

US 20130269077A1

# (19) United States

# (12) Patent Application Publication Anderson

(10) **Pub. No.: US 2013/0269077 A1**(43) **Pub. Date: Oct. 17, 2013** 

# (54) **PROTECTIVE BIB**

(76) Inventor: **Lauren Anne Anderson**, Burbank, CA

(21) Appl. No.: 13/445,944

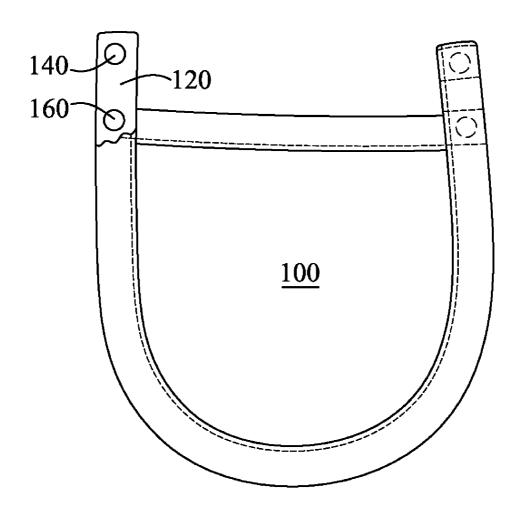
(22) Filed: Apr. 13, 2012

# **Publication Classification**

(51) **Int. Cl.** *A41B 13/10* (2006.01)

(57) ABSTRACT

A protective bib comprises a first strap and a second strap. A first magnet is associated with the first strap and a second magnet associated with the first strap or the main portion of the bib. The second magnet has a polarity opposite to the first magnet, wherein the first and second magnets are capable of being matched to secure the bib to a shirt. A third magnet is associated with the second, and a fourth magnet is associated with the second strap. The fourth magnet has a polarity opposite to the third magnet, wherein the third and fourth magnets are capable of being matched to secure the bib to a shirt.



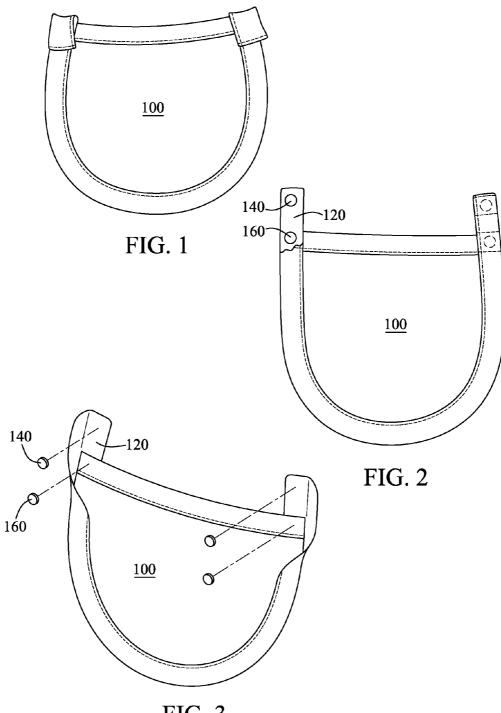


FIG. 3



FIG. 4

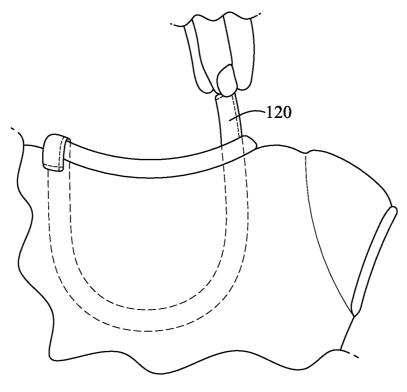


FIG. 5

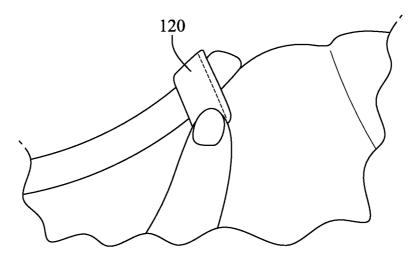


FIG. 6

# PROTECTIVE BIB

# FIELD OF THE INVENTION

[0001] The present invention relates to a protective bib, generally used for infants and/or children.

