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(54) **Anti-theft belt and kit for safely storing valuables**

(57) According to a first aspect, the invention relates to an anti-theft belt (1). The belt (1) for safely storing valuables (3) is suitable to be worn around the waist of a person (2). The belt (1) is provided with an internal pouch (4) and a zipper (5) with at least two sliders (6,7).

The zipper (5) is suitable to provide access to a partial zone (9) of the pouch (4) of the belt (1) via an unzipped portion (8) between two of the sliders (6,7) while leaving other zones of the pouch (4) inaccessible.

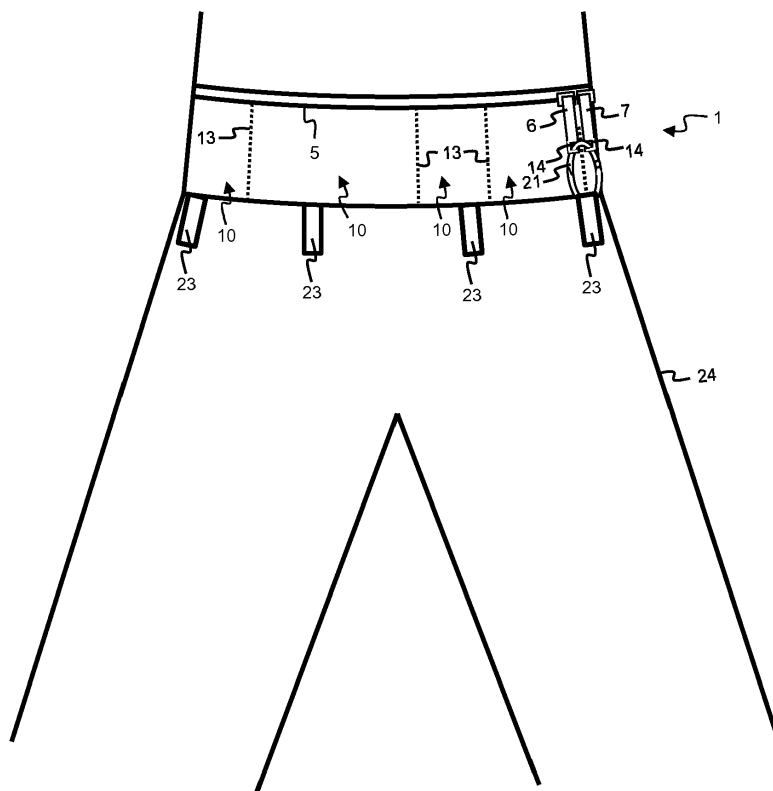


Fig. 5

Description

Technical Field

[0001] The disclosure generally relates to the field of anti-theft belts wherein valuables can be stored. In particular, the disclosure relates to belts to be worn around the waist of a person during e.g. travel or leisure.

Background

[0002] Taking part in activities, such as travelling, concerts, sleeping, vacationing, work etc., people often need to carry their personal belongings. Typical valuables to carry with are photo cameras, keys, cell phones, passports, credit cards, money, watches, travel tickets, driver's license, etc. Thereto, so-called 'fanny packs' or waist bags are commonly used. These small fabric pouches - most often secured with a zipper - are worn around the hips or waist with the use of a strap. The strap is usually fastenable by means of a buckle system.

[0003] These waist bags are very unsafe, as thieves or pickpockets can simply unbuckle or open the waist bags unnoticed. Also, such waist bags are vulnerable to be stolen by cutting the strap with a knife or any other sharp object. Another problem is that all weight needs to be carried in a front pouch, making it difficult to hide and wear it comfortably under clothing, such as a sweater or jacket.

[0004] Other existing waist bags or belts are provided with multiple pockets, e.g. one in front and one in the rear of the waist. Problem with these waist bags or belts is that they are easily accessible by pickpockets, especially for the rear pocket, even when pockets would be closed off with a zipper.

[0005] Document US 2006/261108 discloses a wearable sports wallet. The wallet comprises a lightweight washable band which may be worn around a wrist or ankle during recreational and athletic activities. The band comprises a compartment for receiving and storing small personal items therein and closure means for securing items within the compartment.

[0006] One problem is that only a little amount of valuables can be worn. Another problem is that storing larger valuables is difficult, for example phot cameras or smart phones will not fit in the compartment.

[0007] Document JP 11290372 discloses a waist belt wherein a coldpack or warmpack is to be stored. Also storage of valuables would be possible. The waist belt comprises a flexible strip and fasteners to detachably engage the ends of the waist belt. The belt has multiple pockets accessible via one or more slide fasteners. The ends of the belt have a tapering-off shape.

[0008] The main problem is that such a waist belt is not adapted to safely store valuables. As pockets or zippers in some cases need to be opened in order to access other pockets, the chance that a pickpocket or thief steals valuables unnoticed, increases.

[0009] A problem of the existing solutions is that storing valuables is unsafe in view of malicious people. Often, when a person wears a waist belt beneath his clothes and wants to retrieve e.g. his passport, he or she will automatically expose other neighbouring pockets. Hereby, potential pickpockets will easily get access to other valuables stored in the neighbouring pockets, even when these are closed off with a zipper. Therefore, stored valuables are unsafe and easily accessible or removable by malicious people.

Summary

[0010] In order to provide a safer and more comfortable waist belt, an improved anti-theft belt is needed allowing easier accessibility and comfort without compromising safety. A solution is needed for safely and comfortably storing normal-sized valuables around the waist of a person.

[0011] This objective is achieved, in a first aspect, by an anti-theft belt suitable to be worn around the waist of a person for safely storing valuables. The belt is provided with an internal pouch and a zipper with at least two sliders, wherein the zipper is suitable to provide access to a partial zone of the pouch of the belt via an unzipped portion between two of the sliders while leaving other zones of the pouch inaccessible.

[0012] The unzipped portion between two zipper sliders allows access to a zone, which can be chosen arbitrarily. While complimentary zones remain inaccessible, they are unreachable for malicious people. Hence, safety of stored personal belongings is improved.

