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(54) **PACKING SYSTEM, METHOD OF USE, AND METHOD OF MANUFACTURE**

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(60) Provisional application No. 63/310,885, filed on Feb. 16, 2022.

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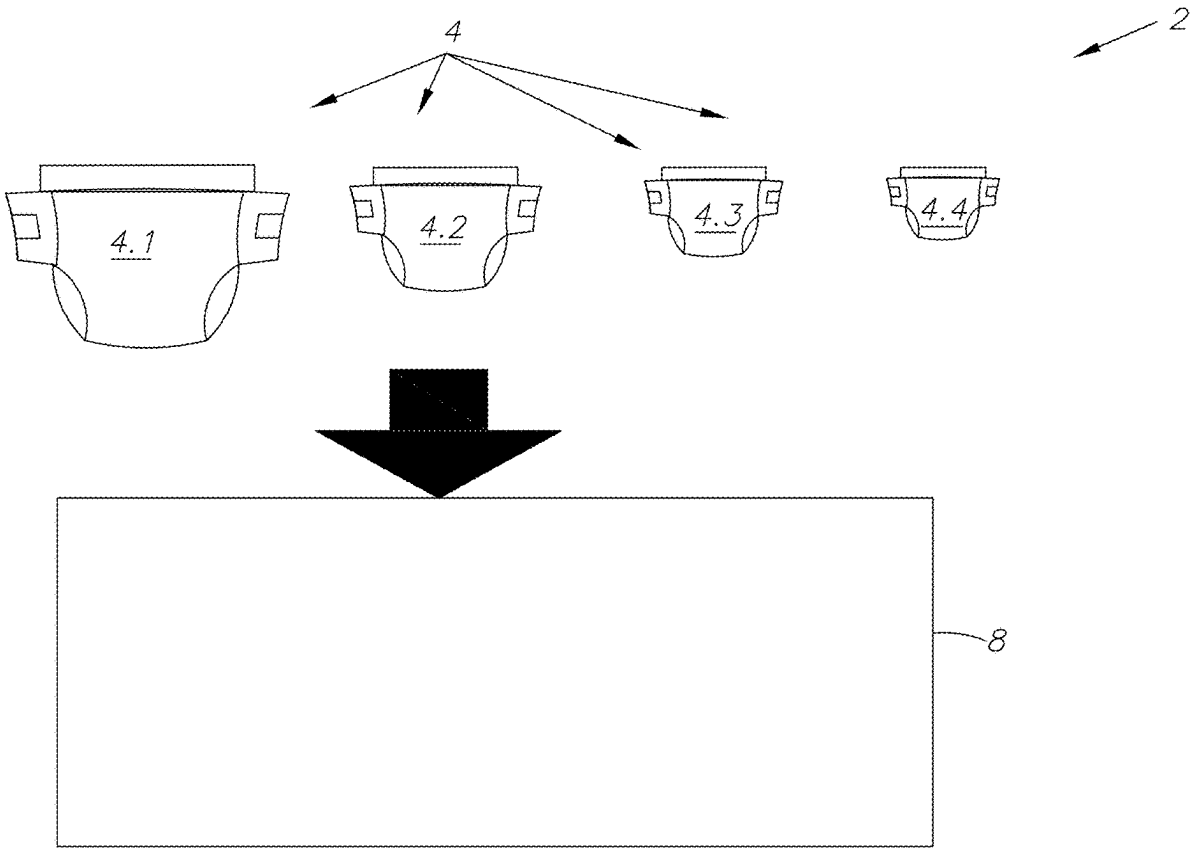
B65D 65/38	(2006.01)

(52) **U.S. Cl.**

CPC ***B65D 81/127*** (2013.01); ***B65B 5/04*** (2013.01); ***B65B 11/00*** (2013.01); ***B65B 11/48*** (2013.01); ***B65B 21/245*** (2013.01); ***B65B 23/00*** (2013.01); ***B65B 55/20*** (2013.01); ***B65D 5/28*** (2013.01); ***B65D 65/38*** (2013.01); *B65D 2203/12* (2013.01); *B65D 2565/384* (2013.01); *B65D 2581/053* (2013.01)

(57) **ABSTRACT**

A packing system for safely packing fragile household item for moving or storage. The packing system provides a number of packing devices which include a pair of ends bridged by a central portion, and a pair of elastic skirts along the central portion, all of which form a cup-like shape for receiving the fragile household item. A variety of sizes of the packing devices could be combined within a single kit. They could be color coded. An embodiment of the invention employs unused diapers as the packing devices. These could be donated or otherwise procured.



