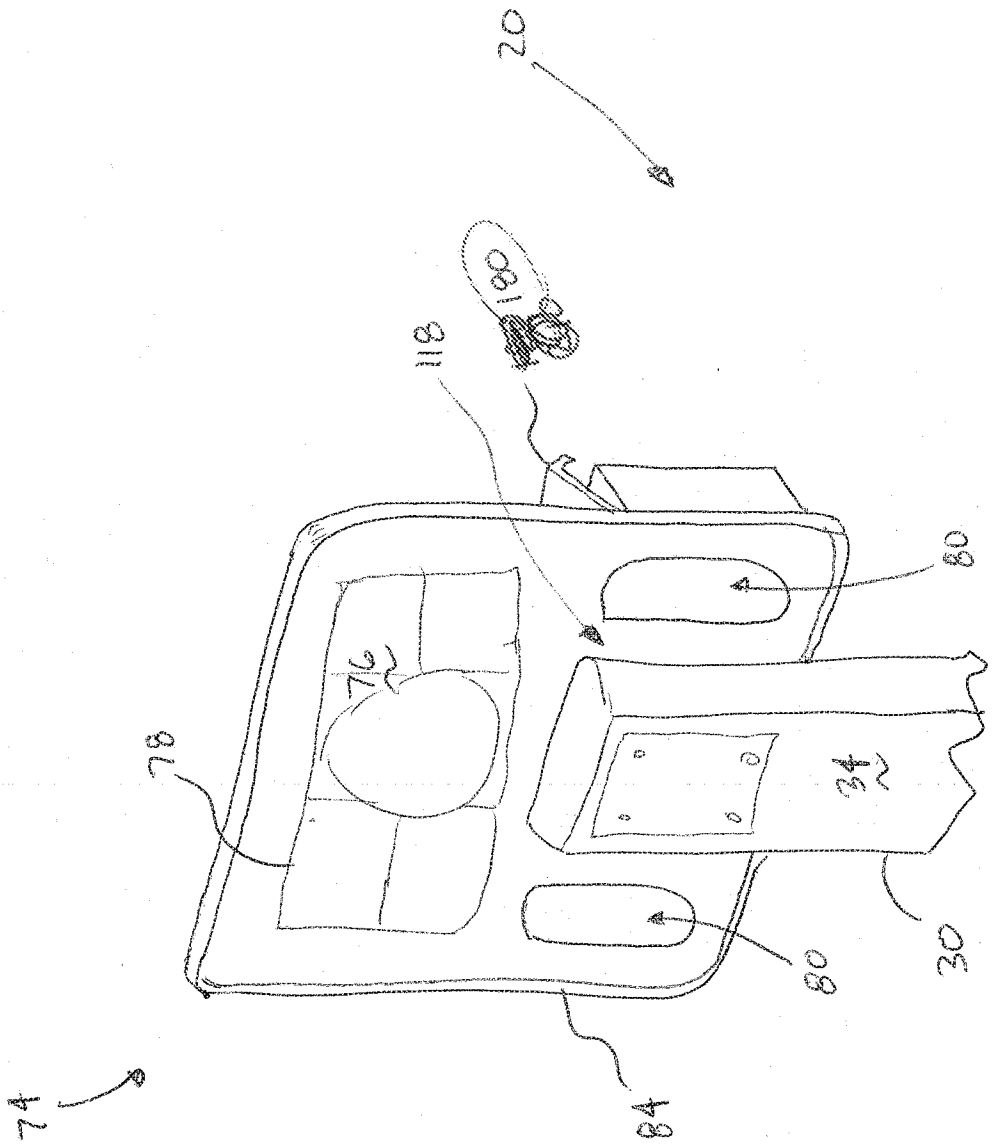

FIG. 7

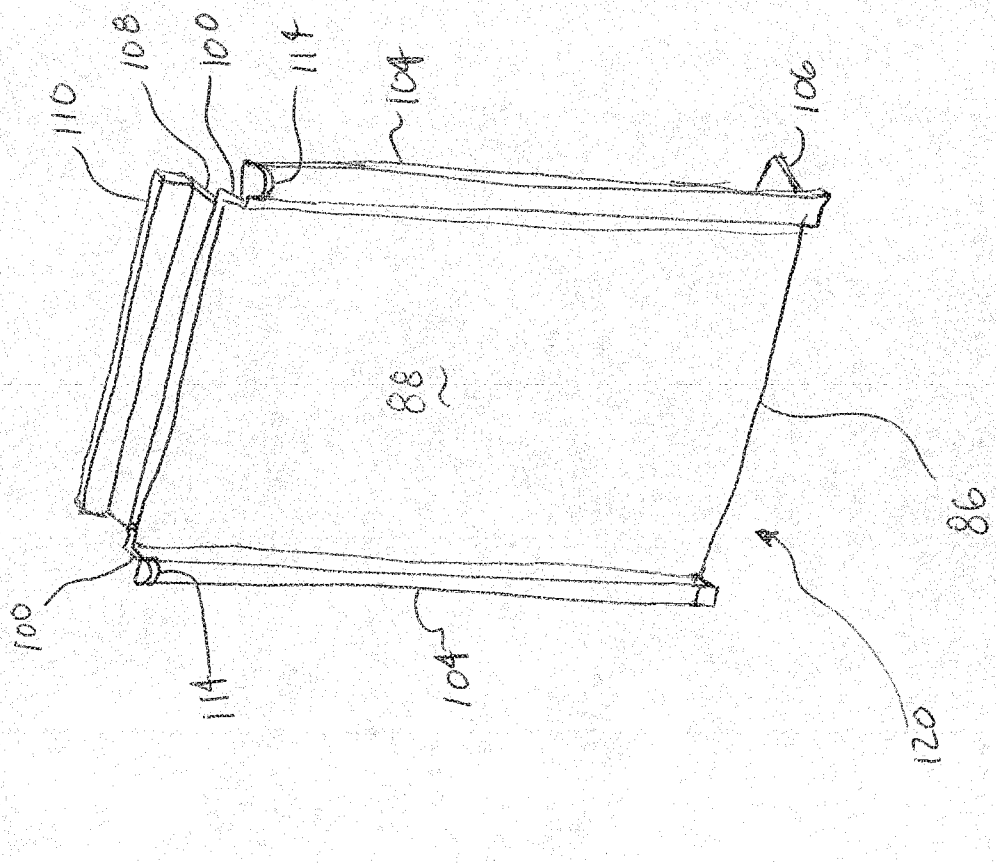

