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(54) **DISPOSABLE GLOVES**

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(57) **ABSTRACT**

Right and left hand gloves forming pairs of disposable gloves are adapted to be dispensed from a single dispenser and are further configured to facilitate donning of each of the gloves with one hand so that a pair of gloves can be conveniently donned at one time. With such a configuration, refilling the glove dispensers and donning of a pair of gloves is less cumbersome than known disposable gloves. The right and left hand gloves may be coupled together by various conventional methods to form a glove pair that can be dispensed from a single dispenser. Each glove is formed from two sheets of plastic configured with a thumb portion and at least one finger portion. The bottom sheet includes a residual portion which remains on the dispenser after the glove is removed. The residual portion and the bottom sheet of the glove are separated by a line of weakness, such as a perforation. The residual portions of both the right and left hand gloves may be bound together with a binder, which may include a pair of holes for use with a dispenser. Alternatively, the bottom sheets of the right and left hand gloves may be formed from a continuous sheet of plastic with the mounting holes and lines of weakness disposed therebetween. In order to facilitate donning of each of the gloves with one hand, the glove opening of each glove is spaced away from the line of weakness. By configuring the right and left hand gloves to be dispensed by a single dispenser, both gloves can be essentially refilled at the same time and donned at the same time. In addition, the gloves in accordance with the present invention reduced the cost since only a single dispenser is required.