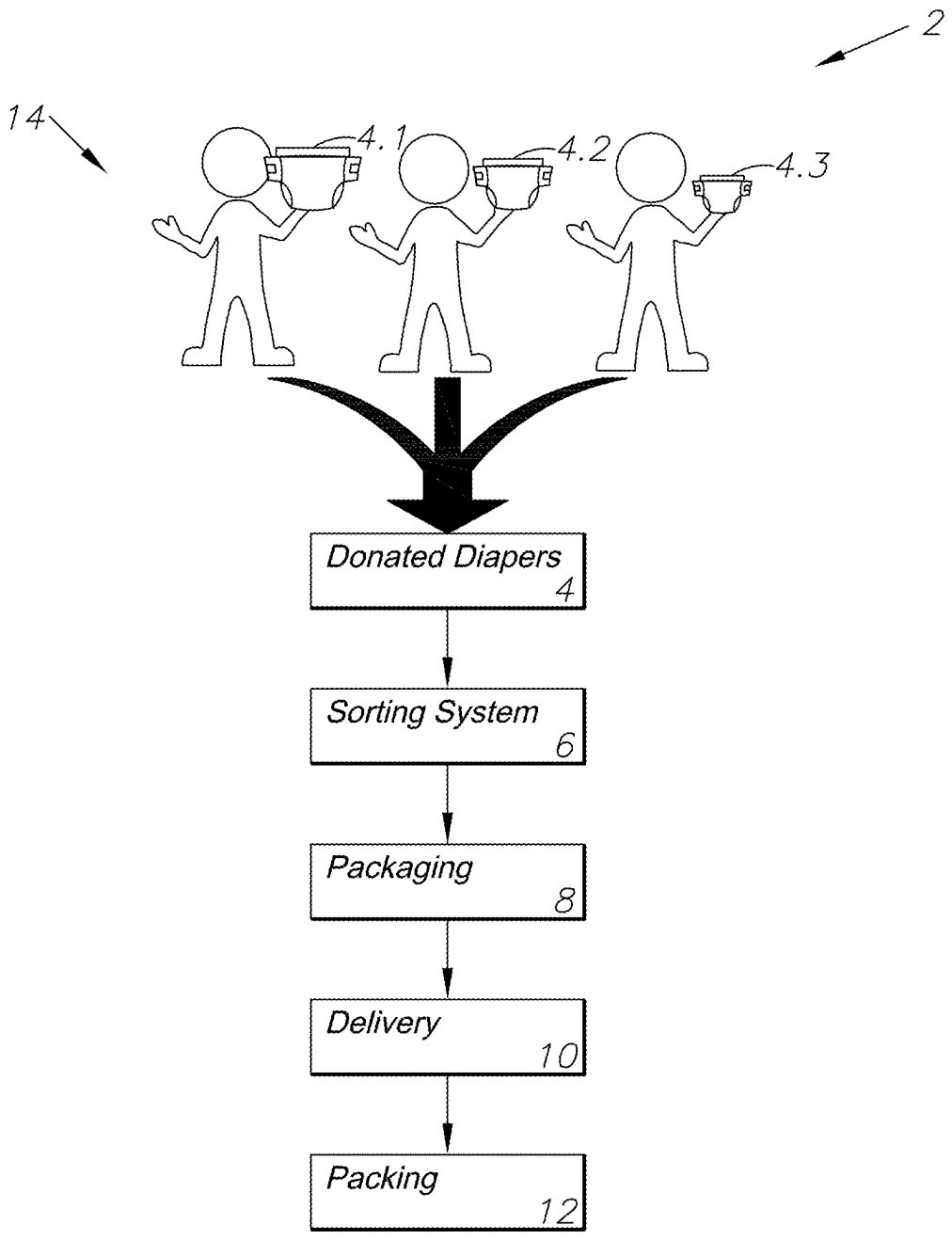

2
14
4.1
4.2
4.3
Donated Diapers
4
Sorting System
6
Packaging
8
Delivery
10
Packing
12