FIG. 8

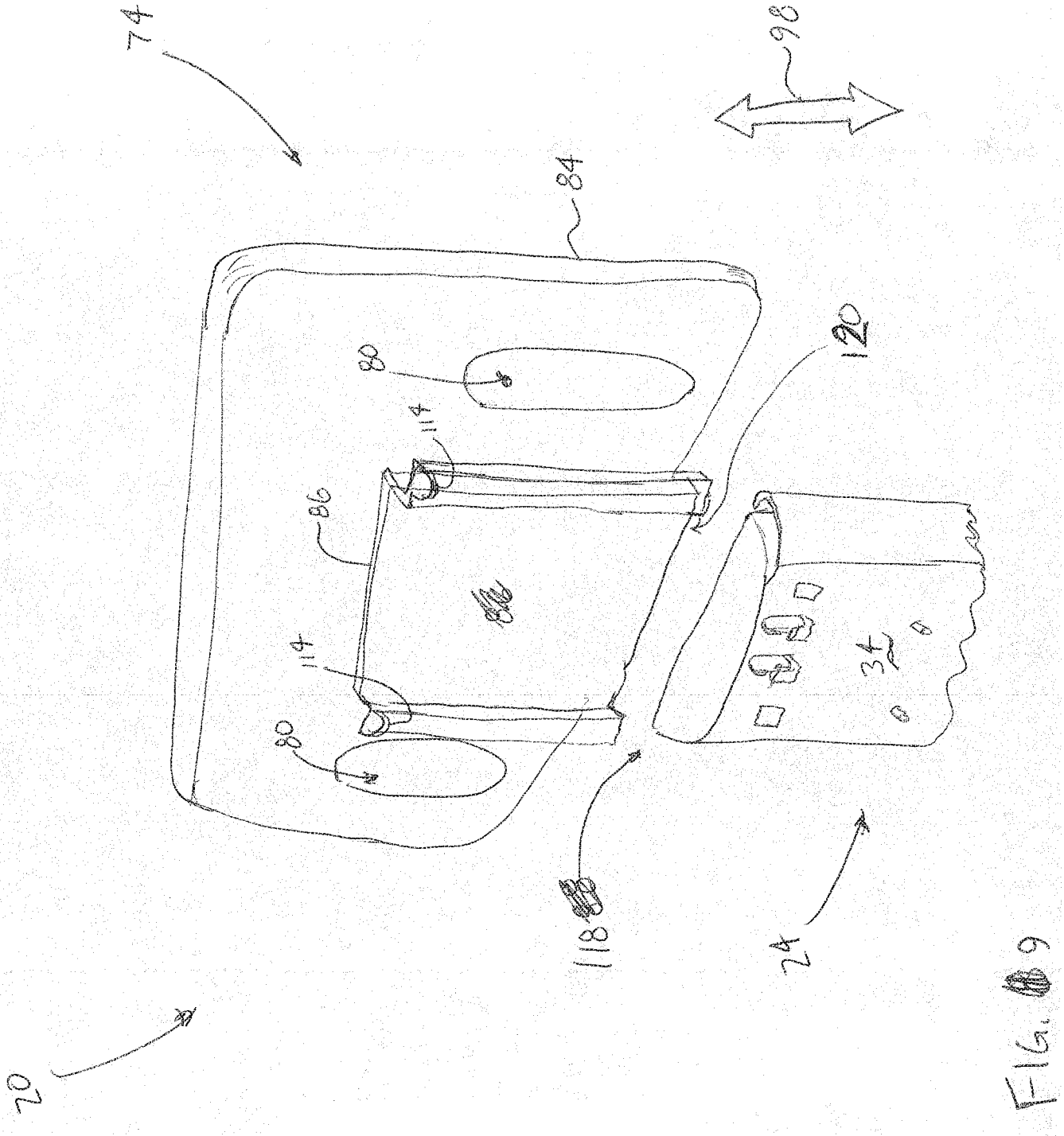

FIG. 9

