

(12) PATENT

(19) NO

(11) 337044

(13) **B1** 

**NORWAY** 

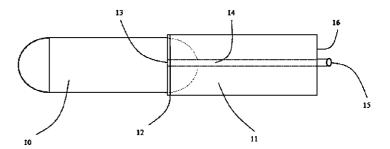
(51) Int CI.

# A61F 13/15 (2006.01)

## **Norwegian Industrial Property Office**

(21)	Application nr.	20150235	(86)	International Filing
				Date and
				Application Number
(22)	Date of Filing	2015.02.18	(85)	Date of Entry into
				National Phase
(24)	Date of Effect	2015.02.18	(30)	Priority
(41)	Publicly Available	2016.01.11		
(45)	Granted	2016.01.11		
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(54)	54) Title A sanitary article comprising an integrated disposal bag, and a method o			
(0.)		thereof	Ji iJiiig C	an integrated disposal bug, and a inclined of disposal
(56)	References	Hiereor		
(30)		US 4182336 A		
	Cited:	US 4605403 A		
<b>(57</b> )	Abstract	US 4003403 A		
(57)	ADSITACE			

The present invention discloses an improved sanitary article (10) comprising an integrated disposal bag (11). The disposal bag can be wrapped inside out over a soiled sanitary article when being attached to the sanitary article body (10) thereby protecting a user from contamination from the soiled sanitary article (10). Further, the present invention comprises also a method of removing a soiled sanitary article (10) being in use according to the present invention.



A sanitary article comprising an integrated disposal bag, and a method of disposal thereof.

#### 5 FIELD OF THE INVENTION

The present invention relates to hygienic products like sanitary pads or similar sanitary articles, and especially to a sanitary article improving hygienic aspects of disposal of soiled sanitary articles, wherein the sanitary article is arranged with an integrated disposal bag being folded before use, wherein a release string integral with the folded disposal bag is attached to a bottom side of the disposal bag, said release string may be protruding out of an opening of the folded bag before use. The present invention is further related to a method of using the disposal arrangement.

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#### BACKGROUND OF THE INVENTION

Sanitary pads, towels, napkins and similar sanitary articles are usually packed and kept inside packages before use, thereby keeping the respective articles clean before use. The package is often of the "overwrap" type. When a user is ready to use the sanitary article, the article is unpacked and removed from the package and then arranged in the undergarment of the user.

A problem with the "overwrap" type of packaging is that when the sanitary article is used there is no simple way of disposal of the soiled sanitary article in a hygienic manner. The user is often forced to pack the article in toilet paper, or simply try to dispose the article directly into a waste bin.

US 20110270210 A1 disclose a sanitary article assembly with an attached integrated disposal sheet, wherein the sanitary article is being structured in such a manner that a user can manually separate the integrated disposal sheet from the article after the article has been soiled, then roll up the article from one end of the article and then enclose the rolled up article by wrapping the disposal sheet around the rolled up article. However, the user still has to manually touch the used sanitary article when removing the article from the undergarment and then

manually roll up the used sanitary article which may provide a situation wherein the hands of the user may be contaminated by the soiled sanitary article.

US 4605403 A disclose a sanitary napkin with an integrated folded disposal bag.

5 When a sanitary napkin is used the disposal bag is unfolded and released from an inactive surface of the sanitary napkin and the used napkin is placed inside the bag before disposal. However, the hand of the user may be soiled when removing the used sanitary article from the undergarment and when inserting the soiled sanitary article into the disposal bag.

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US 4182336 A disclose a pad-type sanitary napkin attached to a sack-like container or bag made of thin, foldable, moisture-proof material. The bag is attached so that it may be opened to a position to receive the napkin. The sanitary napkin is folded by the hand of a user before the napkin is entered inside the disposal bag, the bag is then closed for disposal.

A known problem with the cited prior art when rolling up a soiled sanitary article body is that the absorbed material may be squeezed out together with strong odours from the article body, which is unpleasant. Further, the squeezed out 20 material can end up on the hands of the user being a severe hygienic problem.