[0013] The term "person" in underlying invention should be understood as a human being, an adult, a child, an animal, etc.

[0014] According to an embodiment, the zipper is provided along at least half of the length of the belt.

[0015] Hereby, there is the possibility to distribute valuables in the belt along at least half of the waist of the person, which improves the comfort of carrying valuables without compromising safety for the stored valuables.

[0016] According to an embodiment, the zipper is provided along at least three quarters of the length of the belt.

[0017] Hereby, there is the possibility to distribute valuables and their corresponding weight in the belt along at least three quarters of the waist of the person. This improves the comfort of carrying valuables circumferentially to the waist, without compromising safety of storing valuables.

[0018] According to an embodiment, the zipper is provided near the upper edge of the belt.

[0019] As the zipper is provided near the upper edge of the belt, unzipping and reaching the internal pouch is facilitated in an optimal manner.

[0020] According to an embodiment, the internal pouch is divided in at least two separate compartments, the partial zone corresponding to one of the compartments.

[0021] When the unzipped portion of the zipper allows

access to a partial zone corresponding to a single compartment, access to adjacent or other compartments of the internal pouch is further made inaccessible by separating the compartments.

[0022] According to an embodiment, a compartment is enclosed by an inner belt layer, an outer belt layer, a portion of the zipper and separated from an adjacent compartment by means of a stitched seam.

[0023] The term "stitched seam" in underlying invention should be understood as a single, double or triple join where an inner and an outer layer of the belt are held together with stitches. Examples include but are not limited to plain seams, French seams, flat seams or lapped seams.

[0024] According to an embodiment, an inner belt layer is water impermeable.

[0025] When the belt is worn, the inner belt layer can touch the skin and can be affected by sweat. A water impermeable inner layer prevents sweat from entering the internal pouch of the belt, potentially moistening stored valuables.

[0026] According to an embodiment, an inner belt layer and/or outer belt layer is made of a textile material preferably selected from the following group consisting of nylon, cotton, cotton blend, spandex, leather, polyester, polyamide, rubber, water impermeable material or a combination thereof.

[0027] According to an embodiment, an inner belt layer and/or outer belt layer is made of a flexible textile material.

[0028] Flexibility of the belt improves comfort of wearing the belt.

[0029] According to an embodiment, the two zipper sliders each comprise a through hole and wherein the belt comprises a securing system suitable to be received in the through hole of the two zipper sliders and suitable to releasably secure the zipper sliders to each other.

[0030] The term "securing system" in underlying invention should be understood as a system suitable to fasten and/or secure two zipper sliders with respect to each other. Examples include but are not limited to snap hooks, flat snap hooks, carabineer hooks, glides, strap glides, tri-glides, ladder locks, cinch locks, hinged rings, 'O' shaped rings, 'D' shaped rings, key rings, key clips, buckles, clamp buckles, side release buckles, magnets or a combination thereof. Typically, the securing system is suitable to be received in apertures of zipper sliders. Hereby two zipper sliders can be interconnected by the securing system.

[0031] A securing system improves the difficulty for malicious people of moving the zipper sliders, thereby opening the zipper and accessing the internal pouch with valuables.

[0032] According to an embodiment, the securing system comprises a hinged ring.

[0033] The term "hinged ring" in underlying invention should be understood as a ring comprising a first arc section and a second arc section which are hingeably

connected at an end. The other ends are suitable to be releasably locked and secured together. Typically, a hinged ring is made of metal such as nickel or steel.

[0034] A hinged ring as securing system allows for a lightweight system, which can be quickly opened and closed by the user, without compromising safety.

[0035] According to an embodiment, the hinged ring is suitable to be hooked through the through holes of the two zipper sliders and through a belt loop of pants, when the belt is worn.

[0036] As the hinged ring can be hooked also through a belt loop, an extra securing point is established. This further improves the difficulty for malicious people to open, access or remove the belt, as the belt is additionally connected to the pants of the person.

[0037] According to an embodiment, the securing system comprises a lock.

[0038] Examples for a lock include but are not limited to a padlock, a combination lock, an authority accessible lock, electronic lock or a biometric lock. The term "biometric lock" in underlying invention should be understood as an electronic lock which is lockable and/or unlockable by means of a biometric user-authentication.

[0039] According to an embodiment, the securing system comprises an authority accessible lock.

[0040] The term "authority accessible lock" in underlying invention should be understood as a lock with the extension that a universal master key can open the lock, which key is in possession of e.g. airport luggage control. Example of an authority accessible lock is a "Transportation Security Administration" accepted (TSA) lock.

[0041] According to an embodiment, the securing system is suitable to releasably secure the zipper sliders to each other by means of a magnetic force.

[0042] According to an embodiment, a first end of the belt is provided with a first fastening element and a second end of the belt is provided with a second fastening element, wherein the first and second fastening elements are suitable to be releasably fastened to each other, thereby releasably fastening the belt around the waist.

[0043] According to an embodiment, the first fastening element comprises a hook tape and the second fastening element comprises a loop tape.

[0044] A hook and loop fastening system allows to put on and remove the belt quickly and safely. A typical example of a hook and loop system is known as Velcro.

[0045] According to an embodiment, the hook tape is provided at the inner surface of the first end of the belt and the loop tape is provided at the outer surface of the second end of the belt.

[0046] As the hook tape is provided at the inner surface, the problem of having the hook tape hooked on a worn sweater or pull, will be reduced.

[0047] According to an embodiment, the hook tape is provided along a first length of the belt, wherein the ratio between the first length and the length of the belt is situated between 1 % and 25 %, preferably between 3 % and 20 %, more preferably between 4 % and 15 %, most

preferably between 5 % and 10 %.

[0048] According to an embodiment, the hook tape is provided along a first length of the belt and the loop tape is provided along a second length of the belt, wherein the ratio between the first length and the second length is situated between 10% and 80%.

[0049] As the loop tape extends along a larger length of the belt than the hook tape, the hook tape can be fastened in a range of positions on the loop tape. Hereby, dependent on the position of the hook tape on the loop tape, the individual waist length of the belt can be adjusted.