FIG. 1

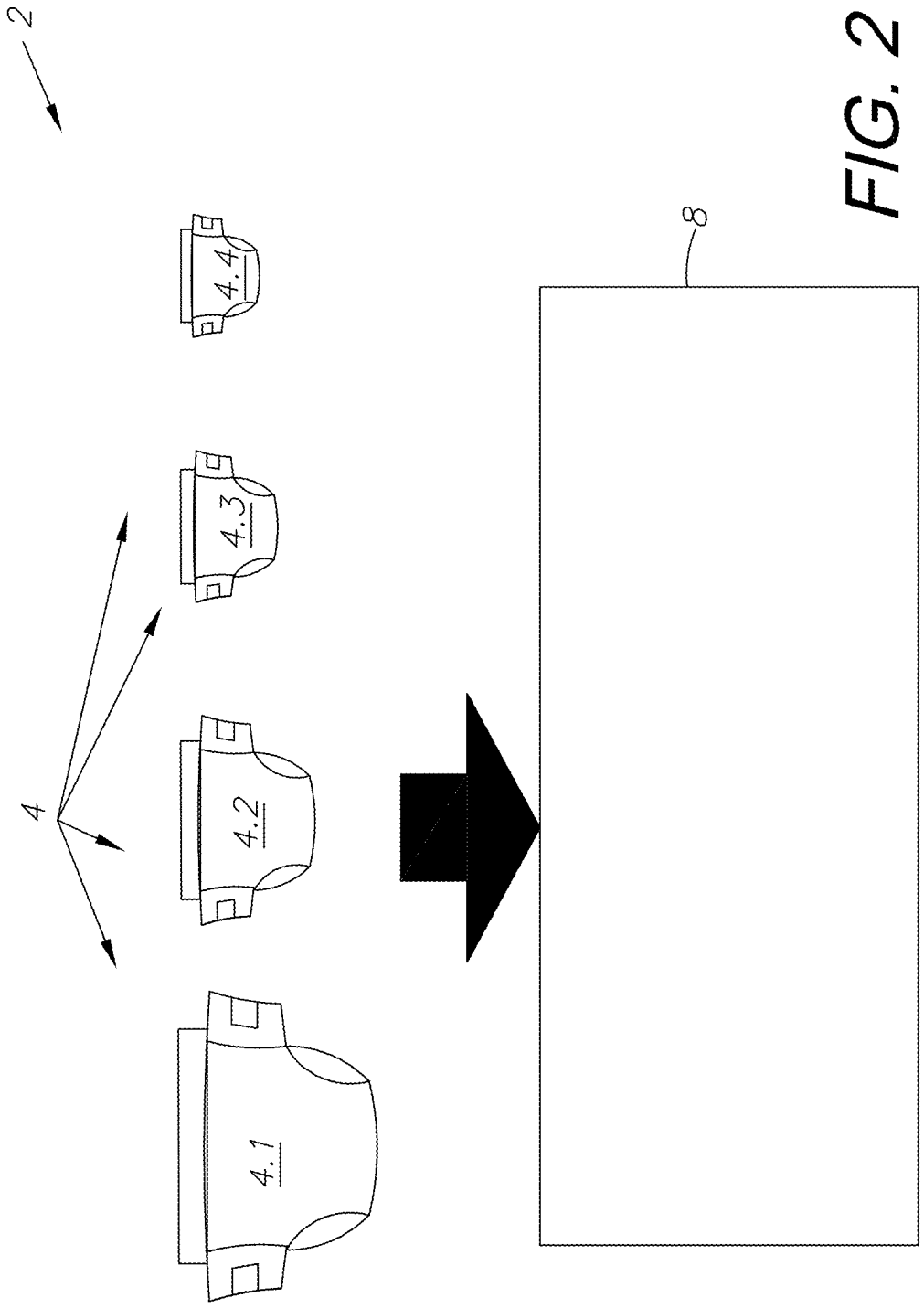


FIG. 2

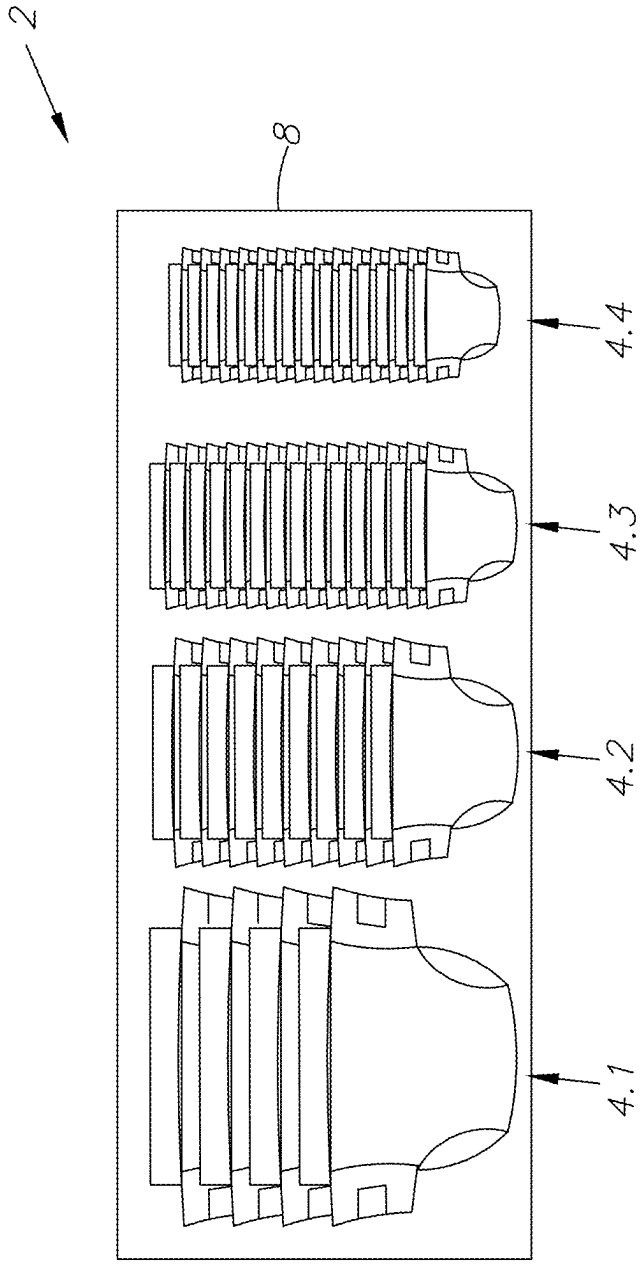


FIG. 3

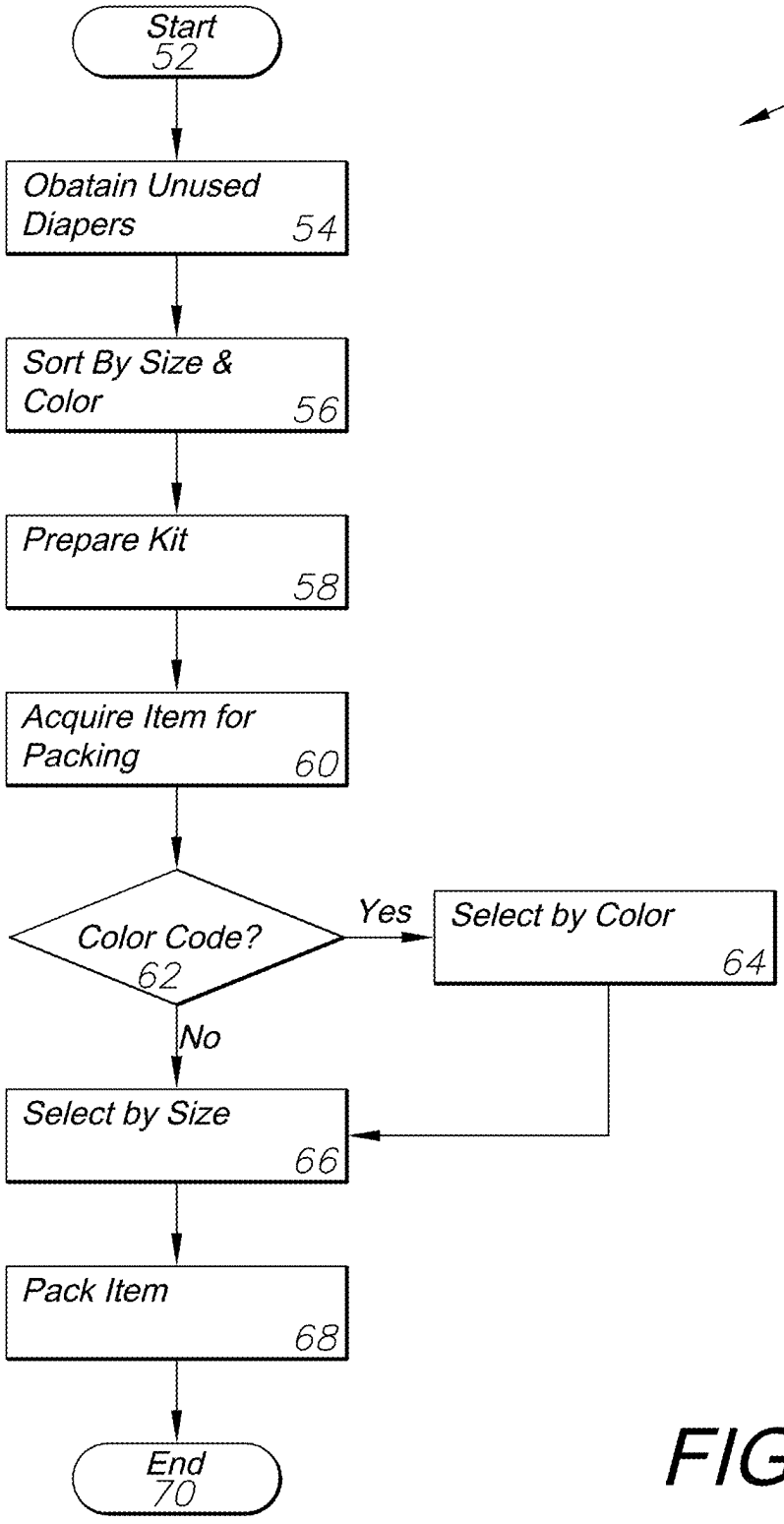

Start
52
2
Obatain Unused Diapers
54
Sort By Size & Color
56
Prepare Kit
58
Acquire Item for Packing
60
Color Code?
62
Yes
Select by Color
64
No
Select by Size
66
Pack Item
68
End
70

