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(54) UPRIGHT POSITION SUPPORT GARMENT

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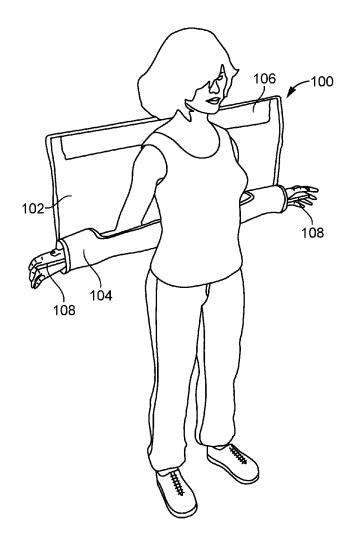
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(57)ABSTRACT

A garment for providing comfort to a wearer in confined environment such as travelling through transport facility with confined seating arrangements. The sleep garment comprises a blanket portion, a sleeve portion and a padded neck portion. The sleeve configuration allows the wearer to fold their arms across their chest with the forearms angled upward and to secure in position with hook and loop o straps. The hook and loop straps are sewn at the back of the sleeve such way it is accessible to the palm of the wearer. Loop fabric on the exterior of the garment allows the wearer to position the arm securing strap anywhere on the product for optimum comfort while keeping the elbows located near the body.