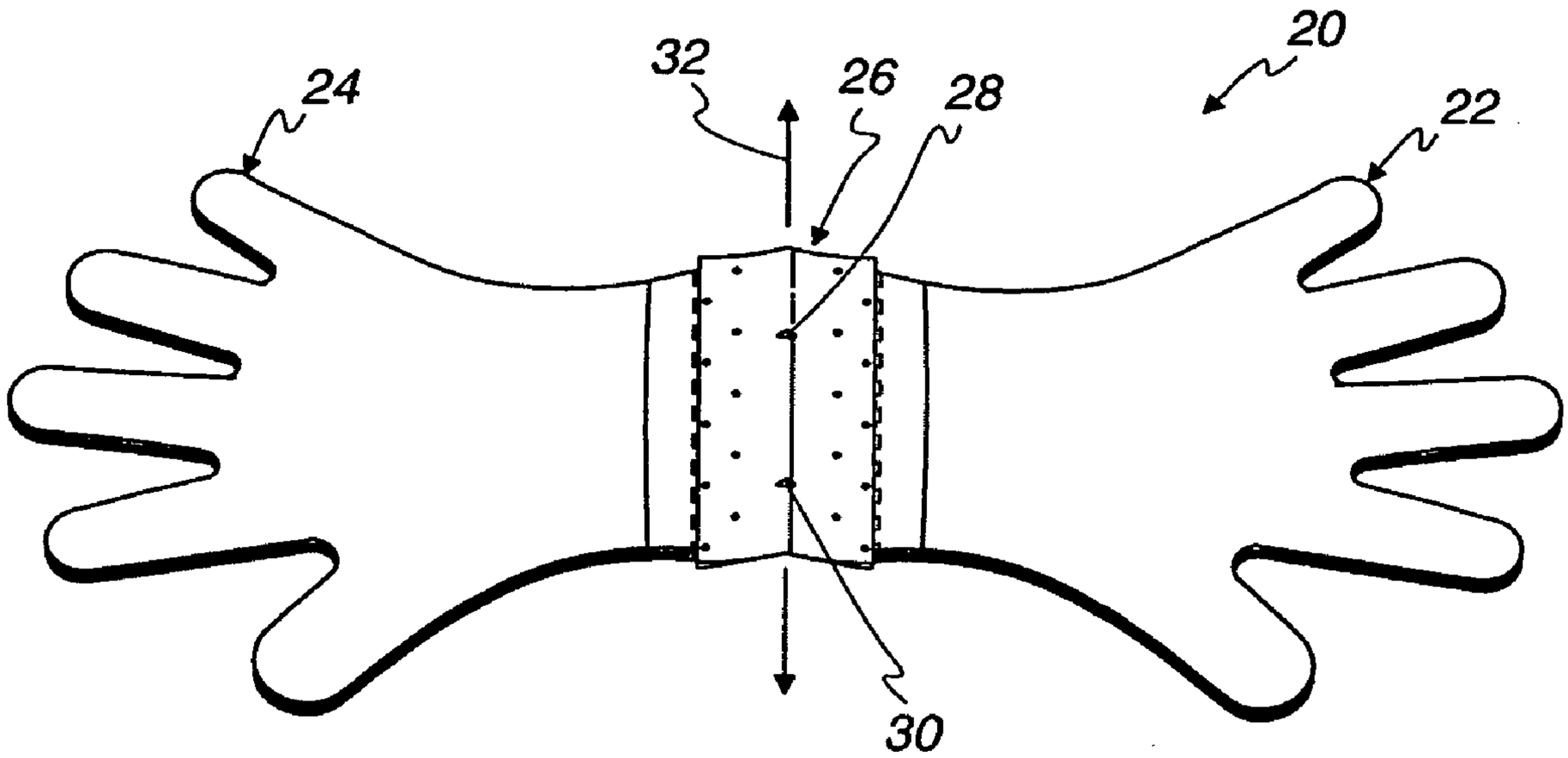


Fig. 1

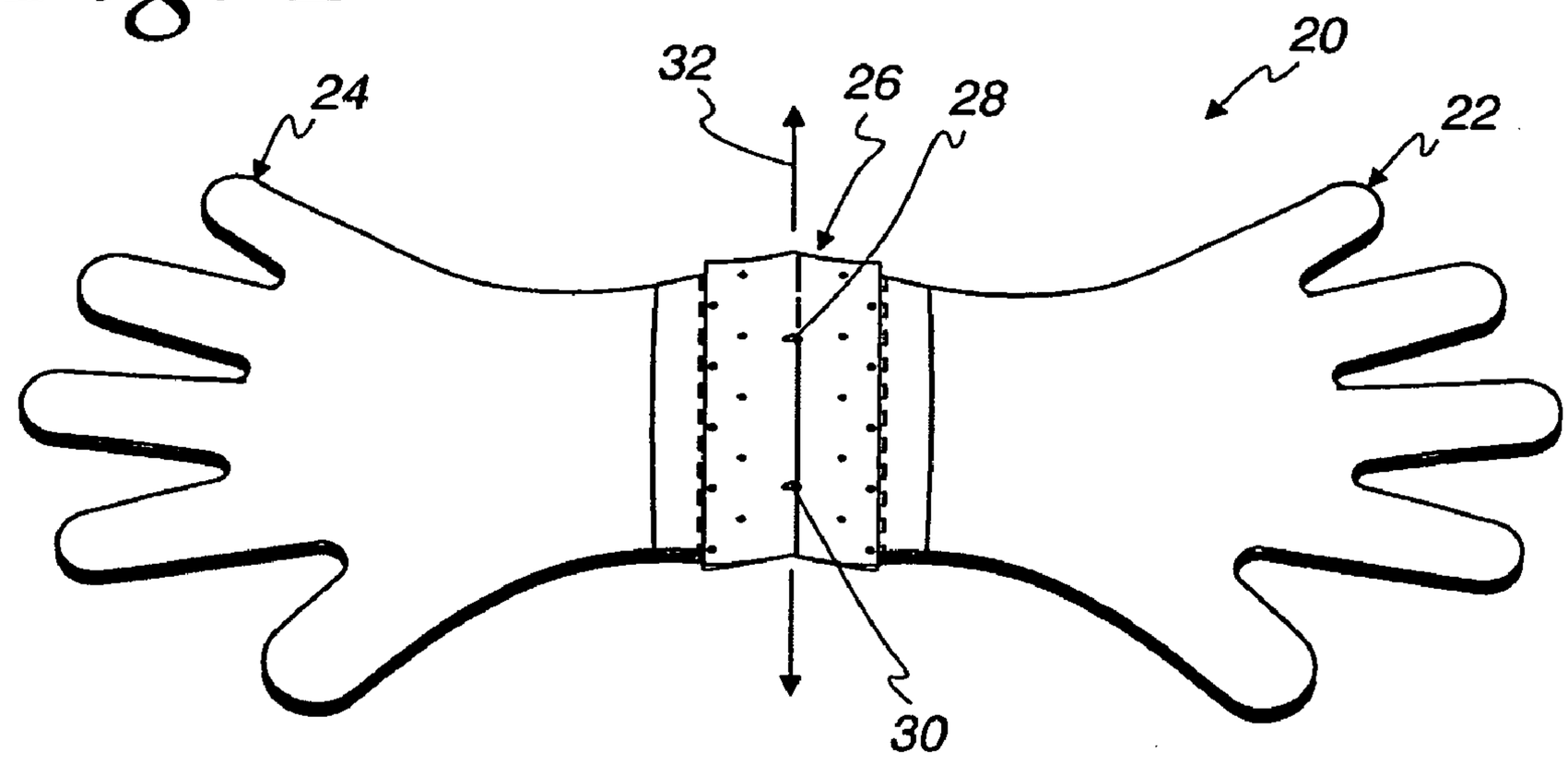