FIG. 4

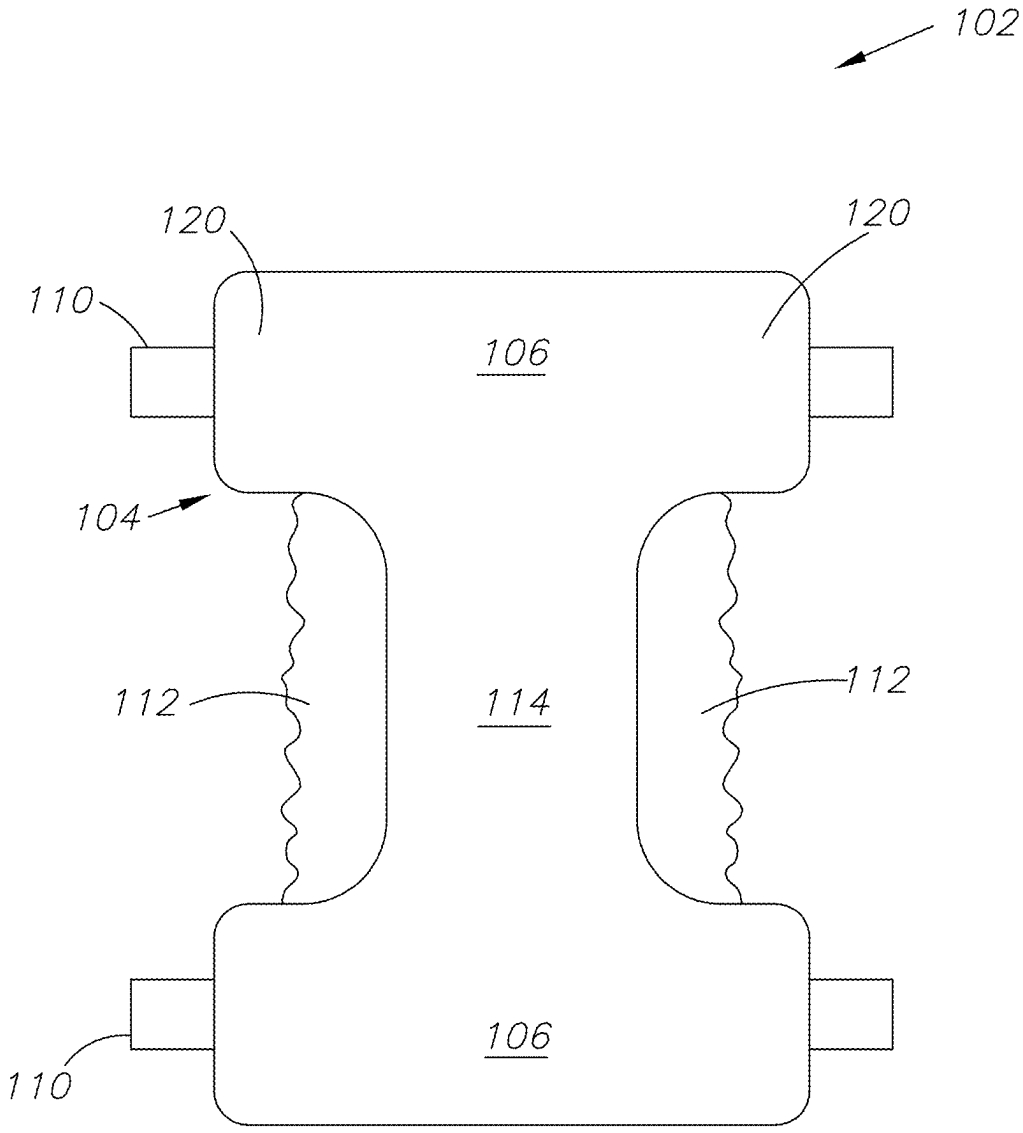


FIG. 5

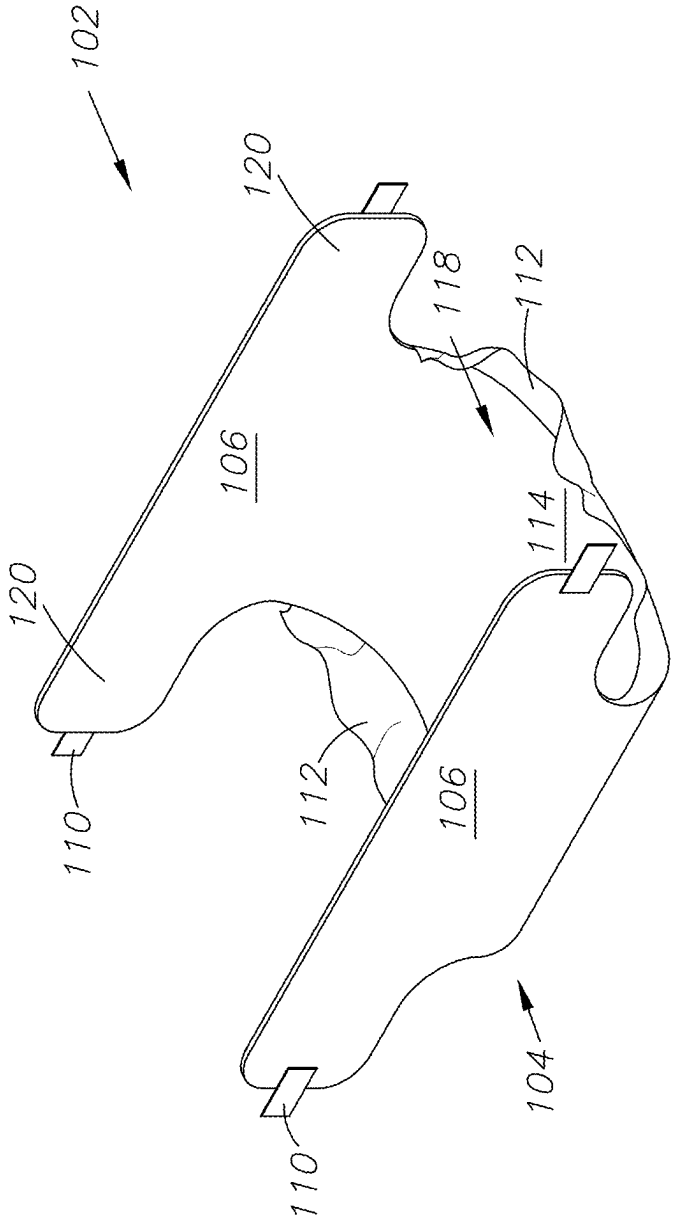


FIG. 6

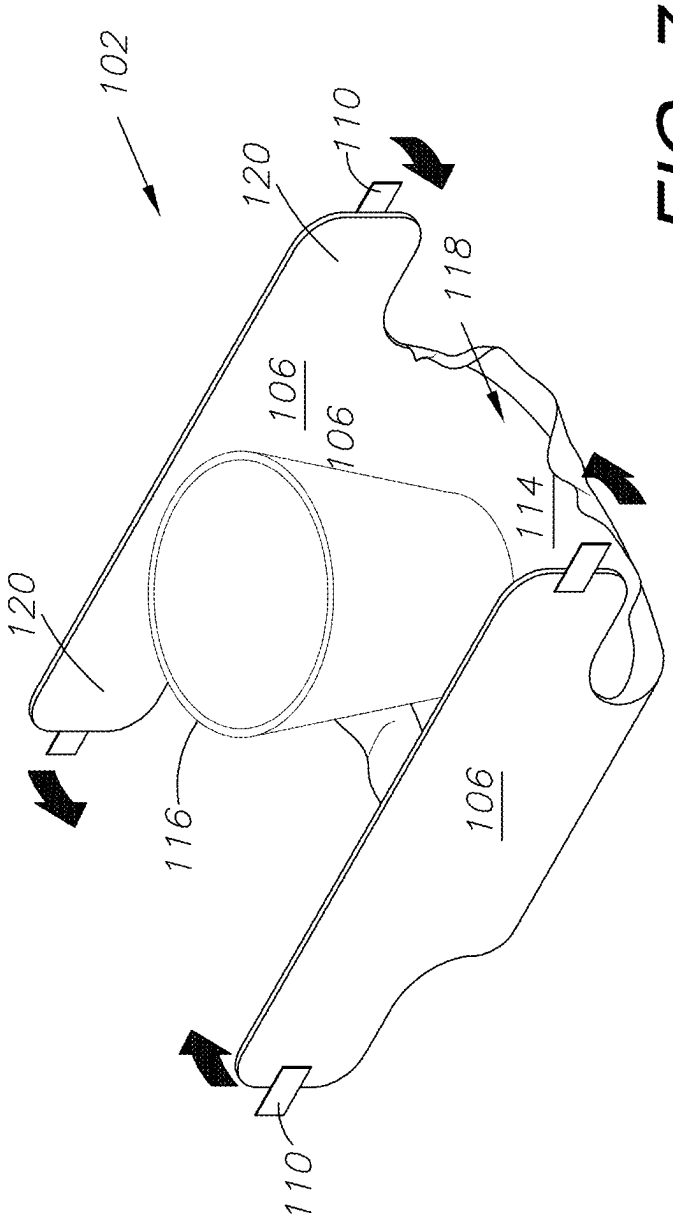


FIG. 7

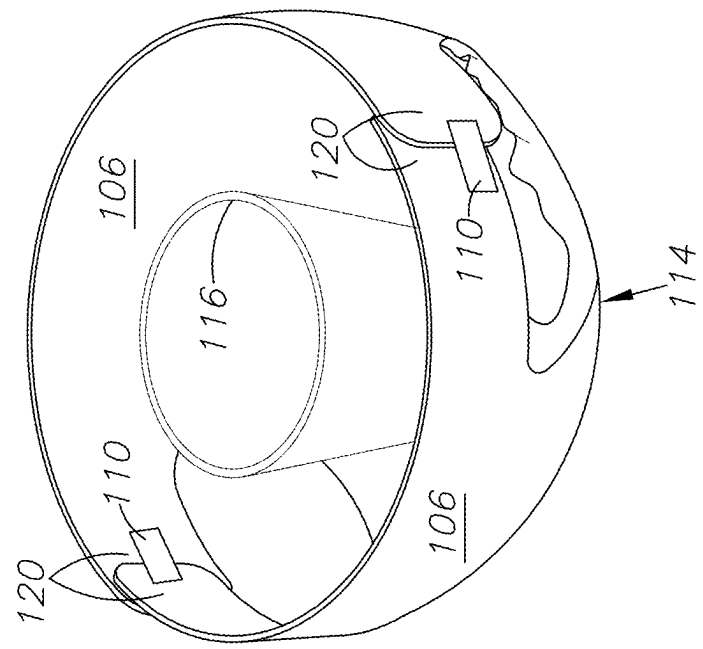


FIG. 8

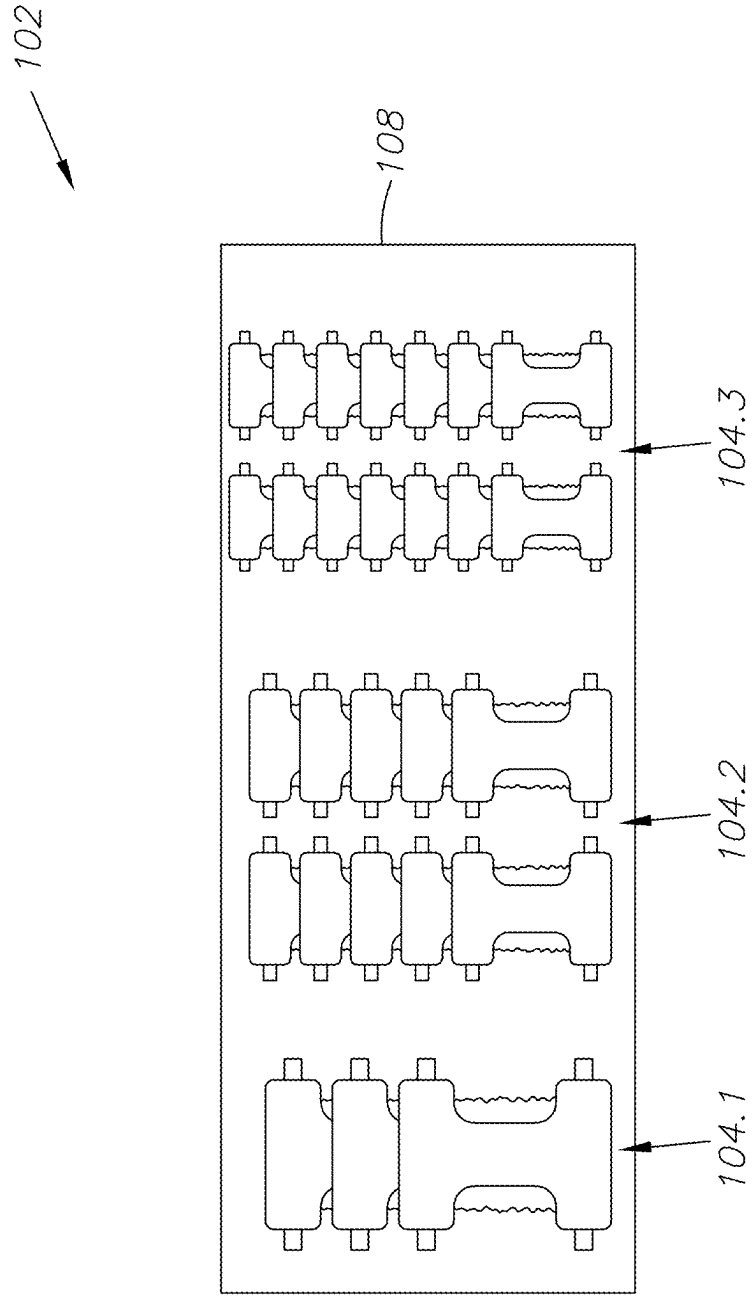


FIG. 9

PACKING SYSTEM, METHOD OF USE, AND METHOD OF MANUFACTURE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application is a divisional of and claims priority in U.S. patent application Ser. No. 18/110,739, filed Feb. 16, 2023, which claims priority in U.S. Provisional Patent Application No. 63/310,885 Filed Feb. 16, 2022, which is incorporated herein by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0002] The present invention relates generally to a packing system and method for use thereof, and more specifically to a packing system employing unused diapers and customized packaging for fragile items.

2. Description of the Related Art

[0003] Packing of fragile items is required when moving to a new location. Generally, this requires packing and wrapping the fragile items with paper, bubble wrap, foam, or other suitable packing materials. This is meticulous and same-sized packing materials may not adequately function for items of varying shapes and sizes. What is needed is a simple packing system with variable packing components.

[0004] Heretofore there has not been available a system or method for a packing system with the advantages and features of the present invention.