[0050] According to an embodiment, the hook tape and loop tape extend over the full height of the belt.

[0051] According to an embodiment, the first fastening element comprises a buckle plug and the second fastening element comprises a buckle socket.

[0052] According to an embodiment, the belt is provided with a unique identification tag.

[0053] The term "unique identification tag" in underlying invention should be understood as a tag giving the belt a unique identity. Examples for such a tag include but are not limited to a number, an alphanumeric code, a bar code, a Radio Frequency Identification (RFID), a chip card, smart card, magnetic identification, etc. In case e.g. a lost belt is found, the owner could be traced back by means of the tag on the belt.

[0054] According to an embodiment, the minimum height of the belt is situated between 2 cm and 25 cm, preferably between 4 cm and 20 cm, more preferably between 6 cm and 15 cm, most preferably between 8 cm and 11 cm.

[0055] According to an embodiment, the maximum height of the belt is situated between 5 cm and 50 cm, preferably between 8 cm and 30 cm, more preferably between 10 cm and 20 cm, most preferably between 12 cm and 15 cm.

[0056] According to an embodiment, the shape of the belt is substantially rectangular.

[0057] According to an embodiment, the upper edge and lower edge of the belt are substantially parallel along the full length of the belt.

[0058] As the height of the worn belt does not show narrowed portions along the waist, the chance of cutting the belt loose with a knife is reduced.

[0059] According to a second aspect, the invention relates to a kit comprising a belt according to the first aspect, wherein the two zipper sliders each comprise a through hole, and a securing system suitable to be received in the through holes of the two zipper sliders and suitable to releasably secure the zipper sliders to each other.

Brief Description of the Drawings

[0060]

Fig. 1 schematically illustrates a front view on a locked and unlocked outer side and a back view on

the corresponding inner side of an anti-theft belt according to an embodiment of underlying invention.

Fig. 2 schematically illustrates a front view of a person wearing the anti-theft belt of Fig. 1 in locked state.

Fig. 3 schematically illustrates a front view of a person wearing the anti-theft belt of Fig. 1 with partial access.

Fig. 4 schematically illustrates a front view on a closed and opened outer side and a back view on the corresponding inner side of an anti-theft belt according to an embodiment of underlying invention.

Fig. 5 schematically illustrates a front view of a person wearing the anti-theft belt of Fig. 4 in closed state.

Fig. 6 schematically illustrates a front view of a person wearing the anti-theft belt of Fig. 4 with partial access.

Detailed Description of Embodiment(s)

[0061] The top drawing of Fig. 1 schematically illustrates a front view on a flexible anti-theft belt (1) in elongated situation, according to an embodiment of the underlying invention.

[0062] The belt (1) is provided with a longitudinal internal pouch (4) wherein personal valuables can be stored. The belt (1) is rectangular-shaped with height (H) and length (L_B). The upper edge (19) and lower edge (29) of the belt (1) are parallel along the full length (L_B) of the belt (1). Along the upper edge (19) of the outer belt layer (12), a zipper (5) with two sliders (6,7) gives access to the internal pouch (4). The zipper (5) is provided along more than three quarters of the length (L_B) of the belt (1). Therefore, personal belongings can be stored circumferential to the waist. As weight can be distributed better, comfort of carrying valuables with the belt will be improved.

[0063] Each end of the two zipper sliders (6,7) has a through hole (14), wherein a securing system (20), i.e. a lock (22), is received. The zipper (5) is closed by the lock (22) which keeps both zipper sliders (6,7) secured near each other. Hence, access to the internal pouch (4) is hindered.

[0064] The middle drawing of Fig. 1 shows that the lock (22) has been opened, in order to move the two zipper sliders (6,7) away from each other. Here, access is provided to the partial zone (9) of the internal pouch (4). The unzipped portion (8) between the two sliders (6,7) allows access to the zone (9), while other zones of the pouch (4) remain inaccessible.

[0065] The bottom drawing of Fig. 1 illustrates the back side view showing the inner belt layer (11) of the belt (1).

The first end (30) of the belt (1) is provided with a first fastening element (31), i.e. a hook tape (34) at the inner surface (36) of the first end (30). The second end (32) of the belt (1) is provided with a second fastening element (33), i.e. a loop tape (35) at the outer surface (37) of the second end (32).

[0066] The hook tape (34) extends over the full height (H) of the belt (1) and along length L_H of the belt (1). The loop tape (35) also extends over the full height of the belt (1), but along a different length (L_L) than for the hook tape (34). The hook tape (34) can be releasably fastened to the loop tape (35) in a range of positions, thereby allowing an individually adjustable waist length.

[0067] Fig. 2 shows a person wearing the belt (1) of Fig. 1 around his waist. The belt (1) is in the locked state. As the belt (1) is closed with the lock (22), access to eventual stored valuables is prevented. As the belt (1) has a constant height along the waist, cutting the belt loose with a knife would be very hard. Further elements shown in the figure, concern the pants (24) with belt loops (23). Fig. 3 shows the worn belt (1) in unlocked state, i.e. with partial access to the internal pouch (4). The unzipped portion (8) allows access to the zone (9), while other zones of the internal pouch (4) remain inaccessible.

[0068] The top drawing of Fig. 4 schematically illustrates an elongated front view on a flexible anti-theft belt (1) in elongated situation, according to an embodiment of the underlying invention.

[0069] The belt (1) is provided with a longitudinal internal pouch (4) wherein personal valuables can be stored. The internal pouch (4) is divided in multiple compartments (10). A compartment (10) is enclosed by the inner belt layer (11), the outer belt layer (12) and a portion of the zipper (5). Sideways they are separated from each other by means of vertical stitched seams (13).

[0070] The belt (1) is rectangular-shaped with height (H) and length (L_B). The upper edge (19) and lower edge (29) of the belt (1) are parallel along the full length (L_B) of the belt (1). Along the upper edge (19) of the outer belt layer (12), a zipper (5) with two sliders (6,7) gives access to the internal pouch (4). The zipper (5) is provided along more than three quarters of the length (L_B) of the belt (1). Therefore, personal belongings can be stored circumferential to the waist. As weight can be distributed better, comfort of carrying valuables with the flexible belt (1) will be improved.