Fig. 2

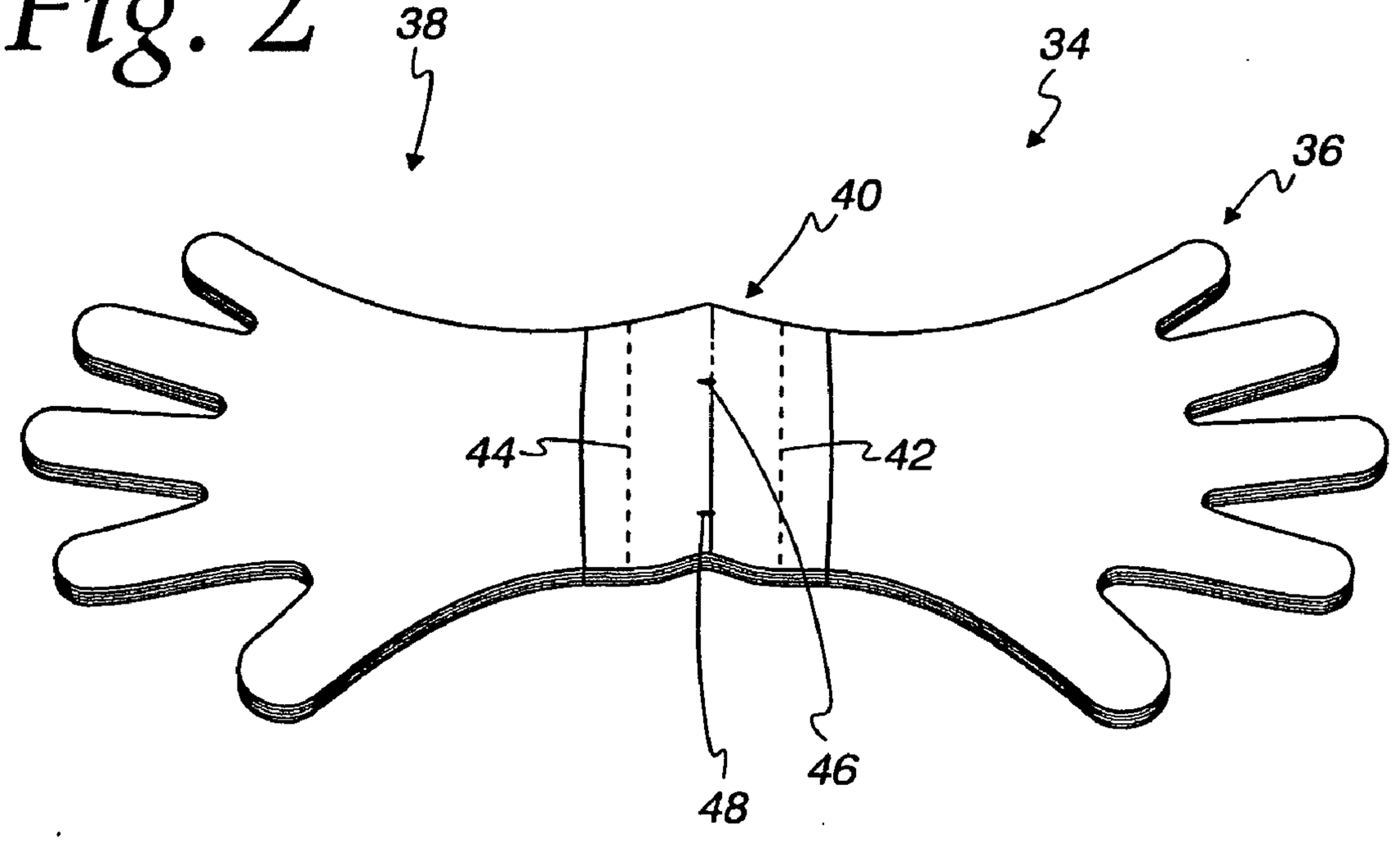


Fig. 3

