



- (51) International Patent Classification:  
A41D 13/00 (2006.01)
- (21) International Application Number:  
PCT/US2017/017605
- (22) International Filing Date:  
13 February 2017 (13.02.2017)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
15/042,107 11 February 2016 (11.02.2016) US
- (72) Inventor; and  
(71) Applicant : RHODES, Armi Tga [US/US]; 3393 Shivas Road, Clarksville, TN 12345 (US).
- (74) Agent: STARKWEATHER, Michael, W.; 4112 N. Myrtle Ave, Tampa, FL 33603 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

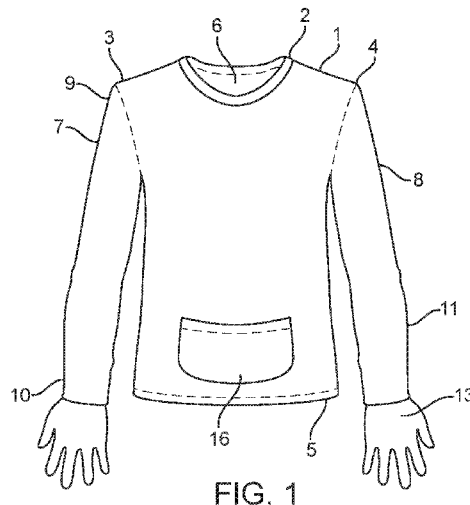
**Declarations under Rule 4.17:**

— of inventorship (Rule 4.17(iv))

**Published:**

— with international search report (Art. 21(3))

(54) Title: FULL SLEEVE THERMAL WINTER APPAREL



(57) Abstract: The present invention relates to a full sleeve thermal winter apparel for a person including, an enveloping torso portion configured to cover a portion of a torso of the person; an opening for head of the person to extend out of when the full sleeve thermal winter apparel is worn by the person; a right sleeve comprising a top end; a bottom end; an outer surface and a lower surface; a means for covering hands of the person; at least one envelope for concealing the head of the person; and at least one pocket for placing the means for covering the head of the person.

## IN THE UNITED STATES PATENT &amp; TRADEMARK OFFICE

## APPLICATION FOR A UTILITY PATENT APPLICATION

## FOR

**(A) A FULL SLEEVE THERMAL WINTER APPAREL**

Inventor: Armi TGA Rhodes

**(B) CROSS REFERENCE TO RELATED APPLICATIONS**

Not applicable

**(C) FEDERALLY SPONSORED RESEARCH AND DEVELOPMENT**

Not applicable.

**(D) MICROFICHE**

Not applicable

**(E) BACKGROUND OF THE INVENTION****(1) FIELD OF THE INVENTION**

The present invention relates to a winter apparel. Particularly, the present invention relates to a thermal winter apparel. More particularly, the present invention relates to a full sleeve thermal winter apparel with concealed gloves and removably attached cap.

**(2) BACKGROUND OF THE INVENTION**

Sleeves of thermal-protection garments such as coats, jackets, and undergarments generally end at the wrist, leaving the hands and fingers unprotected from cold, requiring gloves or mittens.

Gloves and mittens traditionally have the disadvantages of needing to be carried separately from the coat or jacket, and so frequently are lost. This can be a serious problem for skiers or outdoor users, and a great nuisance for the parents of small children. Also, since gloves and mittens typically cause the wearer to lose dexterity, both children and adults alike are prone to remove the gloves or mittens in order to more easily grasp ski poles, fashion snowballs, etc., thereby adding to the chance that the removed article will be lost. Indeed, fingerless gloves have been developed to address this problem by keeping the hand properly covered while leaving the fingers, or some portion of the fingers, uncovered for better dexterity. But even fingerless gloves can be lost if they are not attached to a coat or garment.

Various prior arts in the past supported the use of such garments designed specifically to be worn in winters. Some examples are as follows:

**Patent No. US 7823625 B2** issued to **Adroit Development, Inc.** discloses an upper body heating and cooling apparatus. More particularly, this invention pertains to a garment worn on the body of a person with the garment connected to a thermal unit. The garment has a heat transfer area and a load bearing area, and the heat transfer capabilities of the garment are not affected by the person carrying a load on a portion of the person's body. The connection between the garment and the thermal unit is with fluid connectors that release upon application of a specified tension force.