Another problem with the cited prior art is that sanitary articles must stay in a fixed position when located inside the undergarment. This is usually achieved by having strips of adhesive material fixing the sanitary article in a correct position in the undergarment in a releasable manner. When for example rolling up a used sanitary article body, the soiled absorbent surface must face upwards leaving the protective inactive surface of the sanitary article body faced downwards. It is the protective surface that has the strips with the adhesive material, and it is this side that is facing downwards in a hand or on a table surface etc. when rolling up the sanitary article body. Therefore, the sanitary article body may be sticking or be fastened onto the hand surface or the table surface thereby making it necessary to use some force when releasing the article body from the surface when rolling up the article body. This necessary force may provide a stretching of the sanitary article body thereby provoking a possible squeezing of the article body when

absorbed by the article may be squeezed out of the article onto a hand of a user or onto a table surface. In any case, this is a hygienic problem.

When a sanitary article body is inserted inside a bag the adhesive stripes of a

5 sanitary article body may be touching and then be stuck on inner sides of the bag
before the whole article body is inside the bag. This may require manual
intervention from the user, for example inserting a hand inside the bag guiding
the article body thereby avoiding the article to stick to the inner sides of the bag.
The probability that the hands of the user may then be contaminated by the soiled
sanitary article is also present in this situation.

Hence, an improved sanitary article would be advantageous, and in particular a more efficient and/or hygienic disposal arrangement would be advantageous.

#### 15 OBJECT OF THE INVENTION

It is a further object of the present invention to provide an alternative to the prior art.

- 20 In particular, it may be seen as an object of the present invention to provide a sanitary article with an integrated disposal bag permitting removal of a soiled sanitary article without being in unprotected manual contact with the soiled sanitary article.
- 25 It is further an object of the present invention to provide a method of removal of a soiled sanitary article from an undergarment having steps protecting a user from contamination from a soiled sanitary article.

### SUMMARY OF THE INVENTION

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Thus, the above described object and several other objects are intended to be obtained in a first aspect of the present invention by providing a sanitary article comprising a firmly attached integrated disposal bag that can be wrapped inside out over the soiled sanitary article when the sanitary article has been used.

The present invention is particularly, but not exclusively, advantageous for obtaining a sanitary article body comprising at least an active absorbent layer on one side, and an inactive protective layer on the other side, comprising an integrated disposal bag having a bottom section being attached to an outside surface of the inactive protective layer on a forward facing section of the sanitary article body, wherein the disposal bag when outstretched is of a length of at least equal or a longer length than the total length of the sanitary article body, wherein the disposal bag is arranged with a rope or band being firmly attached to a centrally located attachment point in a bottom section of the disposal bag.

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The present invention is further advantageous for obtaining a method of disposal of a soiled sanitary article body by a user comprising at least an active absorbent layer on one side, and an inactive protective layer on the other side, being in use and located inside an undergarment of the user, comprising an integrated disposal bag folded on top of an outside surface of the inactive layer in a forward section of the sanitary article body, wherein the disposal bag is arranged with an attached integral rope or band serving as a release string unfolding the folded disposal bag when pulled, the rope or band is protruding out of an opening of the disposal bag when folded, wherein the user perform the method comprising steps of:

- grabbing an end of the rope or band protruding out of the opening of the folded disposal bag with a first-hand,
  - pulling the rope or band such that the disposal bag is stretched out completely,
- continuing pulling the rope or band such that the soiled sanitary article body is pulled away from the undergarment the soiled sanitary article have been located inside during use,
  - when the sanitary article body is completely released from the undergarment, wrapping the disposal bag inside out over the used sanitary article body by grabbing somewhere around the opening of the disposal bag and pulling downwards the disposal bag over the soiled sanitary article body with a second hand while holding back the sanitary article body and the disposal bag with the rope or band with the first hand.

The sanitary article according to the present invention will now be described in more detail with reference to the accompanying figures. The attached figures illustrates examples of embodiments of the present invention and is not to be construed as being limiting to other possible embodiments falling within the scope of the attached claim set.

Figure 1 depicts an outstretched example of embodiment of the present invention.

Figure 2 A depicts a folded example of embodiment of the present invention.

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Figure 2B illustrates details of a folding of a disposal bag according to the present invention.