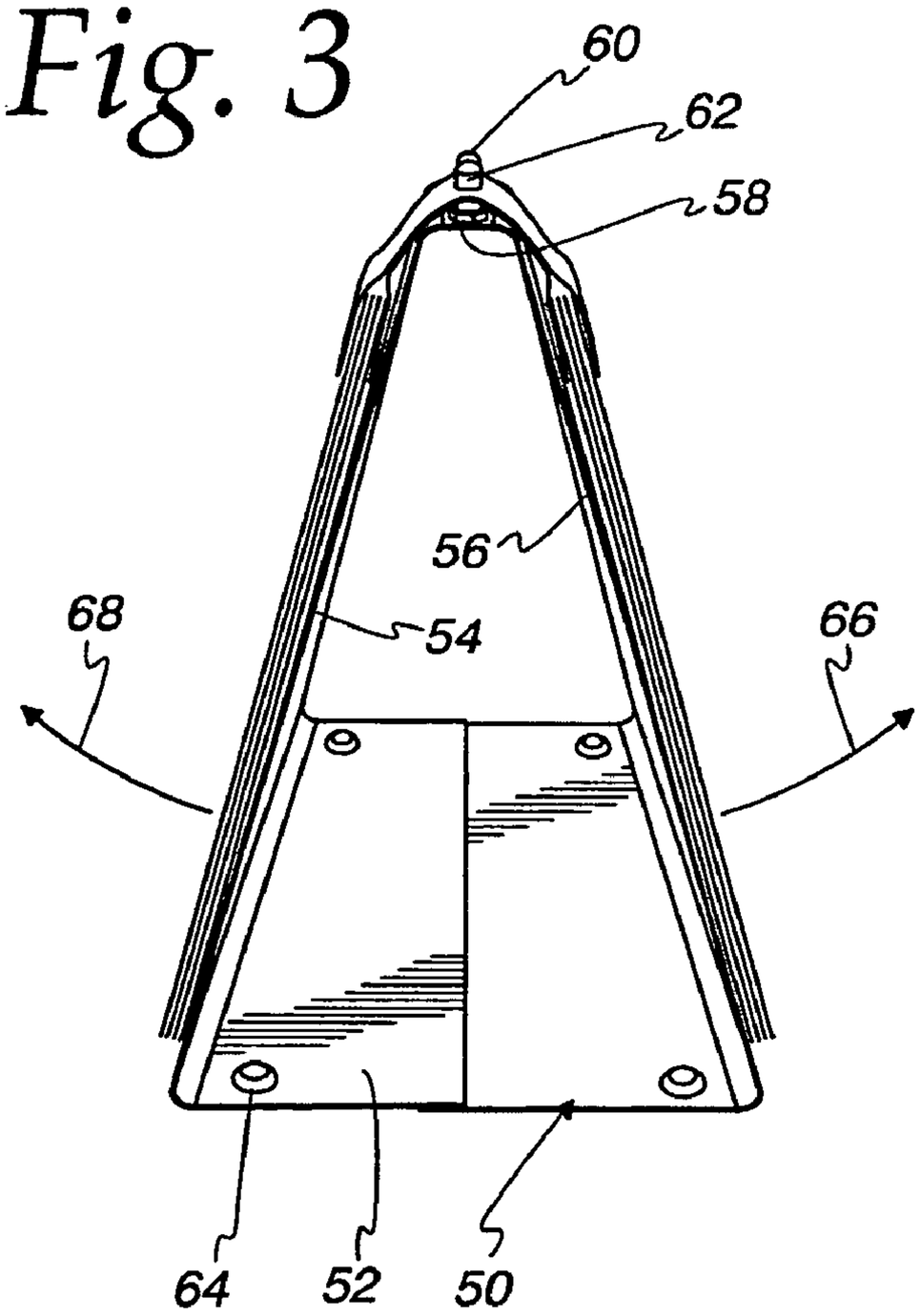


Fig. 4

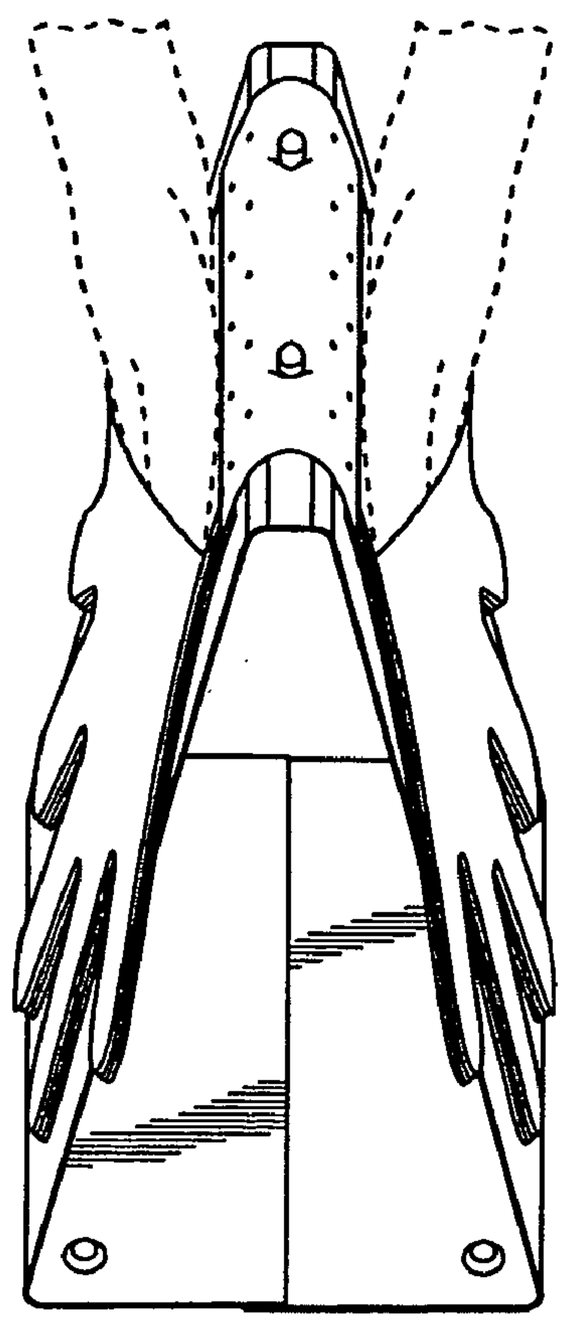


Fig. 5