**Patent No. US 8453270 B2** issued to **Columbia Sportswear North America, Inc.** discloses a fabric or other material used for body gear and other goods having designed performance characteristics, and in particular to methods and apparatuses that utilize a pattern of heat managing/directing elements coupled to a base fabric to manage heat through reflection or conductivity while maintaining the desired properties of the base fabric.

*Patent No. US 6332221 B1 issued to Nicholas Dynes Gracey provides a means by which clothing may be made more effective in its role in assisting temperature regulation by providing increased heat exchange by means of reduced insulation of temperature sensitive sites- reducing insulation of temperature sensitive areas not protected by "fat pads" and/or providing for increased vapor exchange by means of specific ventilation of temperature sensitive areas- allowing flexibility for rapid increases in heat generation owing to facility for improved vapor exchange.*

*None of the above inventions and patents, taken either singly or in combination, are seen to disclose a full sleeve thermal winter apparel for a person.*

*Further, none of this prior art suggests the present inventive combination of component elements arranged and configured for the efficient solution of this problem as disclosed and claimed herein. Prior devices do not provide the benefits of the present invention which achieves its intended purposes, objectives and advantages over the prior art devices through a new, useful and unobvious combination of component elements, through no increase in the number of functioning parts, at a minimum cost and through the utilization of only readily available materials and conventional components.*

*As such, it may be appreciated that there continues to be a need for a new and improved full sleeve thermal winter apparel for a person with concealed gloves and removably attached cap for reducing the chances of losing the gloves and in this respect, the present invention substantially fulfills this need.*

#### **(F) SUMMARY OF THE INVENTION**

*The present invention solves the problems of the prior art by providing a novel full sleeve thermal winter apparel for a person.*

The primary intent of the present invention is to provide a full sleeve thermal winter apparel with concealable gloves and removably attached cap.

An intent of the present invention is to provide a full sleeve thermal winter apparel for a person including, an enveloping torso portion configured to cover a portion of a torso of the person; an opening for a head of the person to extend out of when the full sleeve thermal winter apparel is worn by the person; a right sleeve comprising a top end; a bottom end; an outer surface and a lower surface; a left sleeve comprising a top end; a bottom end; an outer surface and a lower surface; a means for covering hands of the person; at least one envelope for concealing the means for covering hands of the person; a means for covering the head of the person; and at least one pocket for placing the means for covering the head of the person.

Another intent of the present invention is to provide a thermal winter apparel with pockets for placing the detachable accessory of the thermal winter apparel.

Each intent of the present invention provides the advantage of the concealable gloves attached to the full sleeve thermal winter apparel.

Each intent of the present invention provides the advantage of the removably attached cap to the full sleeve thermal winter apparel.

Each intent of the present invention provides the advantage of the pockets for placing the detachable accessory.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that

the phrasenology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter in which there are illustrated preferred embodiments of the invention.

Additional features and advantages of the invention will be set forth in the detailed description which follows, and in part will be readily apparent to those skilled in the art from that description or recognized by practicing the invention as described herein, including the detailed description which follows, the claims, as well as the appended drawings.

#### **(G) BRIEF DESCRIPTION OF THE DRAWINGS**

The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

FIG. 1 shows the front view of the full sleeve thermal winter apparel without cap in an embodiment of the present invention;

FIG. 2 shows the front view of the full sleeve thermal winter apparel with cap in an embodiment of the present invention;

FIG. 3 shows the prospective view of right sleeve with glove in an embodiment of the present invention; and

FIG. 4 shows the prospective view of left sleeve with envelope in an embodiment of the present invention.

**(10) DETAILED DESCRIPTION OF THE INVENTION**

In the following detailed description, reference is made to the accompanying drawings which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that the embodiments may be combined, or that other embodiments may be utilized and that structural and logical changes may be made without departing from the spirit and scope of the present invention. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined by the appended claims and their equivalents.

Referring now to the drawings, wherein like reference characters designate identical, or corresponding parts throughout the figures, and in particular FIGS. 1, 2, 3 & 4 show various embodiments of full sleeve thermal winter apparel in accordance with the present invention.

FIG. 1 shows the front view of the full sleeve thermal winter apparel including, the enveloping torso portion 01, the opening for the head 02, the right seam 03, the left seam 04, the upper surface 05, the inner surface 06, the right sleeve 07 & the left sleeve 08 with the top end 09, the bottom end 10 & the outer surface 11, the means for covering hands 13 and the pocket 16.