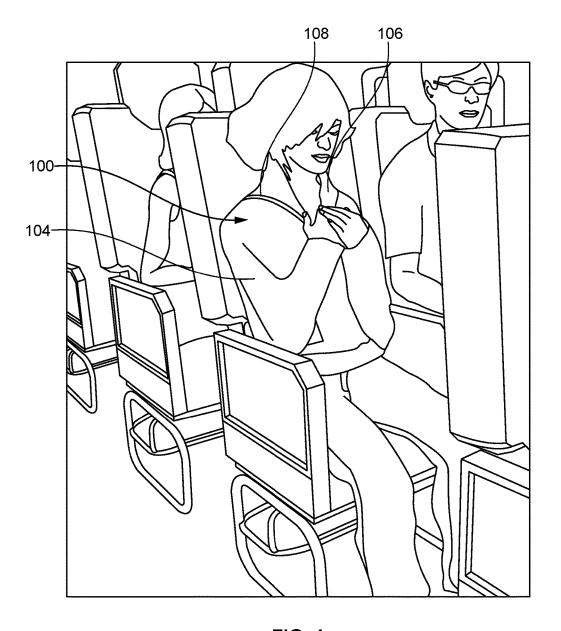


FIG. 1

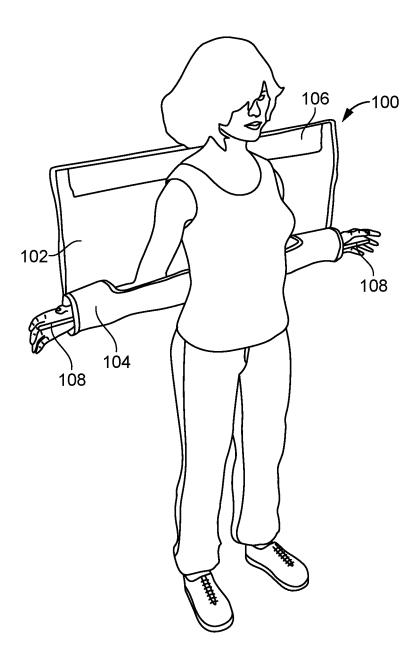


FIG. 2

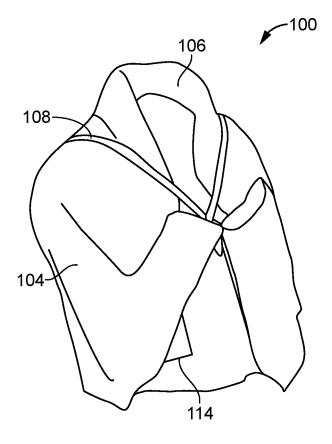


FIG. 3

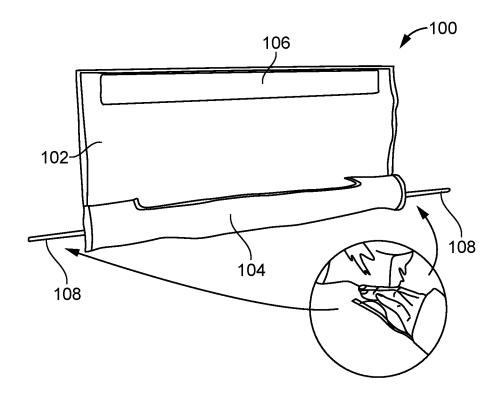


FIG. 4

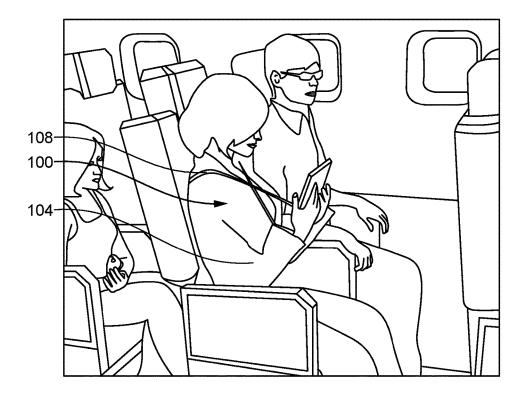


FIG. 5

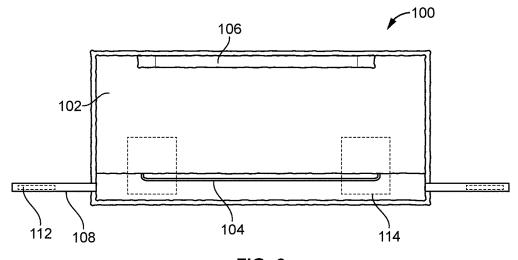


FIG. 6

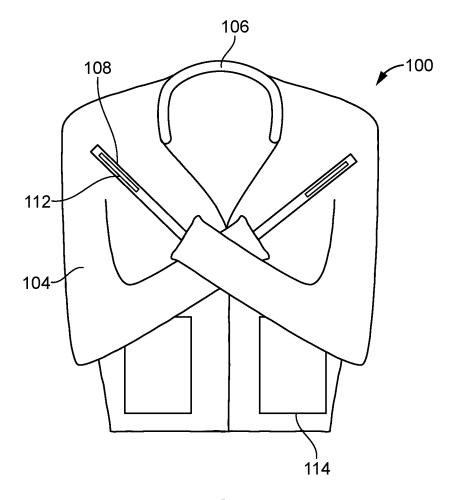


FIG. 7

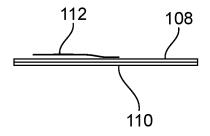


FIG. 8A

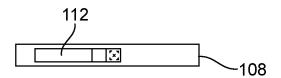


FIG. 8B

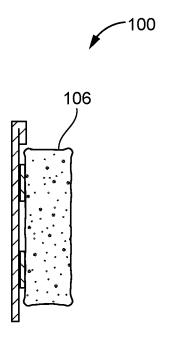


FIG. 9

UPRIGHT POSITION SUPPORT GARMENT

[0001] This application claims priority to U.S. Provisional Patent Application No. 62/550,406 filed Aug. 25, 2017, and is incorporated in its entirety herein by reference.

A. TECHNICAL FIELD

[0002] The present invention generally relates to sleepwear. More specifically, the present invention relates to a sleepwear garment for providing comfort to a wearer in confined environment, or upright position, such as traveling through a transport facility.

B. DESCRIPTION OF RELATED ART

[0003] Getting comfortable in a confined environment is a challenge for most people, for instance, passengers in an airplane. With less head, foot and elbow room in transports becoming a normal environment, it is almost impossible to avoid bumping by someone going down the narrow aisle or sitting next to you. Particularly, aisle seats are annoying as a person's arms and elbows in the aisle seat seem to be the target of anyone including the flight crew and the food cart who passes by the seat. Also, when trying to relax during travel, a dilemma arises to comfortably position the arms and elbows in an aircraft seat. Further, the arm rests are very small and usually, the arm rests between the seats has to be shared by two passengers.