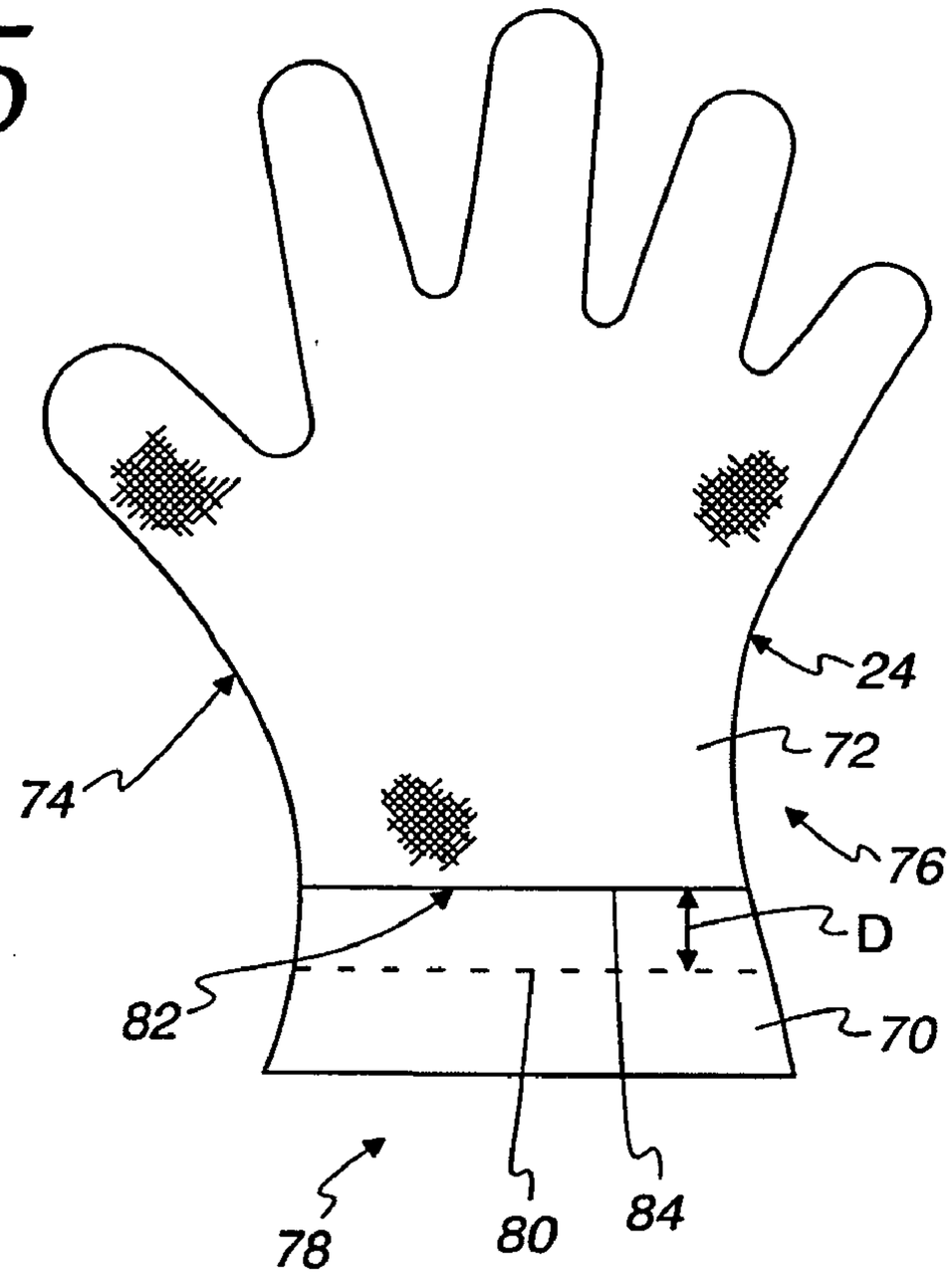
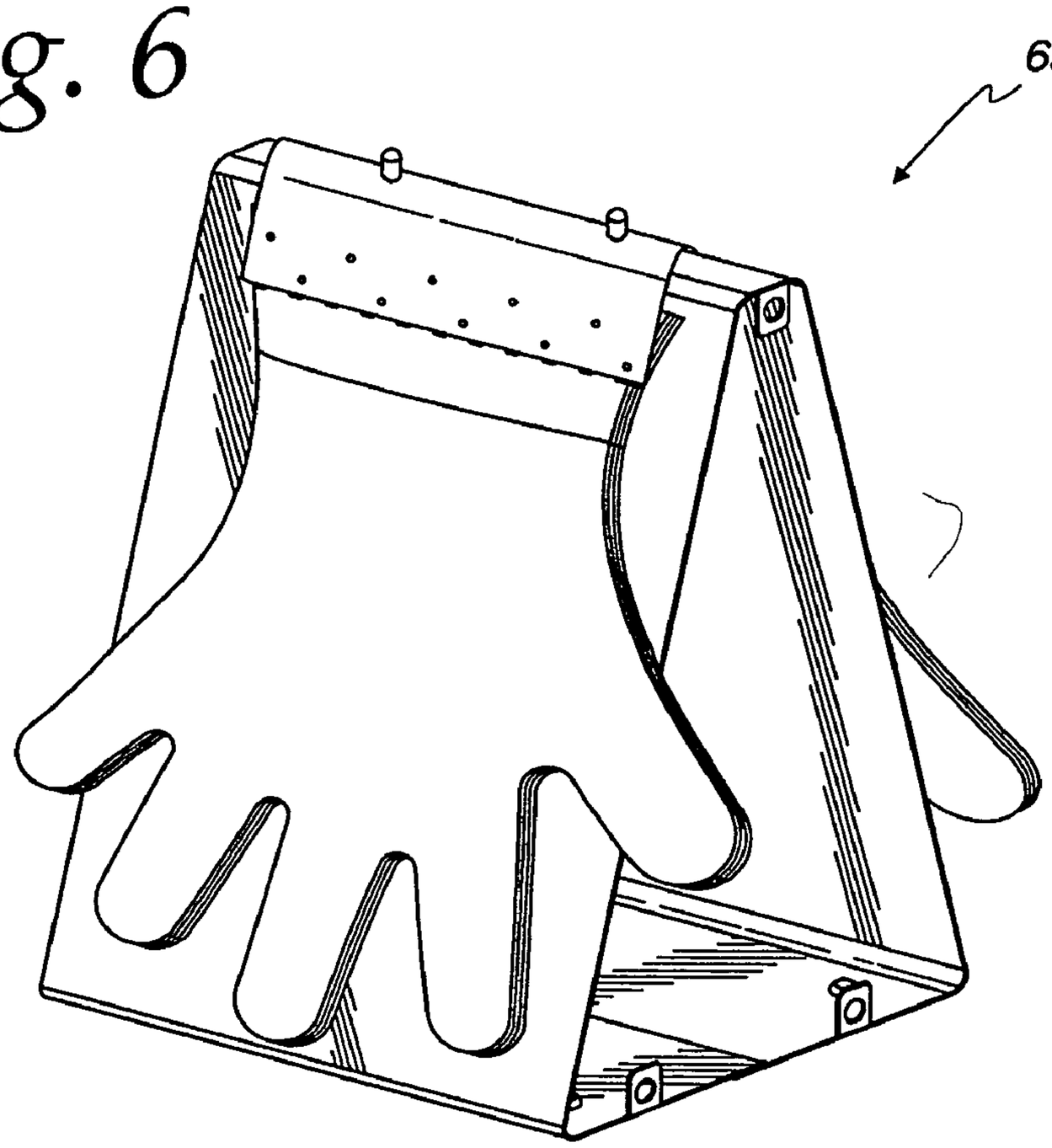