FIG. 2 shows the front view of the full sleeve thermal winter apparel including, the enveloping torso portion 01, the opening for the head 02, the right seam 03, the left seam 04, the upper surface 05, the inner surface 06, the right sleeve 07 & the left sleeve 08 with the top end 09, the bottom end 10 & the outer surface 11, the means for covering the hands 13, the means for covering the head and the pocket 16.

FIG. 3 shows the prospective view of the right sleeve 07 including, the means for covering the hands 13. The means for covering the hands 13 is attached to the bottom end 10 on the outer surface 11 of the right sleeve 07.

FIG. 4 shows the prospective view of left sleeve 08 with envelope 14 concealed on the inner surface 12 of the left sleeve 08 at the bottom end 10.

In general present invention provides the full sleeve thermal winter apparel for a person, including the enveloping torso portion 01, the right sleeve 07, the left sleeve 08, the means for covering the hands 13, envelopes 14 for concealing the means for covering the hands 13, means for covering the head 15 and pocket 16 for placing the means for covering the head 15.

In an embodiment the present invention provides the full sleeve thermal winter apparel for a person including, the enveloping torso portion 01 configured to cover a portion of a torso of the person further including the opening for the head 02 of the person to extend out of when the full sleeve thermal winter apparel is worn by the person, the right seam 03, the left seam 04, the upper surface 05 and the inner surface 06. Further, the right sleeve 07 and left sleeve 08 comprising the top end 09, the bottom end 10, the outer surface 11 and the lower surface 12, the means for covering hands of the person 13, at least one envelope 14 for concealing the means for covering hands 13 of the person, the means for covering the head 15 of the person, and at least one pocket 16 for placing the means for covering the head 15 of the person located at the upper surface 05 of the enveloping torso portion 01.

In various embodiments of the present invention the enveloping torso portion 01 is made of material selected from the group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof and including the opening for the head 02 of the person to extend out of

when the full sleeve thermal winter apparel is worn by the person, the right seam **03**, the left seam **04**, the upper surface **05** and the inner surface **06**.

In various embodiments of the present invention the right sleeve **07** and left sleeve **08** are made of material selected from the group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof comprising the top end **09**, the bottom end **10**, the outer surface **11** and the lower surface **12**, the means for covering hands of the person **13** and envelope **14** for concealing the means for covering hands **13** of the person.

In various embodiments of the present invention the means for covering the hands **13** is selected from the group of group of gloves, gauntlets and mittens and made of material selected from the group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof. The means for covering the hands **13** are located at the bottom end **10** of the right sleeve **07** & left sleeve **08**.

In various embodiments of the present invention the means for covering the head **16** is made of material selected from the group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof and located at the opening for the head **02** of the person to extend out of the enveloping torso portion **01**.

In one of the most preferred embodiment of the present invention provides the full sleeve thermal winter apparel for a person, including the enveloping torso portion **01** made of lightweight, waterproof, stretchable and wind resistant material configured to cover a portion of a torso of the person further including the opening for the head **02** of the person to extend out of when the full sleeve thermal winter apparel is worn by the person. In this embodiment the right sleeve **07** and the left sleeve **08** are made of lightweight, waterproof, stretchable and wind resistant material connected at the right seam **03** and left seam **04** respectively. In this particular embodiments the means for covering the hands **13** is gloves

made of lightweight, waterproof, stretchable and wind resistant material located at the bottom end 10 of the right sleeve 07 and the left sleeve 08 further concealable in the envelopes 14 located at the lower surface 12 of the right sleeve 07 and the left sleeve 08. Also in this particular embodiment the cap 15 is attached to the enveloping torso portion 01 at the opening for the head 02 which could be removed and placed in the pocket 16 located at the upper surface 05 of the enveloping torso portion 01.

It is to be understood that the above description is intended to be illustrative, and not restrictive. For example, the above-discussed embodiments may be used in combination with each other. Many other embodiments will be apparent to those of skill in the art upon reviewing the above description.

While the present invention has been described with reference to particular embodiments, it should be understood that the embodiments are illustrative and that the scope of the invention is not limited to these embodiments. Many variations, modifications, additions and improvements to the embodiments described above are possible. It is contemplated that these variations, modifications, additions and improvements fall within the scope of the invention.