[0004] In addition, trying to rest or sleep will invariably be interrupted by someone jostling or bumping the arm or elbow. Also, it is very difficult to sleep without inadvertently leaning over, or person arms becoming akimbo as one relax. Either of these actions invades the adjacent traveler's space and can make them uncomfortable, whereupon they jostle the resting person to awake, and encourages to move out of their space. This may cause irritation to the co-passengers. Additionally, when a person is sleeping, their head tends to bob around, which can lead to a sore neck and possibly a headache. Sometimes, the vehicle is cooled efficiently decreasing the traveler internal temperature, which could also wake up the traveler. These irritating problems could create a very unpleasant traveling experience for the travelers.

[0005] A similar situation exists for passengers of motor vehicles, such as cars, busses, trains, and the like. In these vehicles, much like an airplane, the passenger is strapped into her seat and must maintain a suitable position for her safety. At the same time, the passenger wants to rest comfortably and not encroach upon the personal space of a neighboring passenger if she should fall asleep. The passenger also does not want her space encroached by her neighbor should her neighbor decide to lounge or fall asleep. The garment described herein can also be used by a car passenger to assist with maintaining comfort in an upright position while wearing a seatbelt. Use in both an airline or automobile enhances passenger safety because it causes the wearer to stay in the intended position for maximum effectiveness of the seat belt.

[0006] The resulting solution is trying to hold the arms and elbows out of the way which becomes fatiguing and prevent any relaxation during the travel time. Furthermore, moving the arm from one position to another becomes an exercise in annoyance in the stressful environment. People usually prefer to avoid stress state on a long-distance flight, however, a plane that is filled to capacity is a very stress-

inducing environment. Especially, in coach seating where the seats are designed to fit as many people in the aircraft as possible and comfort is not usually a consideration. Therefore, there is a need for a solution that could aid in increasing the comfort during a flight.

[0007] Therefore, the present invention provides a sleepwear garment for providing comfort to a wearer in confined environment such as travelling through transport facility with confined seating arrangements, or any situation where finding comfort while maintaining an upright position is the goal.

SUMMARY OF THE INVENTION

[0008] The present invention relates to sleepwear garment to increase comfort of the individual in confined environment, such as in an upright position when as traveling by a transport facility with confined seating arrangements, such as a plane or car. The sleepwear garment avoids the aforementioned problems by providing a blanket-like garment with sleeves that can be secured to the upper body using an attached hook fastener straps. The garment may be made of a fleece material or any other suitable material that provides comfort to the wearer and is washable. Such materials include cotton, polyester, wool, fleece, elastic polyurethane, silk, charmeuse, bamboo, natural fiber, or any blend thereof. [0009] In one embodiment, the sleepwear garment is a combination of a neck roll, a sleeve portion and a blanket portion which holds a wearers arm and elbows in a crossed position on the chest. In one embodiment, the sleepwear garment is layered with one layer of a fleece-like material and another adjoining layer of a felt like fabric comprising loop fabric on an outer side of the felt like layer. Similarly, the garment may be made of a single layer of any of the materials herein described, or a weave or blend of such materials. This single or multi-layer construction is not intended to limit the structure or functionality of the invention but is provided for illustrative purposes. Any suitable material from which a blanket may be constructed may be employed, with loop fabric provided on the outer side in order to apply a fastener employing a hook and loop configuration, as described below. A neck roll is formed at the top portion of the garment to cradle or support the neck and head during sleep while providing restful and stress-free travel comfort. The neck roll may be filled with materials such as rice, beads, or other natural or synthetic material that makes the neck roll soft and supple to provide support and comfort.

[0010] The sleeve portion or arm tube formed at the bottom portion of the garment, to allow the wearer to fold their arms across their chest with the forearms angled upward. The sleeve portion further comprises hook and loop material, such as Velcro brand straps, with hook fasteners sewn at the backside through the ends of the sleeve which are secured at the outer side of the blanket portion of the garment in an optimally comfortable position by which keeps the forearms angled upward. The straps include a nylon handle to assist in releasing the straps from the loop fabric. Further, the garments include pockets to allow the wearer to store cell phones, tablet, pen, pencils, etc.