[0071] Each end of the two zipper sliders (6,7) has a through hole (14), wherein a securing system (20), i.e. a hinged ring (21), is received. The zipper (5) is closed by the ring (21) which keeps both zipper sliders (6,7) secured near each other. Hence, access to the multiple compartments (10) of the internal pouch (4) is hindered.

[0072] Further, the belt (1) is provided with a unique identification tag (40). When the belt (1) would get lost, the owner can be found due to the unique identification of the belt (1).

[0073] The middle drawing of Fig. 4 shows that the ring (21) has been opened, in order to move the two zipper

sliders (6,7) away from each other. Here, access is provided to the partial zone (9) of the internal pouch (4). The unzipped portion (8) between the two sliders (6,7) allows access to a partial zone (9) corresponding to a single compartment (10), while other compartments (10) of the pouch (4) remain inaccessible.

[0074] The bottom drawing of Fig. 4 illustrates the back side view showing the inner belt layer (11) of the belt (1). The first end (30) of the belt (1) is provided with a first fastening element (31), i.e. a hook tape (34) at the inner surface (36) of the first end (30). The second end (32) of the belt (1) is provided with a second fastening element (33), i.e. a loop tape (35) at the outer surface (37) of the second end (32).

[0075] The hook tape (34) extends over the full height (H) of the belt (1) and along length L_H of the belt (1). The loop tape (35) also extends over the full height of the belt (1), but along a different length (L_L) than for the hook tape (34). The hook tape (34) can be releasably fastened to the loop tape (35) in a range of positions, thereby allowing an individually adjustable waist length.

[0076] Fig. 5 shows a person wearing the belt (1) of Fig. 4 around his waist. The belt (1) is in the closed state. The hinged ring (21) is hooked through the through holes (14) of the two zipper sliders (6,7), but also through a belt loop (23) of the pants (24). Hereby, the zipper sliders (6,7) are secured in an additional way, thereby preventing access to the stored valuables and improving safety. As the belt (1) does not have a narrowed portion along the waist (i.e. the upper edge (19) and lower edge of the belt (1) are substantially parallel), cutting the belt loose with a knife would be very hard.

[0077] Fig. 6 shows the worn belt (1) in opened state, i.e. with partial access to a single compartment (10) of the internal pouch (4).

[0078] Although the present invention has been illustrated by reference to specific embodiments, it will be apparent to those skilled in the art that the invention is not limited to the details of the foregoing illustrative embodiments, and that the present invention may be embodied with various changes and modifications without departing from the scope thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein. In other words, it is contemplated to cover any and all modifications, variations or equivalents that fall within the scope of the basic underlying principles and whose essential attributes are claimed in this patent application. It will furthermore be understood by the reader of this patent application that the words "comprising" or "comprise" do not exclude other elements or steps, that the words "a" or "an" do not exclude a plurality. Any reference signs in the claims shall not be construed as limiting the respective claims concerned. Similarly, the terms "inner", "out-

er", "upper", and the like are introduced for descriptive purposes and not necessarily to denote relative positions. It is to be understood that the terms so used are interchangeable under appropriate circumstances and embodiments of the invention are capable of operating according to the present invention in orientations different from the one(s) described or illustrated above.

Claims

1. Anti-theft belt (1) suitable to be worn around the waist of a person (2) for safely storing valuables (3), wherein the belt (1) is provided with an internal pouch (4) and a zipper (5) with at least two sliders (6,7), wherein said zipper (5) is suitable to provide access to a partial zone (9) of said pouch (4) of said belt (1) via an unzipped portion (8) between two of said sliders (6,7) while leaving other zones of said pouch (4) inaccessible. 15
2. Belt (1) according to claim 1, wherein said zipper (5) is provided along at least half of the length (L_B) of the belt (1). 20
3. Belt (1) according to claims 1 or 2, wherein said internal pouch (4) is divided in at least two separate compartments (10), said partial zone (9) corresponding to one of said compartments (10). 25
4. Belt (1) according to any of claims 1-3, wherein a compartment (10) is enclosed by an inner belt layer (11), an outer belt layer (12), a portion of said zipper (5) and separated from an adjacent compartment (10) by means of a stitched seam (13). 30
5. Belt (1) according to any of claims 1-4, wherein the upper edge (19) and lower edge (29) of the belt (1) are parallel along the full length (L_B) of the belt (1). 35
6. Belt (1) according to any of claims 1-5, wherein said two zipper sliders (6,7) each comprise a through hole (14) and wherein said belt (1) comprises a securing system (20) suitable to be received in said through hole (14) of said two zipper sliders (6,7) and suitable to releasably secure said zipper sliders (6,7) to each other. 40
7. Belt (1) according to claim 6, wherein said securing system (20) comprises a hinged ring (21). 45
8. Belt (1) according to claim 7, wherein said hinged ring (21) is suitable to be hooked through said through holes (14) of said two zipper sliders (6,7) and through a belt loop (23) of pants (24), when the belt (1) is worn. 50
9. Belt (1) according to claim 7, wherein said securing

system (20) comprises a lock (22).