BRIEF SUMMARY OF THE INVENTION

[0005] One embodiment of the present invention provides a system of recycling unused diapers and using them for packing smaller, fragile items during a move. Small, fragile items such as kitchen plates and glasses can be difficult to pack up using typical paper, foam, and bubble wraps because of varying shapes and sizes. Unused diapers come in varying sizes and colors. These diapers have a cup-like shape with corners that gather together making them ideal for wrapping small fragile items. The proper sized diaper can be selected to accommodate the varying sizes in the items. If the diapers have colors (e.g. pink and blue), those can be used to identify the item packaged within the diaper. This embodiment provides a way to recycle otherwise unused diapers which may be tossed in the garbage otherwise. The diapers may be modified slightly using color coding or other improvements prior to packing the diapers into a kit which allows the end user to select the varying sizes for packing their items.

[0006] A second embodiment of the present invention provides a packing device which is modeled after the shape and protection of a diaper, but which is formed from cheaper and more common materials. A foam or bubble-wrap body in a generally cup-like shape includes tabs for securing the ends and edges of the device around fragile items. These resemble the tabs on diapers. An elastic material is applied to the base of the cup-like shape which helps to gather up the packing device around the fragile item. Other materials could be used to form the body of the device, including stuffed material within an exterior skin or paper or cardboard.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The drawings constitute a part of this specification and include exemplary embodiments of the present invention illustrating various objects and features thereof.

[0008] FIG. **1** is a diagram demonstrating the practicing of a packing system embodying the present invention by utilizing donated diapers as packing elements.

[0009] FIG. **2** is a diagrammatic representation of the embodiment thereof showing the packing of a variety of donated diaper sizes.

[0010] FIG. **3** is another diagrammatic representation of the embodiment thereof, showing a variety of packed diapers for packing.

[0011] FIG. **4** is a flowchart diagramming the steps taken in practicing an embodiment of the present invention.

[0012] FIG. **5** is a top plan view of an alternative embodiment packing element which may be utilized alone or with the previous embodiment.

[0013] FIG. **6** is a three-dimensional isometric view thereof.

[0014] FIG. **7** is a three-dimensional isometric view thereof shown in a typical environment of packing a fragile item.

[0015] FIG. **8** is a three-dimensional isometric view thereof, showing how the embodiment thereof wraps about the fragile item.