[0011] Other objects, features and advantages of the present invention will become apparent from the following detailed description. It should be understood, however, that the detailed description and the specific examples, while indicating specific embodiments of the invention, are given

by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

BRIEF DESCRIPTION OF DRAWINGS

[0012] The foregoing summary, as well as the following detailed description of the invention, is better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, exemplary constructions of the invention are shown in the drawings. However, the invention is not limited to the specific methods and structures disclosed herein. The description of a method step or a structure referenced by a numeral in a drawing is applicable to the description of that method step or structure shown by that same numeral in any subsequent drawing herein.

[0013] FIG. 1 is a side perspective view of a user wearing a sleepwear garment in a confined environment in an embodiment of the present invention.

[0014] FIG. 2 a side perspective view of a user wearing a sleepwear garment in an embodiment of the present invention.

[0015] FIG. 3 is a side perspective view of the sleepwear garment with the sleeve section in folded position in an embodiment of the present invention.

[0016] FIG. 4 is a perspective of the sleepwear garment in an embodiment of the present invention.

[0017] FIG. 5 a perspective view of the sleepwear garment worn by the user in a confined environment in an embodiment of the present invention.

[0018] FIG. 6 is an inside view of the sleepwear garment accessory in an embodiment of the present invention.

[0019] FIG. 7 is a front elevational view of the sleepwear garment with arms crossed at the chest region secured by hook fastener strap in an embodiment of the present invention.

[0020] FIG. 8A is a side view of a strap with hook fastener in an embodiment of the present invention.

[0021] FIG. 8B is a top view of a strap with hook fastener in an embodiment of the present invention.

[0022] FIG. 9 is a side view of the top section of the sleepwear garment in an embodiment of the present invention.

DETAILED DESCRIPTION OF EMBODIMENTS

[0023] A description of embodiments of the present invention will now be given with reference to the Figures. It is expected that the present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described embodiments are to be considered in all respects only as illustrative and not restrictive.

[0024] Referring to FIG. 1, is a side perspective view of a user wearing a sleepwear garment 100 in an embodiment of the present invention. The sleepwear garment 100 allows the user's or wearer's arms to be secured in a comfortable position when seated in a confined space such as a commercial airline seating. The sleepwear garment 100 comprises a blanket portion 102, a sleeve portion or an arm tube 104 formed at a bottom position, a padded neck rolls 106 at a top portion. The sleeve portion further includes hook and loop straps 108 to hold the arms across the chest, which

prevents the elbows from competing for space with neighbors in the seating rows. Also keeps the arms from being hit by the food cart or other passengers passing through the aisles. The sleepwear garment 100 is comfortable for any type of travel vehicles where the seating is tight, upright comfort is a challenge, or elbow room is at premium such as trains, buses and aircraft or even automobiles. The sleepwear garment 100 keeps the user warm and allows sleeping without the uncomfortable jostling of arms and elbows. Garment 100 also keeps the user in an ideal position to permit seat belt devices to work as intended.

[0025] Referring to FIG. 2, sleepwear garment 100 is worn by placing the wearer arms in the sleeve section 104 at the bottom position of the sleepwear garment 100. The sleeve portion 104 including hook and loop straps 108 are sewn at the backside, through the end, of the sleeve 104 which are attached to the blanket section 102 to comfortably place arms in place. The filled neck cushion 106 cradles the neck and head, supporting it during sleep, reading, etc., while providing restful and stress-free travel and comfort for the user in the upright position.

[0026] Referring to FIG. 3, is a side perspective view of the sleepwear garment 100 with the sleeve section 104 in folded position by using the straps 108. The sleepwear garment comprises a pocket section that can be disposed on either the inside of the blanket section 102, akin to an inside breast pocket or a pocket on the outside of blanket section 102 of the garment 100 to store wearer electronics or things such as cell phones, tablet, pen, pencils, etc.

[0027] Referring to FIG. 4, shows a perspective of the sleepwear garment 100 in an embodiment of the present invention. The hook and loop straps 108 are provided with a pull cords or handle 112 to release the straps 108 from the garment 100. In one embodiment, the padded or washable bead filled neck roll 106 is integrated into garment 100. In this manner, garment 100 is made entirely of washable material as neck roll 106 is not detachable from blanket portion 102. In another embodiment the padded or washable bead filled neck roll 106 is removably or detachably attached to blanket portion 102 which provides ease in laundering the neck roll 106 apart from garment 100 as a whole.