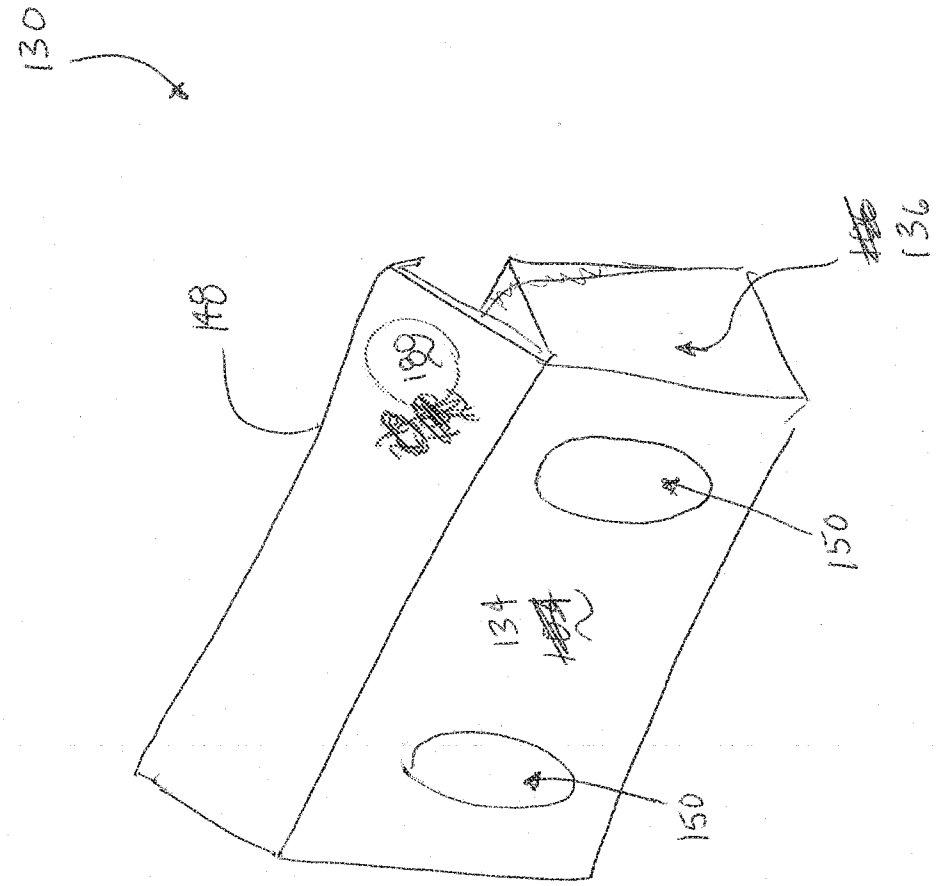

FIG. 10

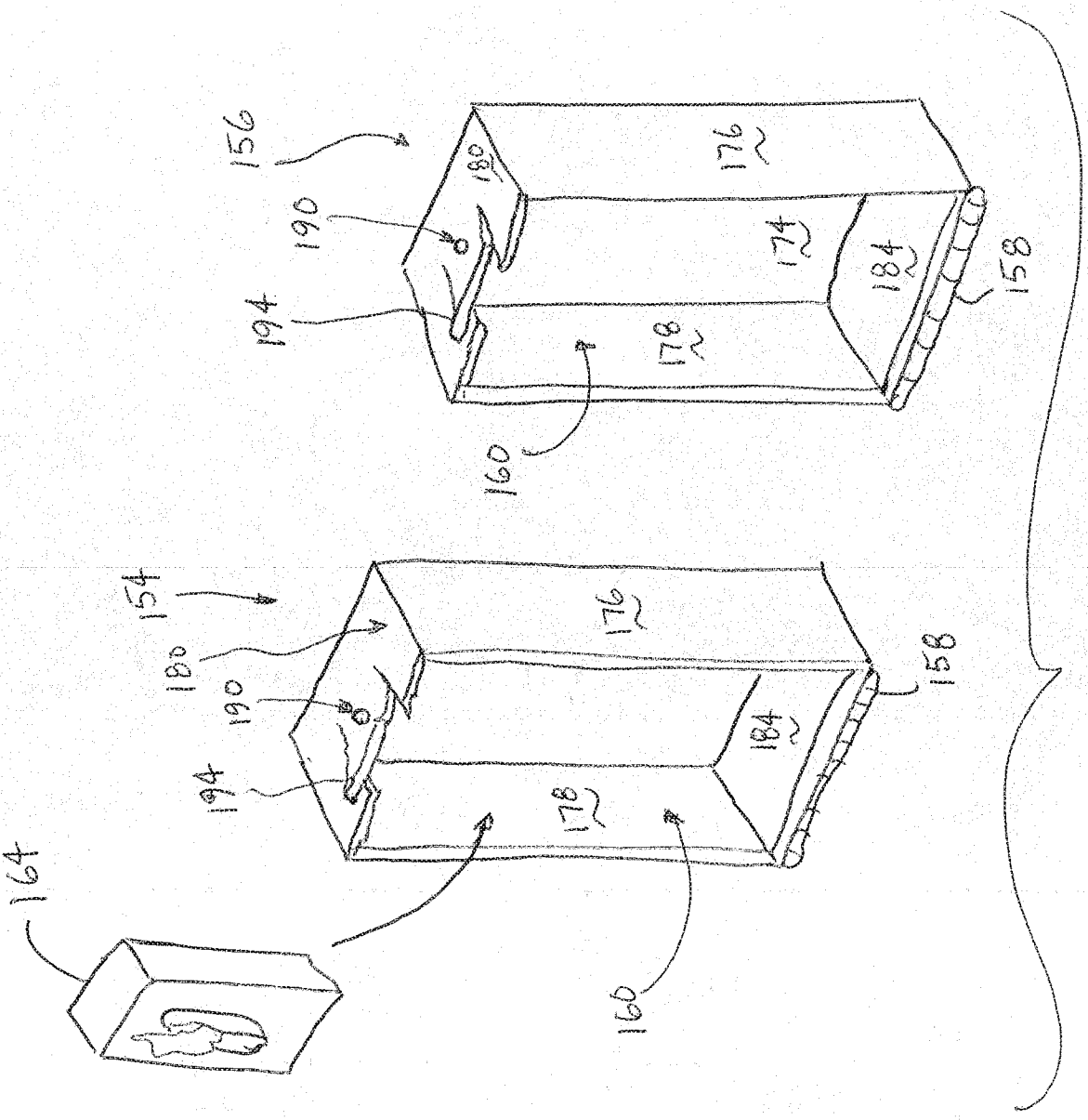
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FIG. 11