### DETAILED DESCRIPTION OF AN EMBODIMENT

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Figure 1 discloses an example of embodiment of the present invention. A sanitary article 10 is illustrated comprising at least an active absorbent surface on one side and an inactive protective surface on the other side, as known in the prior art. In Figure 1 the inactive surface is facing upwards. On an end surface (forward edge section) of the inactive surface of the sanitary article 10 a bottom surface of a disposal bag 11 is glued and attached in a fixed manner. In Figure 1 the bag 11 is illustrated unfolded and outstretched stretching outside the sanitary article 10. In this manner the sanitary article is attached hanging outside the bottom section 12 of the disposal bag 11. Inside the disposal bag 11 there may be arranged a rope or band 14 that is glued in one end to a centrally located point 13 on an inside surface of the bottom section 12 of the disposal bag 11, and the other end of the rope or band 14 is protruding outside of the disposal bag 11 via the open opposite end 16 of the disposal bag 11. Optionally, the protruding end of the rope or band 14 can be attached to a ring 15 wherein a finger may be inserted.

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Figure 2A illustrate a sanitary article according to the present invention wherein the disposal bag 11 is folded up on top of the inactive surface of the sanitary article 10. The rope or band 14 is protruding outside of the open end 16 of the disposal bag 11 after folding of the bag 11, and may be optionally attached to the ring 15 illustrated in Figure 1.

Figure 2B illustrate an example of folding of the disposal bag according to the present invention. When folded the disposal bag 11 forms layers that are folded on top of each other. In end sections 18 of the respective layers of the folding the disposal bag 11 may have arranged on the outer surface of the disposal bag small drops of a releasable adhesive material, for example like the glue used on "yellow stickers" as known in prior art. When completely folded the releasable adhesive material keeps the disposal bag 11 in a folded state. There exists also other arrangements known in prior art keeping the folding of the disposal bag 11 intact before use, for example by arranging a protective sheet of thin plastic material covering the folded disposal bag 11 that is easy to tear open when unfolding the disposal bag 11.

When the sanitary article is used and is about to be thrown away, the user can

15 unfold the disposal bag 11 and stretch it out by pulling the rope or band 14

protruding out of the disposal bag 11. It is important to bear in mind that if the
sanitary article is located inside the undergarment such that the folded disposal
bag is facing forward, the user can grip the rope or band 14 even when the
sanitary article is inside the undergarment, for example by inserting a hand inside

20 the undergarment, or when the undergarment is pulled down the legs of the user
exposing the sanitary article 10.

Optionally, the user can grab the ring 16 and stretch out the whole disposal bag 11 while the sanitary article still is attached to the undergarment without touching 25 the sanitary article itself. Since the adhesive stripes discussed above keeps the soiled sanitary article in place inside the undergarment it is possible to apply a limited force on the folded disposal bag when unfolding the disposal bag without releasing the soiled sanitary article itself. When the disposal bag is fully stretched out further pulling of the rope or band 14 will transfer the pulling force down to 30 the attachment point 13 in the bottom section 12 of the disposal bag 11, and the sanitary article can be released from the undergarment without the user touching the undergarment or the sanitary article itself.

When the sanitary article is fully removed from the undergarment, the sanitary article 10 and the disposal bag 11 is hanging in the rope or band 14 from the

hand of the user holding the rope or band 14, or in a finger inside the ring 15. The user can then grab the disposal bag 11 somewhere around the opening 16 and wrap in a downwards movement the disposal bag inside out over the soiled sanitary article. The sanitary article is then completely inside the disposal bag 11 while the rope or band 14 is completely available on the outside of the disposal bag 11. Then the user can roll up the disposal bag 11 with the used sanitary article 10 inside the bag, and when the sanitary bag 11 is rolled up the rope or band 14 can be wind up around the rolled up disposal bag 11 thereby tying the used sanitary article firmly inside the disposal bag 11 before throwing the sanitary towel in a waste bin, for example.

Alternatively, if the used sanitary article is stuck in the undergarment, or for any other reason the user feels it is difficult to pull out the sanitary article 10 from the undergarment, the user can unfold the disposal bag 11 as discussed above, but instead of pulling the rope or band 14 further, the user can instead insert a hand inside the opening 16 of the disposal bag 11 and grab around the end section of the sanitary article the disposal bag 11 is attached to. Then the user can remove the soiled sanitary article while the hand is being protected by the disposal bag 11 enclosing the hand. After removal the user can still wrap the disposal bag 11 inside out over the soiled sanitary article leaving the holding hand free outside the disposal bag 11. Then the rope or band 14 can be used to secure and tie the folded soiled sanitary article inside the disposal bag 11 before throwing away the soiled sanitary article in a waste bin, for example.