[0028] FIG. 5, shows a perspective view of the sleepwear garment 100 worn by the user, where the hook and loop material straps 108 are comfortably attached in the user desired position allowing the user to work even in confined environment.

[0029] Referring to FIG. 6, is an inside view of the sleepwear garment 100 of the present invention. In one embodiment the sleepwear garment 100 is made of thin, softly draping blanket material with a low nap fleece on inner side and an outer side (when worn) of loop fabric. The blanket can be constructed of a variety of materials, including wool, cotton, polyester, cotton-blend, wool-blend, fleece, lycra, spandex, silk, charmeuse, bamboo, natural fiber, or any blend thereof. The soft fleece side is non-pilling and faces the wearer to provide a slightly warm with a very soft surface which is draped over the wearer's body. The felt like loop fabric on the outer surface of the garment 100 allows the user to position the arm securing strap 108 anywhere on the garment 100 for the optimum in comfort while keeping the elbows located near the body. The loosely filled neck roll 106 adapts to the neck configuration, cradles the neck/head, and allows the user to easily drift off to sleep during the flight. The neck cushion 106 can be removed when washing the garment 100. The garment 100 folds compactly for easy storage in the suitcase, backpack, or carry-on. Further, the hook strap 108 is sewn to the back of the sleeve tube 104 in such way it touches the palms of the wearer or accessible to the palm of the user. The sleeve section or the arm tube 104 opening allows the wearer to slip their arms into the arm tube and to sit with arms crossed. Further, the hook strap 108 is clamped onto the loop fabric covered blanket supporting the crossed arms.

[0030] FIG. 7 provides a front elevational view of the sleepwear garment 100 with arms crossed at the chest region secured by hook fastener strap 108 in an embodiment of the present invention. The hook fastener strap 108 is pressed onto the loop fastener fabric securing the strap 108 in almost any position for optimum comfort. Thus, the elbows are securely refrained in sleep, holding the body to within the seat confines. Further, the strap 108 includes handle 112 to release the straps 108 from the garment 100. Further, the sewn-on pockets 114 allows to store within wearer's cell-phone, tablet, pen, pencils, etc.

[0031] Referring to FIGS. 8A & 8B, in an embodiment, the sleepwear garment includes the strap 108 made of nylon. The hook fastener 110 is sewn at the bottom of the nylon strap 108. Further comprises the nylon pull handle 112 sewn at the top of the top of the nylon strap 108.

[0032] In an embodiment, the sleepwear garment 100 can be made of thin, low pile polyester fleece, is flexibly web bonded to the thin felt like fine loop fabric. The web bonding process flexibly attaches two layers of fabric together without affecting their drape and feel properties of the multilayer material. Further, the fabric sandwich feels and drapes similar to a thin fleece blanket yet allows the hook straps 108 to be positioned anywhere on its surface for the optimum in comfort while restraining the elbows and arms. Alternatively, loop-fabric patches may be affixed to the outer side of the blanket portion of the garment to facilitate receipt of the straps 108 bearing hook material.

[0033] In an embodiment, the web bonding process involves bonding of two layers of fabric by using double sided, hot melt glue adhesive. In an embodiment, the adhesive is a comprises 100 percent of polyamide web which is activated with heat and pressure. In an embodiment, the method of manufacturing involves sandwiching three bolts of material at high speed together between heated rollers and pressing the fabric together to a precisely maintained thickness. After joining, the fabric can be cut, sewn, and handled like a single layer fabric. In an embodiment, the fabric is capable of being machine washed, line dried, or dry cleaned. In an embodiment, the fabric may include a single layer of slightly thicker polyester fleece with loop fastener fabric sewn onto the chest locations to allow the hook fasteners a target upon which to secure themselves. This would eliminate the flexible web bonding process.