10. Belt (1) according to any of claims 1-9, wherein a first end (30) of said belt (1) is provided with a first fastening element (31) and a second end (32) of said belt (1) is provided with a second fastening element (33), wherein said first (31) and second fastening elements (33) are suitable to be releasably fastened to each other, thereby releasably fastening said belt (1) around said waist. 5
11. Belt (1) according to claim 10, wherein said first fastening element (31) comprises a hook tape (34) and said second fastening element (33) comprises a loop tape (35). 10
12. Belt (1) according to claim 11, wherein said hook tape (34) is provided along a first length (L_H) of said belt (1), wherein the ratio between said first length (L_H) and said length (L_B) of the belt (1) is situated between 1 % and 25 %, preferably between 3 % and 20 %, more preferably between 4 % and 15 %, most preferably between 5 % and 10 %. 25
13. Belt (1) according to any of claims 1-12, wherein said belt (1) is provided with a unique identification tag (40). 30
14. Belt (1) according to any of claims 1-13, wherein the maximum height (H) of said belt (1) is situated between 5 cm and 50 cm, preferably between 8 cm and 30 cm, more preferably between 10 cm and 20 cm, most preferably between 12 cm and 15 cm. 35
15. Kit comprising:
 - a belt (1) according to any of claims 1-14 wherein said two zipper sliders (6,7) each comprise a through hole (14);
 - a securing system (20) suitable to be received in said through holes (14) of said two zipper sliders (6,7) and suitable to releasably secure said zipper sliders (6,7) to each other. 40

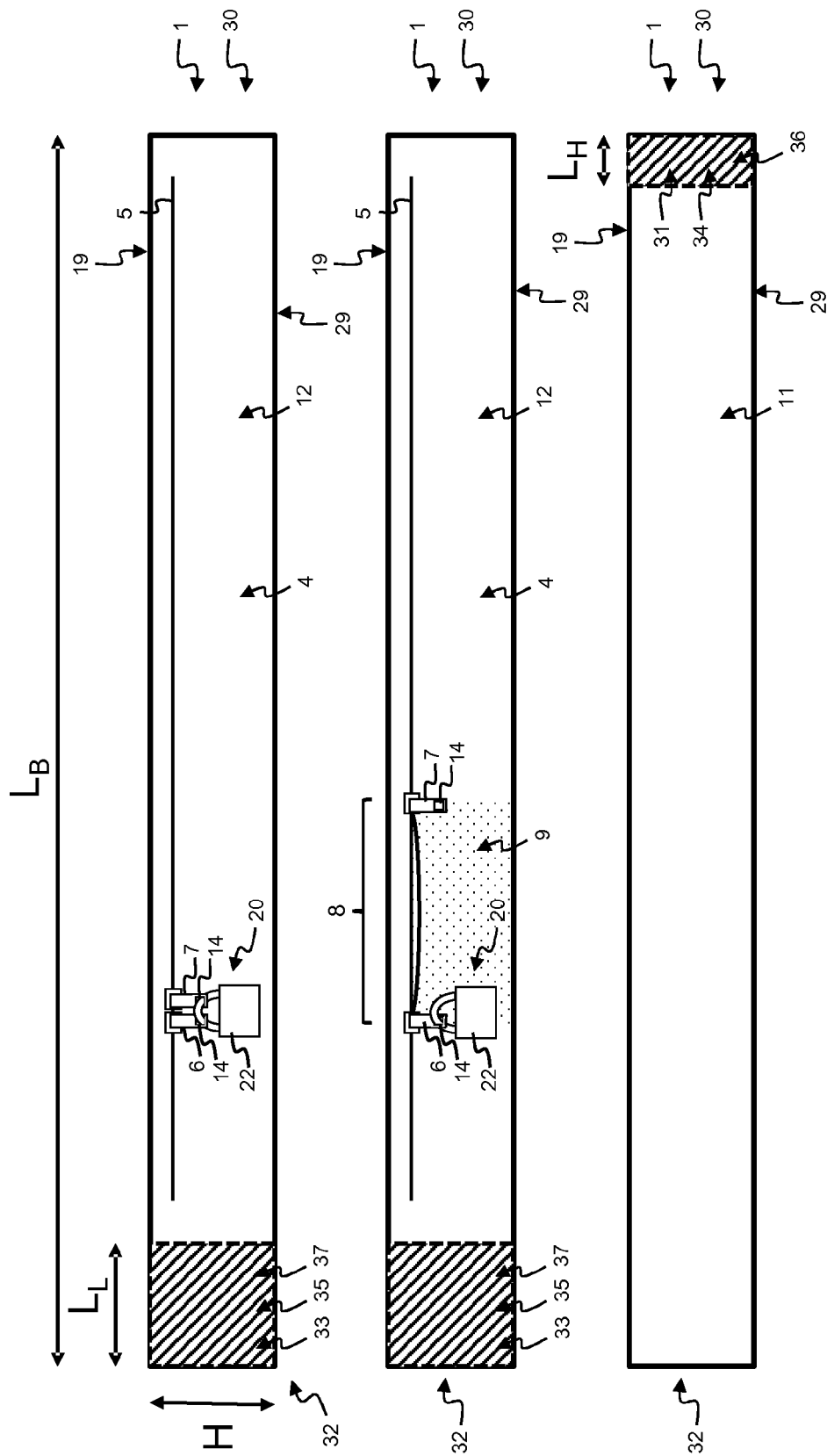
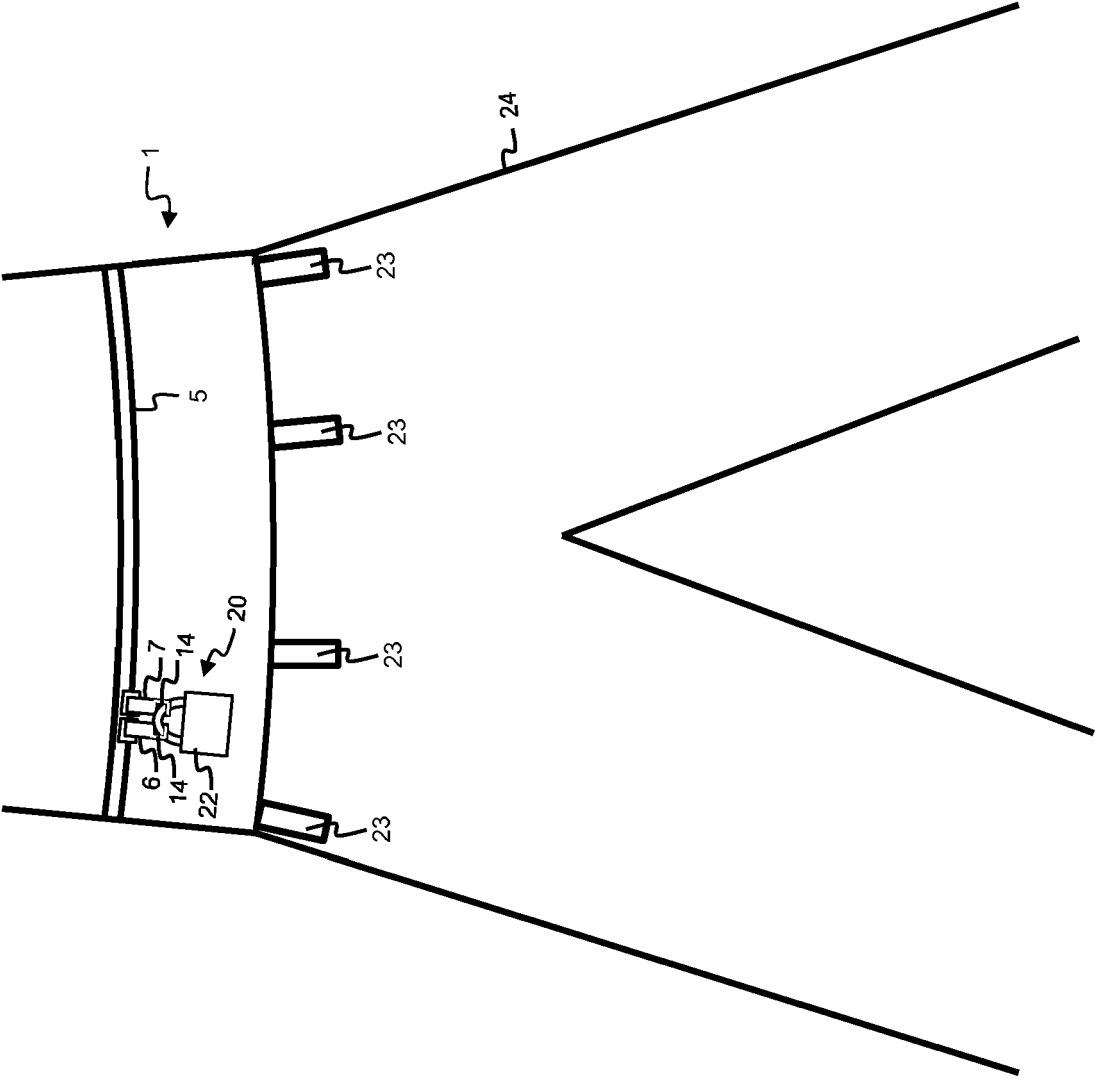