An alternative embodiment according to the present invention is made without the rope or band 14 as discussed above. When the disposal bag 11 needs to be stretched out from the folded position on the inactive surface of the sanitary article 10, a user can simply grab somewhere around the opening 16 of the disposal bag 11 and then pull out the disposal bag in its full length. The user can then wrap the disposal bag inside out as described above by inserting a hand inside the disposal bag and gripping and holding back the sanitary article with the hand as discussed above. Instead of using the rope or band 11 to tie together the disposal bag 11, the opening 16 can be arranged with a wrinkling band as known in the prior art closing the opening 16 of the disposal bag 11 when the wrinkling band is pulled.

If a rope or band 14 is attached to the surface of the bottom section 12, the rope of band 14 may be located inside the disposal bag 11 coiled up, and not be protruding outside the opening 16 of the disposal bag 11. In this case, the user can stretch out the disposal bag 11 with a hand as discussed above, and then wrap the disposal bag 11 inside out over the soiled sanitary article 10. When this is done the coiled up rope or band 14 will be located on an outside bottom surface of the wrapped disposal bag 11, and can be used as discussed above to tie up a rolled up soiled sanitary article 10 now being located inside the disposal bag 11.

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Further, the rope or band 14 may alternatively be releasable attached on an inside side surface of the disposal bag 11, stretching from the bottom section 12 to the opening 16 and further out of the disposal bag 11. This arrangement ensure that the end will stay protruding outside the opening 16 of the disposal bag 11 when the folding bag 11 is being folded, and be staying folded when not in use, as well as after the disposal bag 11 has been stretched out completely. When the disposal bag 11 is wrapped inside out the rope or band 14 is at the same time released from the inner side of the disposal bag 11 by the downward movement of the sides of the disposal bag 11, and can be utilized further as discussed above.

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Further, the central point 13 the rope or band 14 is attached to can be located outside the bottom surface 12 of the disposal bag 11. The rope or band 14 can be guided through a sealed opening in the bottom section 12 of the disposable bag 11 and be attached to at least one or more layers, or all layers, of the sanitary article. In this manner the mechanical integrity of the sanitary article may be kept better intact when pulling the rope or band 14.

When the bag is folded this can be done as discussed above, and the unfolding by pulling the rope or band 14 as discussed above can also be performed in a similar 30 manner when the rope or band 14 is attached to layers of the sanitary article 10.

The wrapping inside out of the disposal bag 11 when packing a soiled sanitary article can also be done in a similar manner as discussed above when the rope or band 14 is attached to layers of the sanitary article 10.

As can readily be understood by an ordinary person skilled in the art, the sanitary article 10 according to the present invention may utilize almost any commercial available sanitary article having a body with an active surface, being the absorbent side of the sanitary article, and an inactive protective surface. The 5 attachment of the disposal bag 11 according to the present invention can be post assembled and fastened to the inactive side of the sanitary article with for example a double sided bonding tape by a user. For example, the company 3M has many commercially available types of suitable bonding tapes that can be used according to the present invention. The rope or band 14 can be attached firmly to 10 an inside surface of the bottom section 12 of the disposal bag 11, or the disposal bag can be manufactured without the rope or band 14, as discussed above. Therefore, the disposal bag with or without the rope or band 14 can be manufactured as a standalone product with an attached double sided bonding tape section on an outside surface part of the bottom section 12. The side of the 15 double sided bonding tape facing outward having the applied bonding glue, may be protected with a tear-off cover sheet, as known in prior art, that can be teared off when the disposal bag 11 is about to be attached to an inactive forward located side surface of a sanitary article body. Therefore, it is within the scope of the present invention to have method steps of using the present invention to let a 20 user post assemble a standalone embodiment of the disposal bag 11 on any suitable sanitary article the user prefers to use. The user can fasten the disposal bag 11 at an upper front end part of the inactive surface of the sanitary article body facing forwards when for example the sanitary article is positioned inside the undergarment of the user. The attachment of the disposal bag can be done prior 25 to positioning the sanitary article, or when the sanitary article is positioned inside the undergarment. In the latter case the user can expose an upper surface part of the inactive side of the sanitary article just by partly pulling down the front side of the undergarment exposing an upper part of the inactive side of the sanitary article. Then the user can tear off for example a protective cover sheet exposing 30 the bonding glue and then press the disposal bag onto the upper exposed inactive surface of the sanitary article. Then the sanitary article is ready to be disposed according to respective aspects of the present invention as discussed above. A consequence of this example of embodiment of the present invention is that the post assembly of the disposal bag 11 can wait until the moment when a user 35 actually wants to remove a soiled sanitary article. Since a hand of the user only