Fig. 6



DISPOSABLE GLOVES

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to disposable gloves and more particularly to disposable gloves that are configured to be dispensed in pairs to facilitate donning of both right and left hand gloves at the same time.

[0003] 2. Description of the Prior Art

[0004] Disposable gloves are known in the art. Examples of disposable gloves are disclosed in U.S. Pat. Nos. 6,497,340; 6,708,840; 6,578,729; 6,497,340, as well as US Published Patent Application, US 2004-0245268 A1, published on Dec. 9, 2004. In some industries, for example, the food industry, in order to prevent contamination and the spreading of germs, employees are requires to wear disposable gloves and are also required to frequently change. In order to facilitate employees donning such disposable gloves, various disposable glove dispensers are known. Also, such gloves are made to allow donning with one hand.

[0005] U.S. Pat. No. 5,806,099 discloses a disposable mitt. The disposable mitt is formed from two sheets of plastic sealed around the periphery. Each sheet is formed in the shape of a mitt having a thumb portion and at least one figure portion. A perforation is provided defining a residual portion as well as a mitt portion. A pair of holes is provided in the residual portion adjacent an edge of the mitt. The holes are configured to enable the disposable mitts to be mounted on vertical rods which form a wicket for dispensing the disposable mitts. In order to facilitate one hand donning of the glove, the mitt opening is spaced away from the edge of the mitt. In addition, the top sheet of the mitt is formed with a cuff. The cuff enables a user to easily slip their fingers under the cuff and slip a hand into the mitt. Once the mitt is on, a user simply moves their hand away from the dispenser which causes the mitt to tear off at the perforation line.

[0006] Although the configuration of the disposable mitt and dispenser disclosed in the '099 patent facilitates one hand donning of the disposable mitts, such a configuration only allows one mitt to be donned at a time. In applications where employees must don mitts or gloves on both the right hand and the left hand, two separate dispensers are required. Although the dispensers for both right and left hand gloves would be identical, the mitts are not. For example, as viewed from the top, a left hand mitt is formed with a thumb on the right and the cuff on top. The right-hand mitt, also viewed from the top, is formed with a thumb on the left and the cuff on top. Since, the right hand and left hand mitts must be dispensed from separate dispensers, there is risk of errors in refilling the dispensers. Also, two dispensers take more time to refill and are thus more cumbersome to use.

[0007] U.S. Pat. Nos. 6,497,340; 6,578,729 and 6,708,840 as well as US Published Patent Application No. US 2004/0245268 A1 also disclose disposable gloves and glove dispenser units. The disposable gloves disclosed in these references are formed from a top sheet and a bottom sheet and sealed together around the periphery. Both the top sheet and bottom sheet are formed as a gloves with thumb portions and four finger portions. The bottom sheet of the glove includes a pair of holes configured to be received in a glove dispenser. A line of weakness or perforation originates from each holes and extends to the edge of the glove. With such a configuration, no residual portion of the glove is left on the dispenser after the glove is removed. In order to facilitate donning of the glove with one hand, the top sheet is configured so that the glove opening is spaced away from an end of the glove.

[0008] Although the gloves and dispensers disclosed in the above identified references facilitate donning of disposable glove with one hand, such a configuration requires two separate glove dispensers are required. As such, only one glove can de donned at a time. Also, two dispensers also need to be refilled separately. Accordingly, there is a need for a glove configuration which utilizes a single dispenser for both right and left hand gloves that also allows the right and left hand gloves to be refilled at the same time and also allows the right and left hand gloves to be donned at the same time.

SUMMARY OF THE INVENTION

[0009] Briefly, the present invention relates to disposable gloves and more particularly, right and left hand gloves forming pairs of disposable gloves that are adapted to be dispensed from a single dispenser and are further configured to facilitate donning of each of the gloves with one hand so that a pair of gloves can be conveniently donned at one time. With such configuration, refilling the glove dispensers and donning of a pair of gloves is less cumbersome than known disposable gloves. The right and left hand gloves are coupled together to form by various conventional methods to form a glove pair that can be dispensed from a single dispenser. Each glove is formed from two sheets of plastic configured with a thumb portion and at least one finger portion. The bottom sheet includes a residual portion which remains on the dispenser after the glove is removed. In one embodiment of the invention, the residual portion and the bottom sheet of the glove are separated by a line of weakness, such as a perforation. The residual portions of both the right and left hand gloves may be bound together with a binder, which may include a pair of holes for use with a dispenser. Alternatively, the bottom sheets of the right and left hand gloves may be formed from a continuous sheet of plastic with mounting holes and lines of weakness disposed there between. In order to facilitate donning of each of the gloves with one hand, the glove opening of each glove is spaced away from the line of weakness. By configuring the right and left hand gloves to be dispensed by a single dispenser, both gloves can be essentially refilled at the same time and donned at the same time. In addition, the gloves in accordance with the present invention reduced the cost since only a single dispenser is required.