# BACKGROUND OF THE INVENTION

[0002] Numerous approaches have been taken to provide a protective bib, particularly for infants and/or children, to be worn over clothing to protect the clothing from food spills, dribbles and the like. Such bibs are formed of an absorbent material, typically terrycloth (a fabric that can absorb large amounts of water) or the like and are made in various shapes and sizes with means for attaching the bib around the neck of the infant and/or child, usually with a pair of cords or chains.

[0003] A number of U.S. patents (e.g., 7,269,856) illustrating improved fit between a protective bib and a wearer's neck and improved absorbent material (e.g., 5,661,851) for a protective bib have been described before.

[0004] However, most prior art bibs use strings, buttons, Velcro, or other methods having choking hazards, have been used to secure the bibs around the neck during use. Thus, there is a need for a safer alternative that provides for removable use of a bib.

# SUMMARY OF THE INVENTION

[0005] According to one preferred embodiment, a protective bib comprises a main bib portion; a strap; a first magnet associated with the strap; and a second magnet associated with the bib, the second magnet having a polarity opposite to the first magnet, wherein the first and second magnets are capable of being matched to secure the bib to a shirt.

[0006] According to another preferred embodiment, protective bib comprises a first strap; a second strap; a first magnet associated with the first strap; a second magnet associated with the first strap, the second magnet having a polarity opposite to the first magnet, wherein the first and second magnets are capable of being matched to secure the bib to a shirt; a third magnet associated with the second strap; and a fourth magnet associated with the second strap, the fourth magnet having a polarity opposite to the third magnet, wherein the third and fourth magnets are capable of being matched to secure the bib to a shirt.

# BRIEF DESCRIPTION OF THE FIGURES

[0007] FIG. 1 illustrates a elevational view of the protective bib, according to one embodiment of the present invention;

[0008] FIG. 2 illustrates an expanded elevational view of the protective bib, according to the embodiment of FIG. 1;

[0009] FIG. 3 illustrates an expanded perspective view of the protective bib, according to the embodiment of FIG. 1;

[0010] FIG. 4 illustrates a first step for installing the bib of the embodiment of FIG. 1 on the inside front of a baby's shirt;

[0011] FIG. 5 illustrates a further step for installing the bib of the embodiment of FIG. 1 on the inside front of a baby's shirt; and

[0012] FIG. 6 illustrates a close-up view of a final step for installing the bib of the embodiment of FIG. 1 on the inside front of a baby's shirt.

#### DETAILED DESCRIPTION OF THE INVENTION

[0013] The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims. [0014] Various inventive features are described below that can each be used independently of one another or in combination with other features.

[0015] With reference to FIG. 1, an elevational view of the protective bib 100, is shown according to one embodiment. The protective bib 100 may use superior absorbent material for ease of wiping and/or cleaning, without compromising any comfort.

[0016] With reference to FIG. 2, an expanded elevational view of the protective bib 100 is shown according to the embodiment of FIG. 1. The protective bib 100 may comprise a main bib portion (generally marked as 100) having at least one strap 120. Furthermore, the strap 120 can be bonded or attached or stitched onto the protective bib 100. Furthermore, the strap 120 could be made of same or substantially similar material as the protective bib 100.

[0017] A miniature magnet 140, for example, of north polarity, can be sewn onto the strap 120, such that it does not move to any substantial degree and substantially stays in place by means of being sewn around, forming a pocket wherein the miniature magnet 140 of north polarity is placed during assembly and sewing of the protective bib 100.

[0018] Similarly, a miniature magnet 160 of south polarity can be can be sewn onto the strap 120, such that it does not move to any substantial degree and substantially stays in place by means of being sewn around, forming a pocket wherein the miniature magnet 160 of south polarity is placed during assembly and sewing of the protective bib 100.

[0019] The strap 120 with a pair of miniature magnets 140 and 160 can have a cover 180, so that the miniature magnets 140 and 160 are not exposed to air.