touches the undergarment when pulling down the front side of the undergarment, and the other hand is just pressing the disposal bag 11 onto the inactive surface of the sanitary article body, the hygienic aspects of the present invention is fully preserved. Further, the post assembly may also be done before an unused sanitary article is positioned inside an undergarment for use.

Therefore, in accordance with examples of embodiment of the present invention a sanitary article body 10 comprising at least an active absorbent layer on one side, and an inactive protective layer on the other side, comprising an integrated disposal bag 11 having a bottom section 12 being attached to an outside surface of the inactive protective layer on a forward facing section of the sanitary article body 10, wherein the disposal bag 11 when outstretched is of a length of at least equal or a longer length than the total length of the sanitary article body 10, wherein the disposal bag 11 is arranged with a rope or band 14 being firmly attached to a centrally located attachment point 13 in a bottom section 12 of the disposal bag 11.

According to examples of embodiment of the present invention the disposal bag
11 and the rope or band 14 is folded together in layers folded on top of each other
onto a smaller forward located surface section on the inactive side of the sanitary
20 article 10 such that an end of the rope or band 14 opposite the end being firmly
attached to the central point 13 is protruding outside an opening 16 of the
disposal bag 11.

According to examples of embodiment of the present invention the folded layers

of the disposal bag 11 and the rope or band 14 is kept folded and stable on the
inactive surface of the sanitary article 10 by a releasable adhesive material, or a
thin layer of a tearable thin plastic sheet covering the folded disposal bag 11 when
folded.

30 According to examples of embodiment of the present invention the rope or band 14 is located inside the disposal bag 11, and the central attachment point 13 of the rope or band 14 is located on an inside surface of the bottom section 12 of the disposal bag 11.

According to examples of embodiment of the present invention the rope or band 14 is releasable attached to an inside side surface of the disposable bag 11 stretching in a line from the bottom section 12 to the opening 16 of the disposal bag 11.

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According to examples of embodiment of the present invention the rope or band 14 is guided through a sealed hole in the bottom section 12 of the disposal bag 11, wherein the rope or band 14 is attached to at least one layer, or more layers, or all layers of the sanitary article 10.

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According to examples of embodiment of the present invention the rope or band 14 is arranged with a ring 15 attached to the end of the rope or band 14 protruding outside the opening 16 of the disposal bag 11.

- 15 According to examples of embodiment of the present invention a method of disposal of a soiled sanitary article body 10 by a user, being in use and located inside an undergarment of the user, comprising an integrated disposal bag 11 folded on top of a forward located inactive surface of the sanitary article body 10 with an attached integral rope or band 14 serving as a release string unfolding the 20 folded disposal bag 11 when pulled, the rope or band 14 is protruding outside an opening 16 of the disposal bag 11 when folded, wherein the method comprises steps of:
  - grabbing an end of the rope or band 14 protruding outside the opening 16
     of the folded disposal bag 11 with a first-hand,
- pulling the rope or band 14 such that the disposal bag 11 is stretched out completely,
  - continuing pulling the rope or band 14 such that the used sanitary article body 10 is pulled away from an undergarment the used sanitary article have been located inside during use,
- when the sanitary article body 10 is completely released from the undergarment, wrapping the disposal bag inside out over the used sanitary article body 10 by grabbing somewhere around the opening 16 of the disposal bag 11 and pulling downwards the disposal bag 11 inside out over the used sanitary article body 10 A method of disposal of a soiled sanitary article body 10 by a user comprising at least an active absorbent layer on