[0016] FIG. **9** is a diagrammatic representation of a packing system utilizing the embodiment thereof.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

I. Introduction and Environment

[0017] As required, detailed aspects of the present invention are disclosed herein, however, it is to be understood that the disclosed aspects are merely exemplary of the invention, which may be embodied in various forms. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art how to variously employ the present invention in virtually any appropriately detailed structure.

[0018] Certain terminology will be used in the following description for convenience in reference only and will not be limiting. For example, up, down, front, back, right and left refer to the invention as orientated in the view being referred to. The words, "inwardly" and "outwardly" refer to directions toward and away from, respectively, the geometric center of the aspect being described and designated parts thereof. Forwardly and rearwardly are generally in reference to the direction of travel, if appropriate. Said terminology will include the words specifically mentioned, derivatives thereof and words of similar meaning.

II. First Embodiment Packing System **2**

[0019] FIGS. **1-3** show a packing system **2**. Unused diapers **4** can be used for packing small, fragile items instead of being tossed out in the garbage. By collecting unused diapers **4** and separating them into kits, this provides a new, customizable packing system for packing up these small, fragile items. FIG. **1** demonstrates how donators **14** can discard their unused diapers of varying sizes **4.1**, **4.2**, **4.3**, thereby becoming donated diapers **4**. A sorting system **6**

sorts the diapers by size, and then a packaging system **8** packages the donated diapers **4** of varying sizes into a final package for use by customers.

[0020] The sorting and packaging systems could be automated using conveyors, arms, sensors, and computers to identify the diapers by size, sort the diapers out into the packages, and physically pack the packages with a variety of diapers sizes.

[0021] Once packaged, the diapers can be delivered **10** to the end users, where they can be used for packing **12** fragile items, such as cups, plates, and glassware. The different sizes of the donated diapers **4** allow for the user to pack a variety of fragile items, selecting a diaper size appropriate for the items. As shown in FIGS. **2-3**, the diapers of varying sizes would likely be provided in different quantities. There may not be a need for as many larger diapers, such as those identified as **4.1**, whereas there would likely be a need for more of the smaller diapers **4.4**. The overall kits can be customized by the end users or could include a standard inventory. A color-coding process could also be employed to help more quickly identify the various diaper sizes.

[0022] FIG. **4** shows the steps taken in practicing this embodiment. The process starts at **52** with the diapers being obtained at **54**. This can be done by requesting donations for unused diapers or purchasing unused diapers.

[0023] The diapers are sorted by size and color at **56** and then are put into kits at **58**. These kits would have varying sizes and may include varying colors. The end user would purchase or otherwise receive the kit for use in packing their items which are acquired at **60**.

[0024] If the user wishes to color code the packing at **62**, then they will select a diaper for a particular item based on color at **64**. Either way, the user must also select the diaper based on size at **66**. The item is packed at **68** by placing it inside of the diaper, gathering the diaper around the item, and then securing the diaper with the tabs. The process ends at **70**.

III. Packing Device and Method of Manufacture **102**

[0025] FIGS. **5-9** show a packing device **102** manufactured for the purposes of wrapping and securing small, fragile items **116**. The shape is designed similar to the shape of a diaper, having a pair of end portions **106** with flaps **120** bridged by a central portion **114** which forms a cup-like space **118** with gathered-up elastic edges **112**. The body **104**, formed of the end portions **106** and central portion **114**, may be made of bubble wrap, foam, or other suitable packing and packaging materials. Adhesive tabs **110** at the edges of flaps **120** are used to secure the body around the packed object as shown in FIGS. **7-8**. As with the previous embodiment, the entire body could also be color coded as well.

[0026] This device **102** could be employed in conjunction with the previous packing system **2** to fill in gaps in diaper supplies, or may form the entirety of a packaging kit **108** as shown in FIG. **9**. As with the previous embodiment, quantities of various sizes of packing devices **104.1**, **104.2**, **104.3** could all be contained in a single packing kit **108**.

[0027] It is to be understood that while certain embodiments and/or aspects of the invention have been shown and described, the invention is not limited thereto and encompasses various other embodiments and aspects.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A packing system comprising:
- a plurality of packing devices, each of said packing devices comprising a body formed from pair of end portions bridged by a central portion;
- each of said pair of end portions comprising a pair of flaps extending out away from said end portions;
- each of said flaps comprising an adhesive tab;
- said central portion having a left side and a right side each comprising an elastic skirt, whereby said pair of end portions, said central portion, and said elastic skirts configured to form a cup-like interior space configured to receive a fragile object;
- wherein said flaps are configured to be wrapped about said fragile object; and
- wherein said adhesive tabs are configured to secure said flaps around said fragile object.

2. The packing system of claim **1**, further comprising:
- said plurality of packing devices comprising at least a first quantity of said packing devices and a second quantity of said packing devices; and
- wherein the packing devices contained within said first quantity of packing devices are of a larger size than the packing devices contained within said second quantity of packing devices.

3. The packing system of claim **2**, wherein said first quantify of packing devices are identified with a first color code and said second quantity of packing devices are identified with a second color code.

4. The packing system of claim **1**, wherein said pair of end portions and said central portion are made of a material selected from a list comprising: foam; bubble wrap;
paper; cardboard; and stuffing.

5. The packing system of claim **1**, wherein said plurality of packing devices comprise unused diapers.

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