**(I) CLAIMS**

What is claimed is:

1. A full sleeve thermal winter apparel for a person, comprising:
  - a) an enveloping torso portion configured to cover a portion of a torso of said person;
  - b) an opening for a head of said person to extend out of when said full sleeve thermal winter apparel is worn by said person;
  - c) a right sleeve comprising a top end; a bottom end; an outer surface and a lower surface;
  - d) a left sleeve comprising a top end; a bottom end; an outer surface and a lower surface;
  - e) a means for covering hands of said person;
  - f) at least one envelope for concealing said means for covering hands of said person;
  - g) a means for covering said head of said person; and
  - h) at least one pocket for placing said means for covering said head of said person.
2. A full sleeve thermal winter apparel for a person according to claim 1, wherein said enveloping torso portion further comprising: an upper surface and an inner surface.
3. A full sleeve thermal winter apparel for a person according to claim 1, wherein said enveloping torso portion is made of material selected from a group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof.
4. A full sleeve thermal winter apparel for a person according to claim 1, wherein said right sleeve is coupled to said torso portion at a right seam which is located to a right side of said opening in said torso portion for said head.
5. A full sleeve thermal winter apparel for a person according to claim 1, wherein said right sleeve is made of material selected from a group of

lightweight, waterproof, stretchable, wind resistant materials or combination thereof.

6. A full sleeve thermal winter apparel for a person according to claim 1, wherein said left sleeve is coupled to said torso portion at a left seam which is located to a left side of said opening in said torso portion for said head.
7. A full sleeve thermal winter apparel for a person according to claim 1, wherein said left sleeve is made of material selected from a group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof.
8. A full sleeve thermal winter apparel for a person according to claim 1, wherein said means for covering hands of said person is made of material selected from a group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof.
9. A full sleeve thermal winter apparel for a person according to claim 1, wherein said means for covering hands of said person is fixed at said bottom end of said sleeves.
10. A full sleeve thermal winter apparel for a person according to claim 1, wherein said means for covering hands of said person is selected from a group of gloves, gauntlets and mittens.
11. A full sleeve thermal winter apparel for a person according to claim 1, wherein said envelope for concealing said means for covering hands of said person is located on said lower surface at said bottom end of said sleeves.
12. A full sleeve thermal winter apparel for a person according to claim 1, wherein said means for covering said head of said person is removably attached at said opening for a head of said person.
13. A full sleeve thermal winter apparel for a person according to claim 1, wherein said means for covering said head of said person is made of material selected from a group of lightweight, waterproof, stretchable, wind resistant materials or combination thereof.

14. A full sleeve thermal winter apparel for a person according to claim 1, wherein said pocket for placing said means for covering said head of said person is located at said outer surface of said enveloping torso portion.