[0034] In an embodiment, the sleepwear garment 100 sewing process involves cutting the fabric components to shape using computer controlled rolling cutters. Then the edge of the back subcomponent is folded over and double stitched around the periphery. In one embodiment, pockets 114 are sewn onto or integrated into the outer surface of blanket portion 102 that will end up in the front of the wearer when garment 100 is in use. In the alternative, pockets 114 can be sewn onto or integrated into the inner surface of blanket portion 102. The arm tube 104 is cut to shape, the arm insert edge is folded over and single stitched around the

periphery to make a finished edge. The hook straps 108 are sewn into place after the nylon pull tabs 112 are sewn onto the side opposite the hook fastener 110. Then the arm tube 104 is folded over, the joining edges are sewn together, and then the tube 104 is turned inside out. The arm tube 104 is then sewed onto the back panel to make the finished garment 100. The neck collar 106 is sewn similarly to the arm tube 104, the mating hook and loop fasteners are sewn onto the collar and back blanket in the mating locations, and the neck collar tube 106 may be partially or fully filled with beads, rice, or any natural or synthetic foam or padding material that provides cushioning and support, and then sewn closed. After sewing the rest of the garment components together, the neck collar 106 is pressed into place on the garment 100 back. Referring to FIG. 9, is a side view of the top section of the sleepwear garment 100 in an embodiment of the present invention, where the shaded line depicts the edge of the fabric is turned under and sewn to form a finished edge. The bead filled neck roll 106 in the top section of the sleepwear garment 100 is easily removed, so the garment 100 could be washed. The shaded portion represent the fleece is sewn into a tube and then sewn to a hook and loop

[0035] In an embodiment, the garment 100 can be supplied in almost any vibrant color, and any weight of washable fabric, so a distinctive color may be chosen to enhance the product recognition factor, which can dramatically improve the market adoption of the product. In an embodiment, the garment 100 is worn as a light jacket. Further, the garment 100 could be worn on and off the vehicle, rather than storing or retrieving it from the carryon bag or back pack. In an embodiment, the garment 100 could be worn if the terminal or vehicle's ambient air is chilly.

[0036] The sleepwear garment 100 according to the present invention, has the following advantages: makes the travel space more comfortable, keeps arms and elbows out of the way; avoids being bumped and jostled during travel; allows the arms and elbows to relax; allows to store mobile device and other things in the pocket 114; supports the neck with the help of neck roll 106; keeps the user warm using the blanket section 102; easily stores the sleepwear garment 100 in on-board bags; promotes a restful stress free travel; easily worn and removed; ideal for use at home or anywhere where comfort is needed and quality construction assures garment's 100 durability.

[0037] Preferred embodiments of this invention are described herein, including the best mode known to the inventors for carrying out the invention. It should be understood that the illustrated embodiments are exemplary only, and should not be taken as limiting the scope of the invention.

[0038] The foregoing description comprise illustrative embodiments of the present invention. Having thus described exemplary embodiments of the present invention, it should be noted by those skilled in the art that the within disclosures are exemplary only, and that various other alternatives, adaptations, and modifications may be made within the scope of the present invention. Merely listing or numbering the steps of a method in a certain order does not constitute any limitation on the order of the steps of that method. Many modifications and other embodiments of the invention will come to mind to one skilled in the art to which this invention pertains having the benefit of the teachings presented in the foregoing descriptions. Although specific

terms may be employed herein, they are used only in generic and descriptive sense and not for purposes of limitation. Accordingly, the present invention is not limited to the specific embodiments illustrated herein.

What is claimed is:

- 1. A garment, comprising:
- a blanket comprising:
- a neck support disposed approximate to an upper edge of the blanket:
- a sleeve section having a first opening and a second opening disposed below the neck support; and
- at least one fastener strap disposed on the sleeve section for detachably securing the sleeve section to an exterior side of the blanket.
- 2. The garment of claim 1, wherein the at least one fastener strap comprises a hook material for securing onto a loop material associated with a section of the exterior side of the blanket.

- 3. The garment of claim 1, wherein the sleeve section is affixed to an interior side of the blanket.
- **4**. The garment of claim **1**, wherein the neck support is at least partially occupied with filler material.
- 5. The garment of claim 1, wherein the at least one fastener strap is constructed of nylon.
- **6**. The garment of claim **1**, further comprising a release cord associated with the at least one of the fastener straps.
- 7. The garment of claim 1, wherein the blanket is constructed of a material selected from the group consisting of cotton, polyester, wool, fleece, elastic polyurethane, silk, charmeuse, bamboo, natural fiber, or any blend thereof.
- 8. The garment of claim 1, wherein the neck support is detachably fastened to the blanket.
- 9. The garment of claim 1, wherein the neck support is integrated into the blanket.

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