DESCRIPTION OF THE DRAWINGS

[0010] These and other advantages of the present invention will be readily understood with reference to the following specification and attached drawing, wherein:

[0011] FIG. **1** is a plan view of one embodiment of a pair of disposable gloves in accordance with one embodiment of the present invention.

[0012] FIG. **2** is an alternate embodiment of the glove pair illustrated in FIG. **1**.

[0013] FIG. **3** is an elevational view illustrating an exemplary table top dispenser for dispensing both the right and left hand gloves at the same time.

[0014] FIG. **4** is an isometric view which illustrates a user donning a pair of gloves at the same time.

[0015] FIG. **5** is a plan view of an exemplary right hand glove in accordance with the present invention.

[0016] FIG. **6** is an isometric view of an exemplary alternative wall mounted dispenser

DETAILED DESCRIPTION

[0017] The present invention relates to disposable gloves, and more particularly, to disposable gloves configured so that the right and left hand gloves can be dispensed from a single dispenser and at the same time. By configuring the right and left hand gloves to be dispensed from a single dispenser, the system is less expensive and also less cumbersome than known systems. For example, only a single dispenser is required for dispensing both right and left hand gloves. Thus, the cost of dispensers is reduced in half. In accordance with an important aspect of the invention, right and left hand gloves are coupled together by various attachment methods forming a glove pair for dispensing from a single dispenser. In addition, the configuration of each glove allows each glove to be donned with one hand. As such, the gloves in accordance with the present invention facilitate donning of both the right and left hand gloves at the same time.

[0018] Turning to FIG. **1**, one embodiment of the disposable gloves in accordance with the present invention, generally identified with the reference numeral **20**, includes a left hand glove **22** and a right hand glove **24** coupled together in a spaced apart relationship by various conventional methods forming a pair. In an exemplary embodiment, a binding element **26** may be used to bind stacks of glove pairs **20** together. The binding element **26** may be formed from two sheets of plastic, for example, LDPE, 0.2 mm-0.3 mm, to enable the glove pairs **20** to be sandwiched there between. The stacks of glove pairs may be secured between the layers of the binding **26** by various conventional methods including stapling and heat-punch. Other conventional methods are also considered to be within the broad scope of the present invention.

[0019] As shown, the binding element **26** may be provided with a pair of spaced apart punched holes **28** and **30** aligned along a longitudinal axis **32**. The punched holes **28** are configured to be received by a dispenser, as will be discussed in more detail below.

[0020] In the embodiment illustrated in FIG. **1**, stacks of right hand gloves **22** may be manufactured separately and secured between the layers of the binding material **26**. Similarly, stacks of left hand gloves **24** may be manufactured separately and secured between the layers of the binding materials **26**.

[0021] Alternatively, as shown in FIG. **2**, each glove pair, generally identified with the reference numeral **34**, is manufactured as a unit. In this embodiment, each pair is formed from a continuous sheet of with a right hand portion **38**, a left hand portion **36**. In this embodiment of the invention, the right hand glove **38** and the left hand glove **36** are coupled to a residual portion **40** by way of lines of weakness, such as the perforations **42** and **44**. The residual portion **40** is formed with a pair of punched holes **46** and **48** that are configured to be dispensed from a dispenser as discussed below. In order to facilitate replacement of the glove pairs in a dispenser, stacks of the glove pairs **34** may be secured together at the residual portion **40** by way of a staple or other conventional attachment methods.

[0022] An exemplary table top dispenser for dispensing the glove pairs is illustrated FIG. **3** and generally identified with the referenced numeral **50**. As shown, the dispenser **50** is formed with a generally triangular configuration which includes a base **52** and two sidewalls **54** and **56**. An apex **58** of the dispenser is provided with a pair of spaced apart pins **60**, **62**. These pins **60**, **62** are configured to receive the punched holes **28**, **30** and **46**, **48** of the glove pairs **20**, **34**. The binding element **26** (FIG. **1**) or residual portion **40** (FIG. **2**) forms a saddle which rests on the apex **58** of the dispenser **50**. In the dispenser illustrated in FIG. **3**, the right hand **22** and left hand **24** glove portions are supported by the sidewalls **56** and **54**, respectively. The dispenser **50** may be formed from stainless steel or plastic or virtually any material. The base **52** of the dispenser **50** may be configured to be secured to a horizontal surface, for example by way of suction cups **64** or even conventional fasteners. The exemplary dispenser **50**, illustrated in FIG. **3**, is available from Pak-Sher, Kilgore, Tex., as item nos. 1763 and 1752 A-frame type dispensers.

[0023] As shown in FIG. **3**, stacks of glove pairs **20**,**34** are installed on the dispenser **50** so that the glove openings, as discussed below, face outwardly as indicated by the direction of the arrows **66** and **68**. As such, the dispenser **50** is preferably mounted at a convenient height, for example, standard table height, to enable an employee to stand over the dispenser **50**, place both hands into the gloves at the same time and quickly and easily tear away the gloves from the dispenser **50** by simply moving their right and left hands away from the dispenser, as generally show in FIG. **4**.