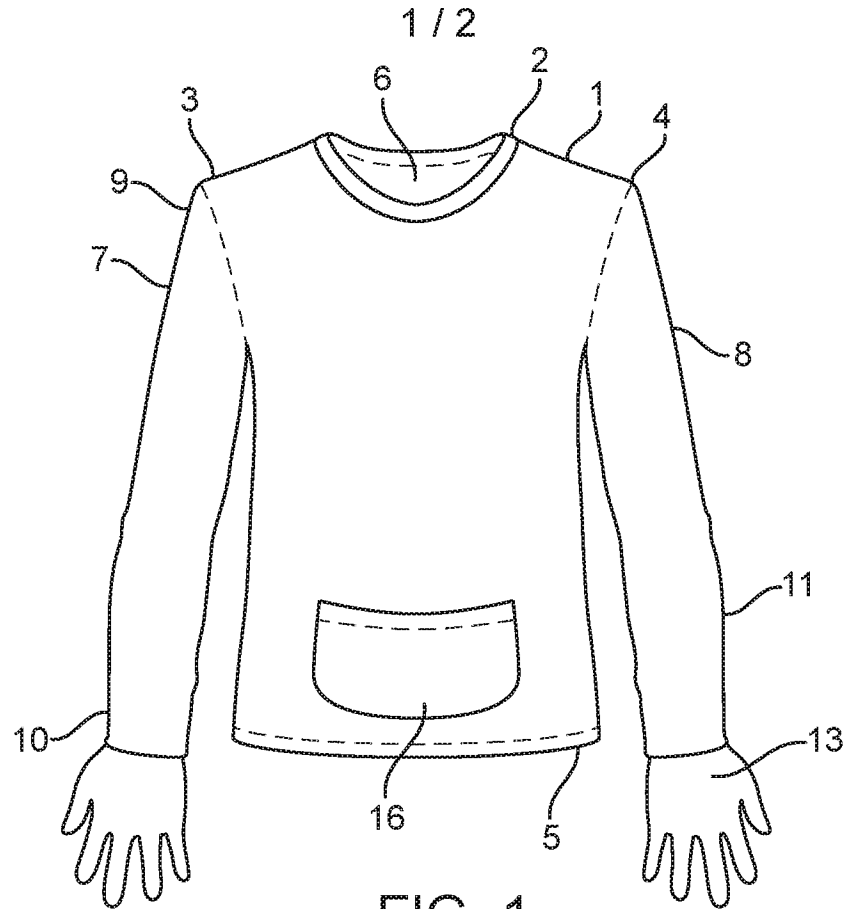


FIG. 1

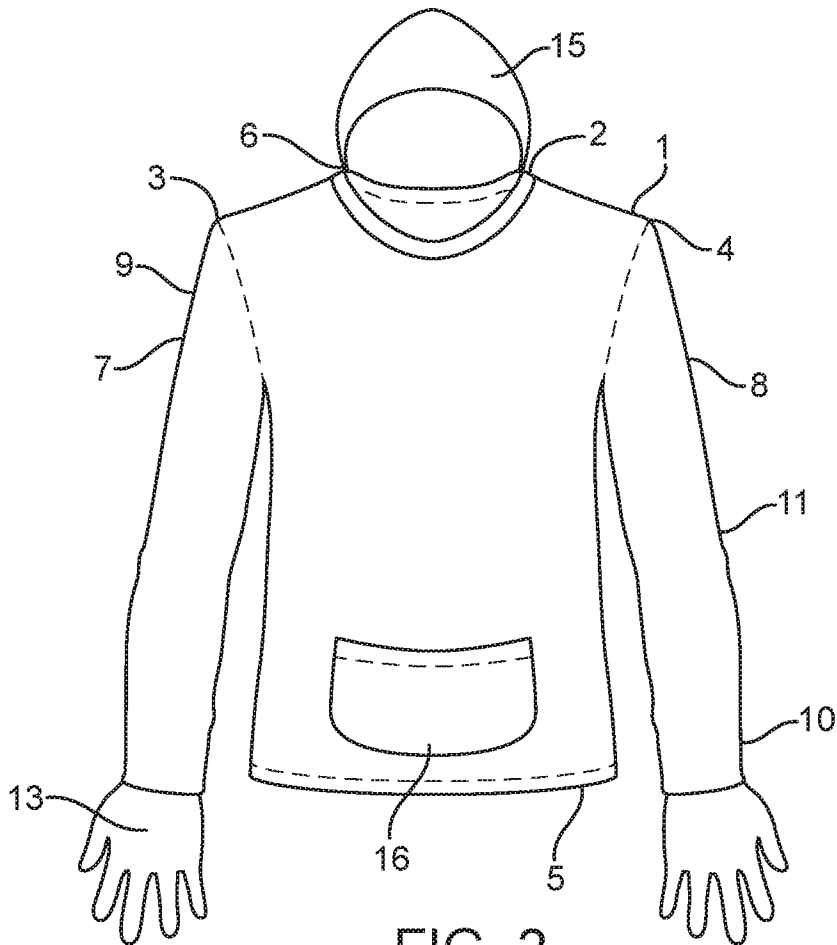


FIG. 2

2 / 2

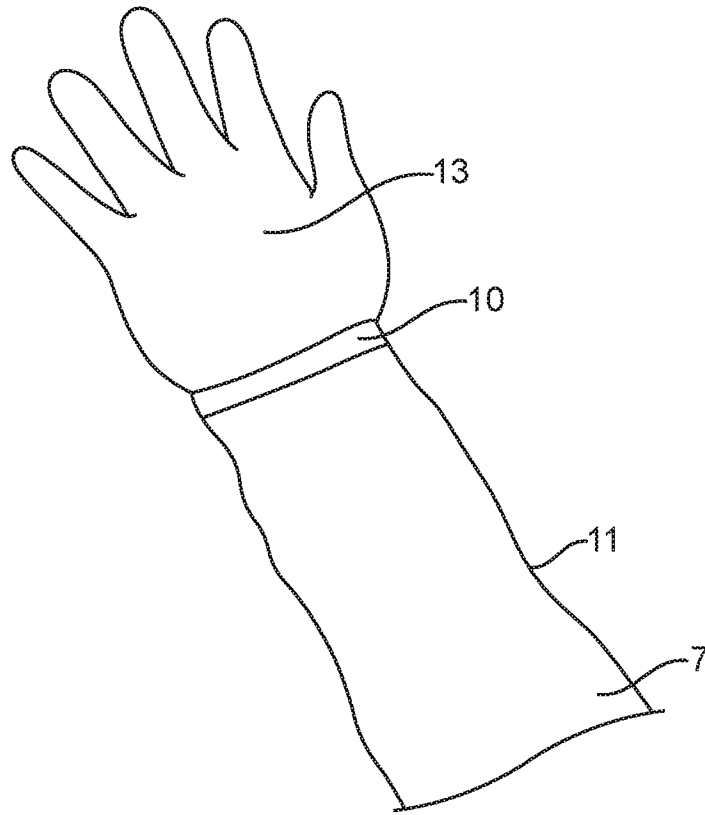


FIG. 3

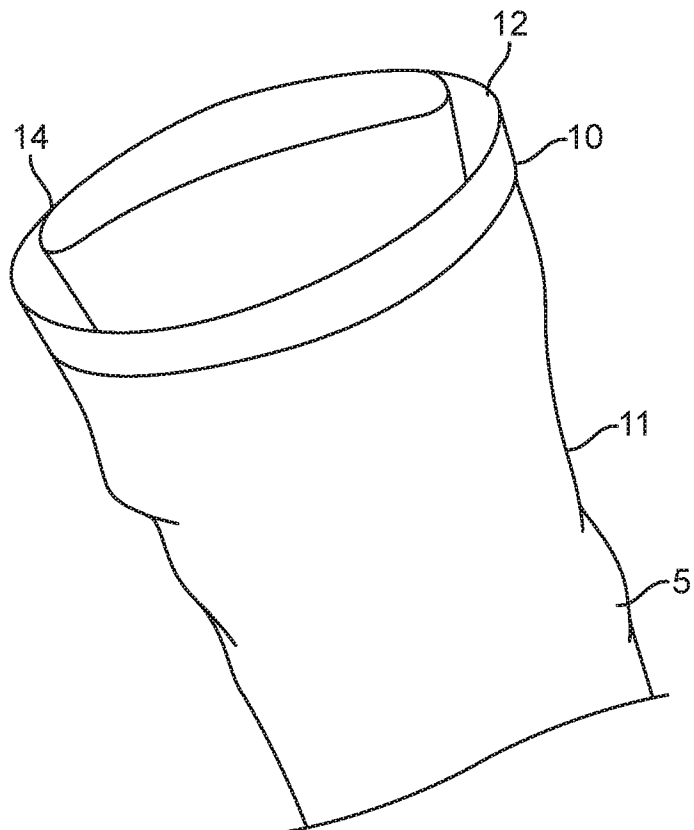


FIG. 4

<b>INTERNATIONAL SEARCH REPORT</b>		International application No. PCT/US17/17605		
<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC: <b>A41D 13/00(2006.01)</b>  CPC:        002/069 According to International Patent Classification (IPC) or to both national classification and IPC				
<b>B. FIELDS SEARCHED</b>				
Minimum documentation searched (classification system followed by classification symbols) CPC : 002/069				
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)				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>				
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	US 4,297,746 (Zarbos) 03 November 1981, see entire document.	4, 6		
X	US 4,944,041 (Buenos et al.) 31 July 1990, see entire document	1-5, 7-14		
---		-----		
Y		4, 6		
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.				
* Special categories of cited documents: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">               "A" document defining the general state of the art which is not considered to be of particular relevance                "E" earlier application or patent published on or after the international filing date                "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)                "O" document referring to an oral disclosure, use, exhibition or other means                "P" document published prior to the international filing date but later than the priority date claimed             </td> <td style="width: 50%; border: none;">               "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                "&amp;" document member of the same patent family             </td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family			
Date of the actual completion of the international search 04 March 2017 (04.03.2017)		Date of mailing of the international search report <b>10 MAR 2017</b>		
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-8300		Authorized officer Tom Barrett Telephone No. 571-272-4300		