Fig. 1



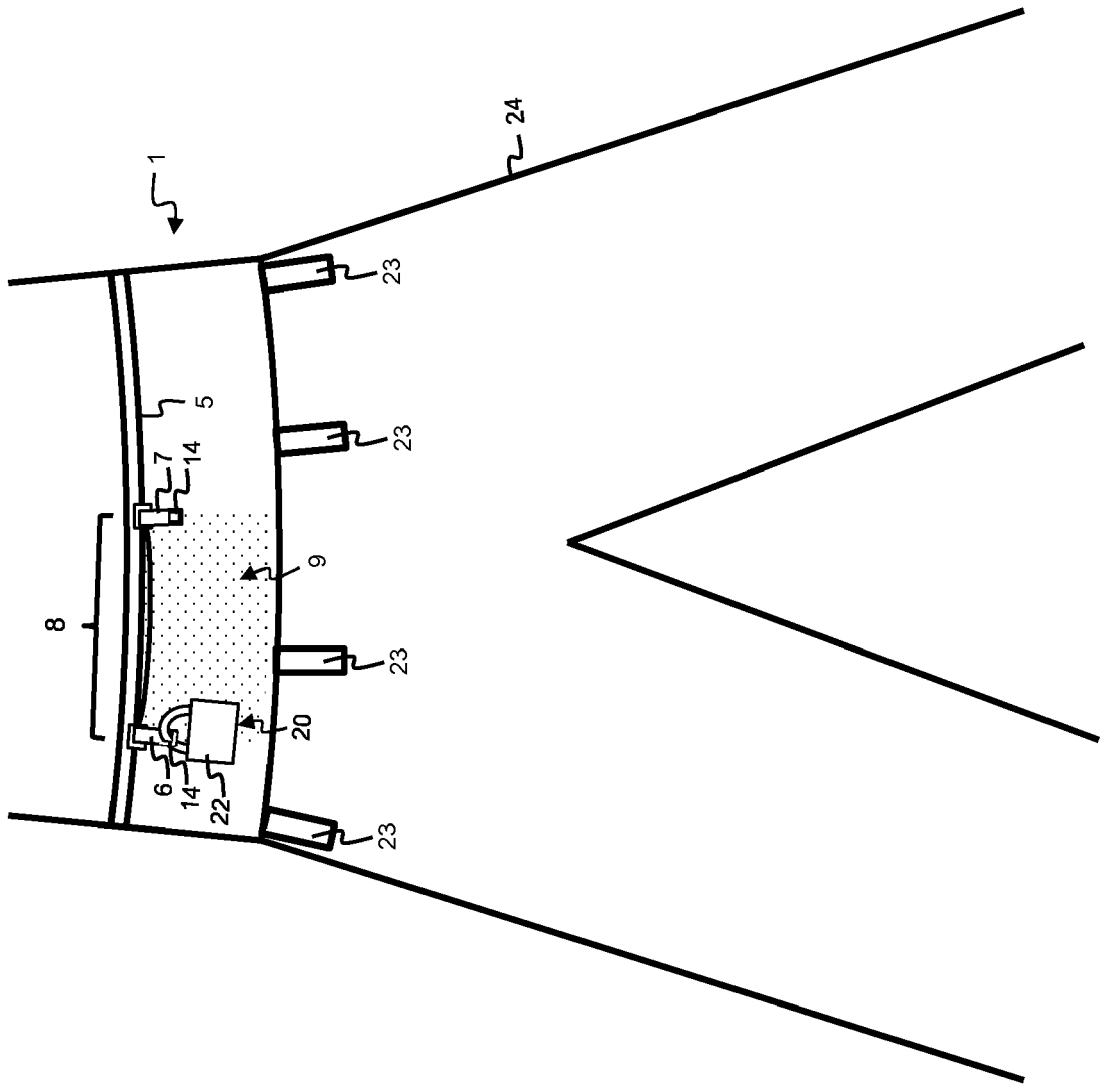


Fig. 3

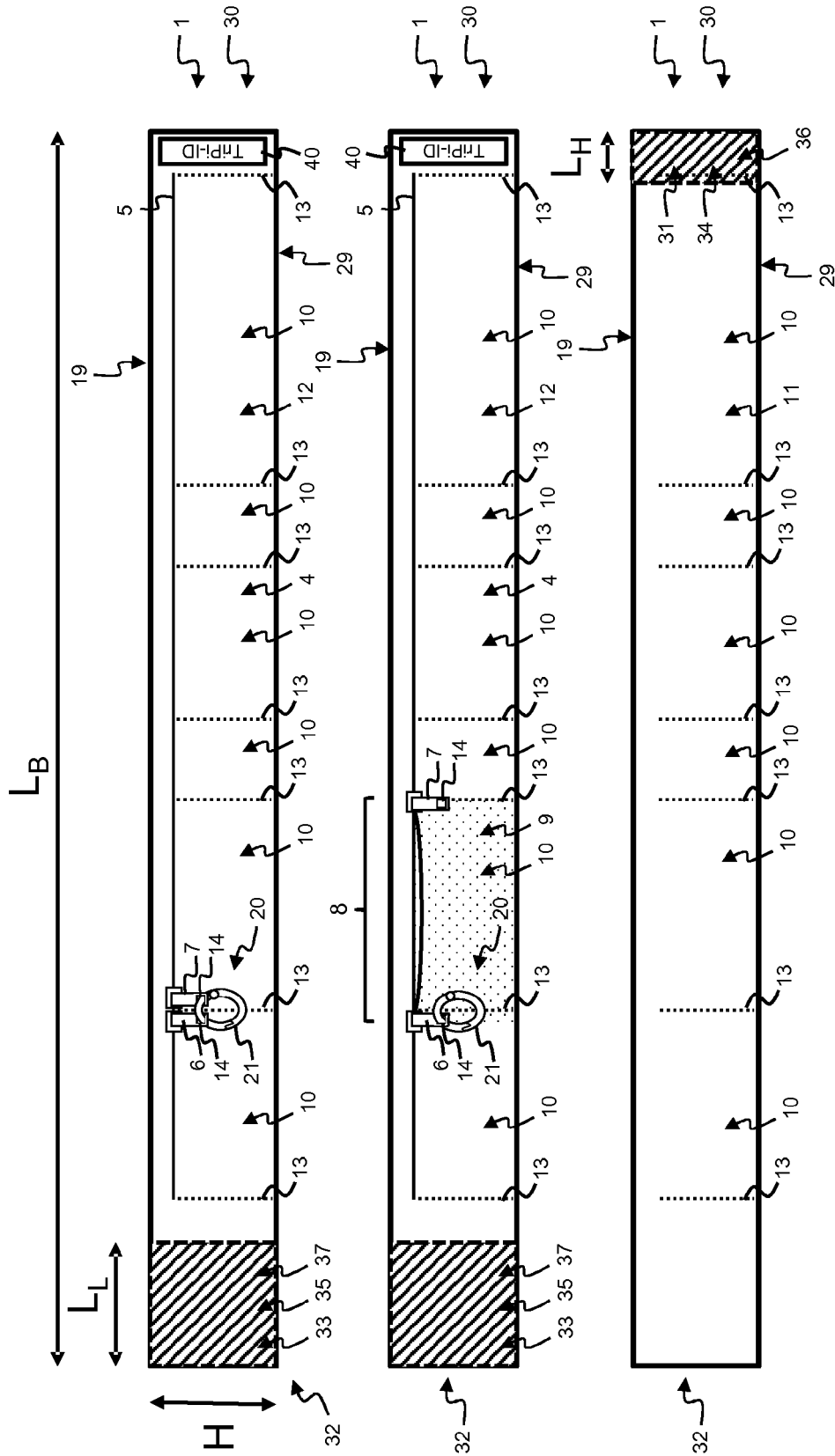


Fig. 4

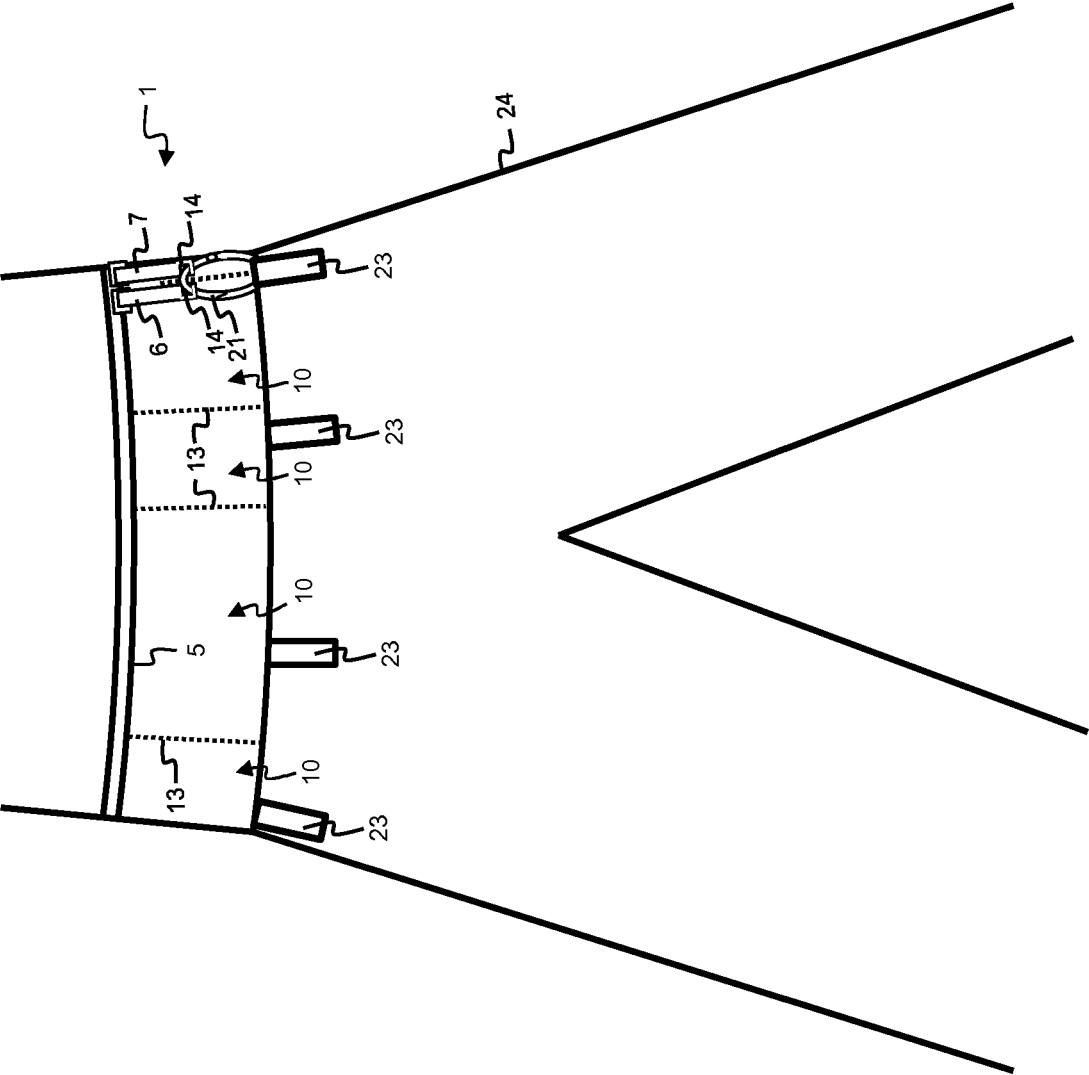


Fig. 5

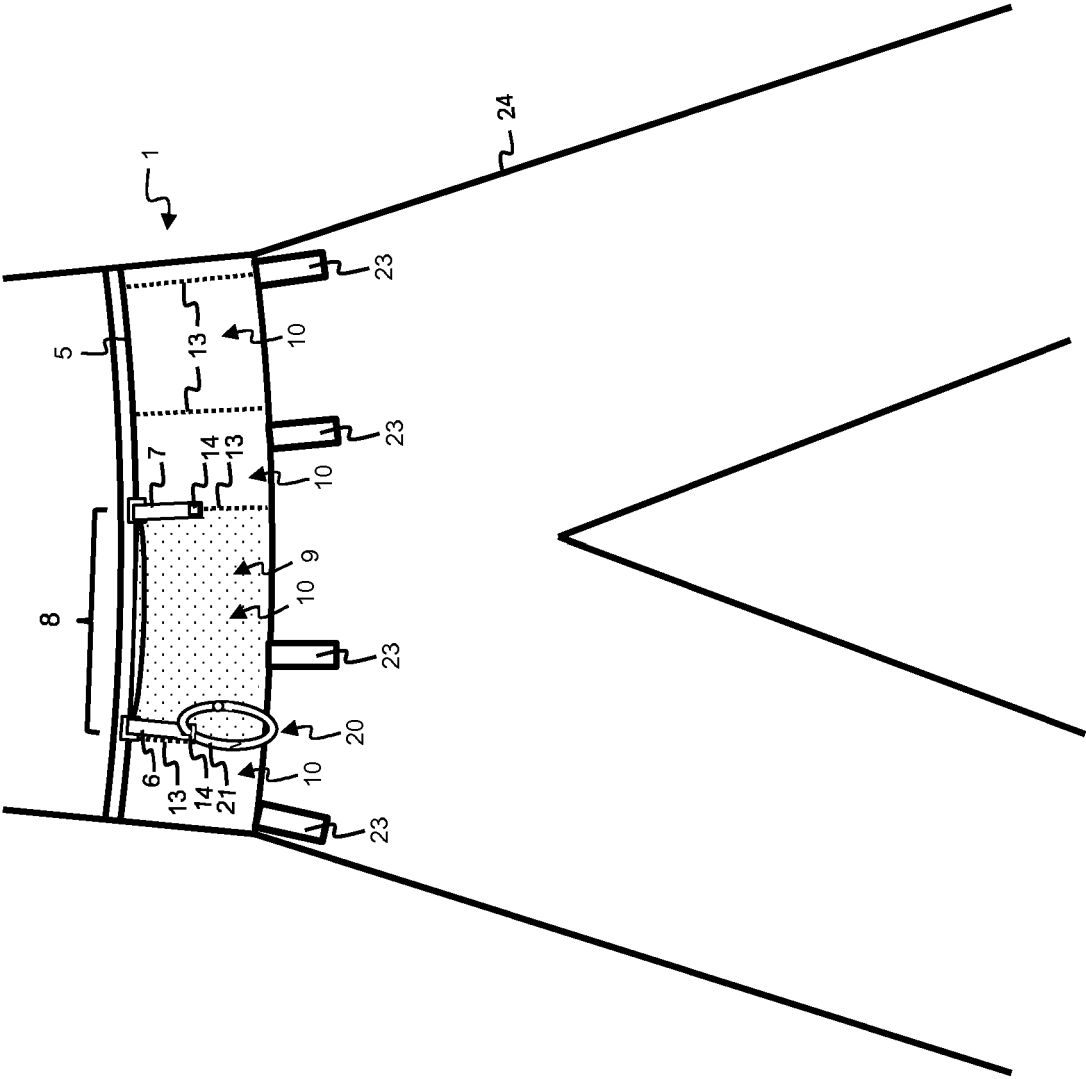


Fig. 6



EUROPEAN SEARCH REPORT

 Application Number
 EP 15 15 3813

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
			A45C A41F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 23 July 2015	Examiner Witkowska-Piela, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 15 15 3813

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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