[0020] The strap 120 with a miniature magnet 140 and a miniature magnet 160 can be placed symmetrically on the left end side and right end side of the protective bib 100 for mechanical stability.

[0021] With reference to FIG. 3, an expanded perspective view of the protective bib 100 is shown according to the embodiment of FIG. 1. The assembly of the strap 120 illustrates the insertion of the pair of miniature magnets 140 and 160 and their placement within the strap 120.

[0022] With reference to FIG. 4, a first step for installing the bib 100 of the embodiment of FIG. 1 on the inside front of a baby's shirt is shown. The bib 100 can be first inserted into the inside portion of the shirt, preferably while the baby is wearing the shirt.

[0023] With reference to FIG. 5 a further step for installing the bib 100 of the embodiment of FIG. 1 on the inside front of a baby's shirt is shown. As shown, the straps may be unfolded from the bib 100, and re-folded over the front of the shirt, thereby securing the bib 100 to the inside of the shirt using magnets 140 and 160.

[0024] With reference to FIG. 6, a close-up view of a final step for installing the bib 100 of the embodiment of FIG. 1 on the inside front of a baby's shirt is shown. As illustrated, each strap 120 is pressed against the shirt so that the magnets 140 and 160 on each strap are in close proximity, but through the shirt to secure the bib 100 onto the inside of the shirt. In this

way, the bib 100 is removably attached to the shirt without the need of a pair of cords or chains, or the need for any attachment means on the shirt itself.

[0025] The material used to make the protective bib 100 can be a traditional absorbent material (e.g., cloth, cotton and cellulose fiber) or a super absorbent polymer.

[0026] A superabsorbent polymer, for example, may comprise cross-linked networks of flexible polymer chains. Except for the molecular-sized chains that make up the network, this picture of a network is remarkably similar looking to the mass of cotton fibers. The difference is that cotton takes up water by convection—water is sucked up, wetting the dry fibers. Superabsorbent polymers work by diffusion mechanism at the molecular level, since the fibers are actually long chained molecules.

[0027] The dimensions of the protective bib 100 can be such that they are suitable for infants and/or children as well as adults with special needs.

[0028] The protective bib 100 is illustrated herein without a pocket. A pocket can be formed into the bottom edge of protective bib 100 to catch any spillage.

[0029] The protective bib 100 can also be fabricated with a decorative button or other embellishment on the strap 120 for display after installation on the shirt.

[0030] The protective bib 100 can be personalized by fabricating a child and/or infants name or any other embellishment or decorative fabric.

[0031] The protective bib  $100\,\mathrm{can}$  be personalized by affixing or directly fabricating a child and/or infants photo thereon.

[0032] It should be understood, of course, that the foregoing relates to exemplary embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims

- I claim:
- 1. A protective bib, comprising:
- a main bib portion;
- a strap;
- a first magnet associated with the strap; and
- a second magnet associated with the bib, the second magnet having a polarity opposite to the first magnet, wherein the first and second magnets are capable of being matched to secure the bib to a shirt.
- 2. The protective bib of claim 1, wherein the first magnet is sewn into the strap.
- 3. The protective bib of claim 2, wherein the second magnet is sewn into the bib such that strap is capable of a folded configuration such that the first magnet and the second magnet are in close proximity through the shirt when secured to a shirt.
  - 4. A protective bib, comprising:
  - a first strap;
  - a second strap;
  - a first magnet associated with the first strap;
  - a second magnet associated with the first strap, the second magnet having a polarity opposite to the first magnet, wherein the first and second magnets are capable of being matched to secure the bib to a shirt;
  - a third magnet associated with the second strap; and
  - a fourth magnet associated with the second strap, the fourth magnet having a polarity opposite to the third magnet, wherein the third and fourth magnets are capable of being matched to secure the bib to a shirt.
- 5. The protective bib of claim 4, wherein the first and second magnets are sewn into the first strap.
- **6**. The protective bib of claim **5**, wherein the third and fourth magnets are sewn into the second strap.

\* \* \* \* \*