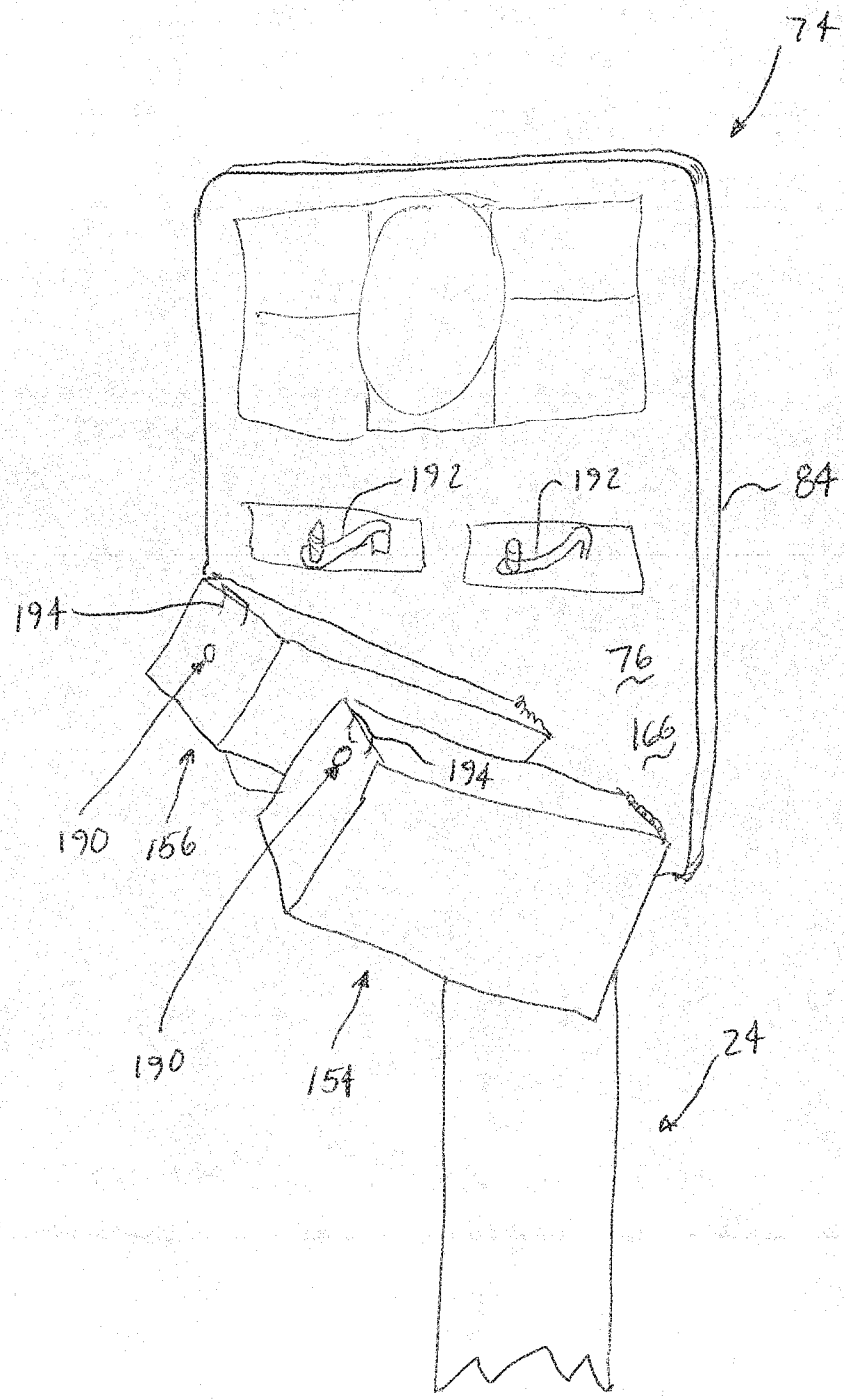

FIG. 12

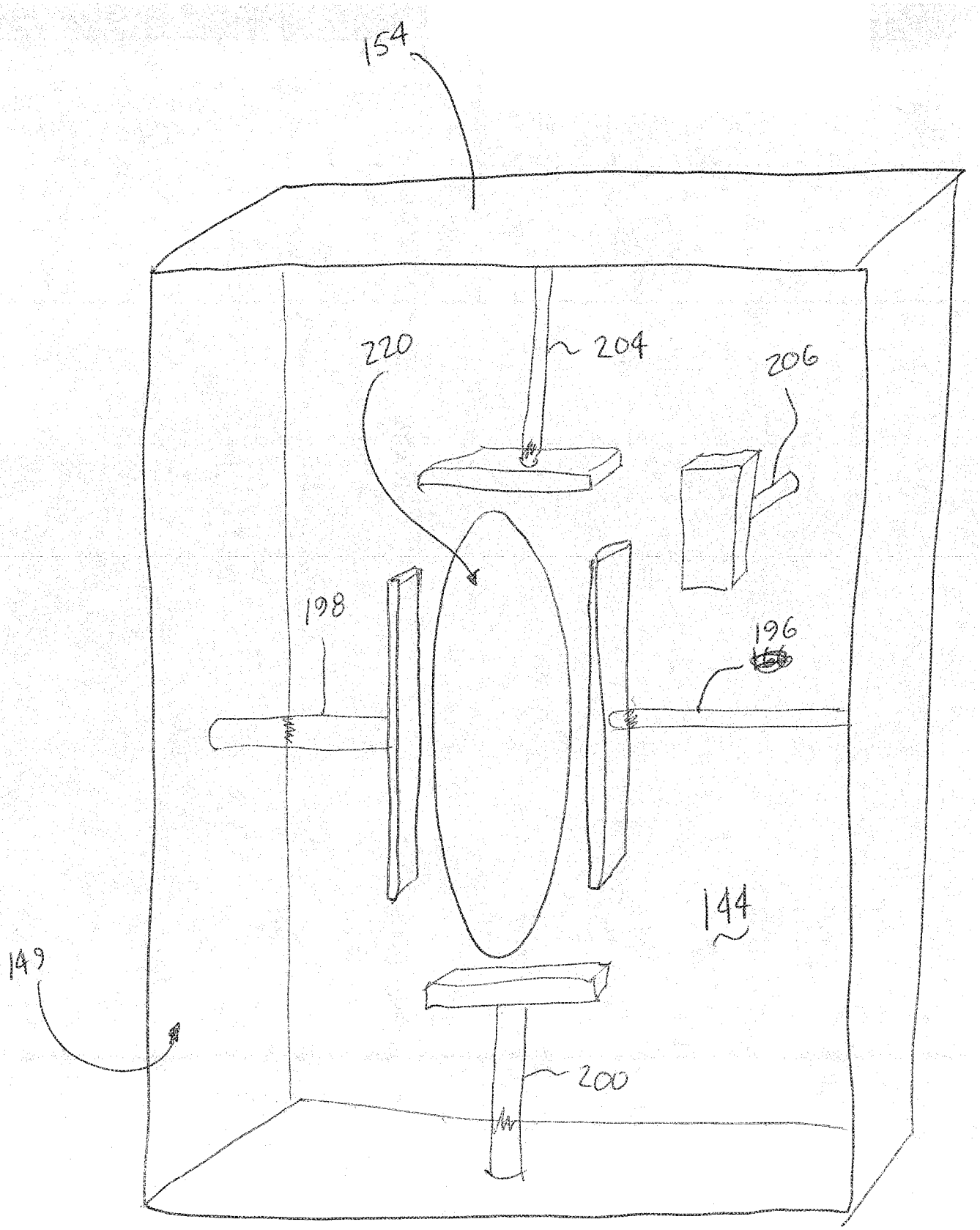

FIG. 13

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2018/037413

A. CLASSIFICATION OF SUBJECT MATTER
INV. A47F1/12 A47K10/32
ADD. A61F15/00 A47F5/04

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)
A47F A61F A47K A47B A61B G09F B65D B25H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 7 147 129 B1 (MENEFIELD MARY JANE [US]) 12 December 2006 (2006-12-12) figures 1,2,4,5	1-18
X	US 2015/245747 A1 (MANFREDONIA MARCIE [US] ET AL) 3 September 2015 (2015-09-03) paragraph [0036]; figures 1-4	1-17,19, 20

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :

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"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
26 July 2018	03/08/2018

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Martinez Valero, J

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Form PCT/ISA/210 (second sheet) (April 2005)

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Anonymous: "Respiratory Hygiene Station ¦ Locking Hygiene Stand UM3403", , 15 March 2017 (2017-03-15), XP055495442, Retrieved from the Internet: URL:https://web.archive.org/web/20170315053209/http://www.universalmedicalinc.com:80/locking-respiratory-hygiene-stand-health-station.html [retrieved on 2018-07-26] page 1	1-3, 5-11,13, 14,16, 17,19,20
X	GB 2 447 853 A (GORDON MICHAEL JOHN [GB]) 1 October 2008 (2008-10-01) page 5, line 22; figures 1,2	1-6,19, 20
A	Anonymous: "Displays Done Right", , 25 November 2016 (2016-11-25), XP055495365, Retrieved from the Internet: URL:https://web.archive.org/web/20161125100400/https://www.displaysdoneright.com/ [retrieved on 2018-07-25] Image Hand Sanitizer Stations; page 6	1,16,19

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2018/037413

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 7147129 B1	12-12-2006	NONE	
US 2015245747 A1	03-09-2015	US 2015245747 A1	03-09-2015
		WO 2015130569 A1	03-09-2015
GB 2447853 A	01-10-2008	NONE	