[0024] The glove pairs, **20**,**34** are also suitable for other types of dispensers. For example, glove pairs may be dispensed from table type dispensers having other than a triangular configuration, such as generally square or rectangular and even arcuate configurations (not shown). In addition, the dispenser need not be table mounted. The glove pairs **20**, **34** in accordance with the present invention can also be dispensed from wall-mounted dispensers **69**, as illustrated in FIG. **6** as well as wall mounted dispensers with shorter sidewalls, which may only extend a portion of the distance to the finger tips of the gloves. All such configurations are considered to be within the broad scope of the present invention.

[0025] Referring to FIG. **5**, for brevity, only an exemplary right hand glove **24** is illustrated. The left hand glove **22** is similar. Moreover, although the invention is described and illustrated as a gloves with a thumb portion and four finger portions, the principles of the present invention are also applicable to other configurations, such as a mitt configuration formed with one thumb portion and one finger portion

[0026] The right hand glove **22** may be formed from two sheets of plastic; a lower sheet **70** and an upper sheet **72**. The lower and upper sheets of plastic **70** and **72** may be cut into the shape of a glove as shown and sealed together around the periphery **74** by conventional methods, such as heat-seal. Each sheet of plastic may be, for example, 100 mil HDPE Each glove **22** is formed with a glove portion **76** and a residual portion **78**. The glove portion **76** is coupled to the

residual portion **78** by way of a line of weakness **80**, which may be a perforation. Thus, once the glove **22** is removed from the dispenser **50**, the residual portion **78** remains at the dispenser **50**.

[**0027**] As shown, the opening **82** of the glove **22** is spaced away from the line of weakness **80**. By spacing the glove opening **82** away from the line of weakness **80**, the fingers of a user can easily be slipped between the top sheet **72** and the bottom sheet **70** to facilitate one hand donning of the glove **22**. The opening **82** may be spaced away from the line of weakness **80** by forming the top sheet **72** such that it is not a mere image of the bottom sheet **70** and instead is cut short such that a free edge **84** of the top sheet **72** is spaced away from the line of weakness **80** by a distance D which may be virtually any distance which enables the fingers of a user to easily be slipped between the top sheet **72** and bottom sheet **70**.

[**0028**] Obviously, many modifications and variations of the present invention are possible in light of the above teachings. Thus, it is to be understood that, within the scope of the appended claims, the invention may be practiced otherwise than is specifically described above.

What is claimed and desired to be secured by a Letters Patent of the United States is:

1. At least one pair of disposable gloves configured to be dispensed by a single dispenser, said at least one pair comprising:

a left hand glove;

a right hand glove; and

a binding element for binding said right hand glove and said left hand glove forming a glove pair.

2. The at least one pair of disposable gloves as recited in claim 1, wherein each of said left hand glove and said right hand glove includes a glove portion and a residual portion, said residual portion being coupled to said glove portion by a line of weakness so that said glove portion can be separated from said residual portion which remains at the dispenser after separation.

3. The at least one pair of disposable gloves as recited in claim 1, wherein said binding element includes a pair of punched holes that are configured to be received by a dispenser.

4. The at least one pair of disposable gloves as recited in claim 1, wherein said glove portion includes a thumb portion and four finger portions.

5. The at least one pair of disposable gloves as recited in claim 1, wherein said glove portion includes a thumb portion and one finger portion forming a mitt.

6. The at least one pair of disposable gloves as recited in claim 1, wherein said right hand glove and said left hand glove are formed from plastic.

7. The at least one pair of disposable gloves as recited in claim 2, wherein said right hand glove and said left hand glove are formed such that an opening for receiving a user's hand is spaced away from the line of weakness.

8. A stack of disposable gloves comprising:

a plurality of gloves consisting of a right hand gloves and a left hand gloves; and

a binder element for binding said right hand gloves to said left hand gloves in a spaced apart relationship.

9. The stack of disposable gloves as recited in claim 8, wherein each of said left hand gloves and said right hand gloves includes a glove portion and a residual portion separated by a line of weakness.

10. The stack of disposable gloves as recited in claim 9, wherein said right hand gloves and said left hand gloves are formed with an opening for receiving a user's hand, spaced away from said line of weakness.

11. A method for forming pairs of disposable gloves comprising the steps of:

(a) forming right hand gloves;

(b) forming left hand gloves; and

(c) binding said right hand gloves to said left hand gloves in a spaced relationship.

12. The method as recited in claim 11 wherein step (c) comprises:

sandwiching said right hand gloves and said left hand gloves between a pair of plastic strips forming a binding element; and

securing said plastic strips together.

13. At least one pair of disposable gloves configured to be dispensed by a single dispenser, said at least one pair comprising:

a left hand glove; and

a right hand glove; wherein said right hand glove and said left hand glove are formed as a unit defining a right hand portion and a left hand portion coupled to a residual portion by way of lines of weakness, each of said right hand glove and said left hand glove formed with an opening for receiving a user's hand.

14. The at least one pair of disposable gloves as recited in claim 13, wherein said right hand glove and said left hand glove are configured with openings spaced away from said lines of weakness.

15. A method for facilitating dispensing of disposable gloves comprising the steps of:

(a) providing at least one pair of gloves consisting of a right hand glove and a left hand glove, coupled together in a spaced apart relationship; and

(b) configuring said at with one or more punched holes to enable said at least one pair to be dispensed from a single dispenser.

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