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one side, and an inactive protective layer on the other side, being in use and located inside an undergarment of the user, comprising an integrated disposal bag 11 folded on top of an outside surface of the inactive layer in a forward section of the sanitary article body 10, wherein the disposal bag 11 is arranged with an attached integral rope or band 14 serving as a release string unfolding the folded disposal bag 11 when pulled, the rope or band 14 is protruding out of an opening 16 of the disposal bag 11 when folded, wherein the user perform the method comprising steps of:

- grabbing an end of the rope or band 14 protruding out of the opening 16 of the folded disposal bag 11 with a first-hand,
- pulling the rope or band 14 such that the disposal bag 11 is stretched out completely,
- continuing pulling the rope or band 14 such that the soiled sanitary article body 10 is pulled away from the undergarment the soiled sanitary article have been located inside during use,
- when the sanitary article body 10 is completely released from the undergarment, wrapping the disposal bag inside out over the used sanitary article body 10 by grabbing somewhere around the opening 16 of the disposal bag 11 and pulling downwards the disposal bag 11 over the soiled sanitary article body 10 with a second hand while holding back the sanitary article body 11 and the disposal bag 11 with the rope or band 14 with the first hand.

According to examples of embodiment of the present invention the rope or band
14 being located outside the disposal bag 11, when the disposal bag 11 have been
wrapped inside out over the soiled sanitary article body 10, is used to tie together
the disposal bag 11 with the soiled sanitary article 10 being inside the disposal
bag 11 before throwing the disposal bag 11 in a waste bin.

30 According to examples of embodiment of the present invention wherein the step of holding back the stretched out disposal bag 11 in the rope or band 14 with a hand of the user is replaced by inserting the hand of the user inside the opening 16 of the stretched out disposal bag 11, and then grabbing around the end section of the sanitary article body the disposal bag 11 is attached to, and then wrapping 35 the disposal bag 11 inside out over the soiled sanitary article body 10.

According to an alternative example of embodiment of the present invention the rope or band 14 is omitted, and instead of pulling the rope or band 14 when stretching out the disposal bag 11, a user can stretch out the disposal bag with an 5 outward bound hand movement.

According to an alternative example of embodiment of the present invention a user is performing a post assembles of the disposal bag (11) onto the outer surface of the inactive layer before removing the soiled sanitary article (10).

Although the present invention has been described in connection with the specified embodiments, it should not be construed as being in any way limited to the presented examples. The scope of the present invention is set out by the accompanying claim set. In the context of the claims, the terms "comprising" or "comprises" do not exclude other possible elements or steps. Also, the mentioning of references such as "a" or "an" etc. should not be construed as excluding a plurality. The use of reference signs in the claims with respect to elements indicated in the figures shall also not be construed as limiting the scope of the invention. Furthermore, individual features mentioned in different claims, may possibly be advantageously combined, and the mentioning of these features in different claims does not exclude that a combination of features is not possible and advantageous.

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## Claims:

1.

A sanitary article body (10) comprising at least an active absorbent layer on one side, and an inactive protective layer on the other side, comprising an integrated disposal bag (11) having a bottom section (12) being attached to an outside surface of the inactive protective layer on a forward facing section of the sanitary article body (10), wherein the disposal bag (11) when outstretched is of a length of at least equal or a longer length than the total length of the sanitary article body (10), wherein the disposal bag (11) is arranged with a rope or band (14) being firmly attached to a centrally located attachment point (13) on a bottom surface section (12) of the disposal bag (11).

2.

The sanitary article according to claim 1, wherein the disposal bag (11) and the rope or band (14) is folded together in layers on top of each other onto a smaller surface on the inactive side of the sanitary article body (10) such that an end of the rope or band (14) opposite the end being firmly attached to the central attachment point (13) is protruding outside an opening (16) of the disposal bag (11) after the folding.

3.

The sanitary article according to claim 2, wherein the folded layers of the disposal bag (11) and the rope or band (14) is kept folded and stable on the inactive surface of the sanitary article body (10) by a releasable adhesive material, or an attached thin layer of a tearable thin plastic sheet covering the folded disposal bag (11) when folded.

4.

The sanitary article according to any claim 1 to 3, wherein the rope or band (14) is located inside the disposal bag (11), and the central attachment point (13) of the rope or band (14) is located on an inside surface of the bottom section (12) of the disposal bag (11).

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5.

The sanitary article according to claim 1, wherein the rope or band (14) is guided through a sealed hole in the bottom section (12) of the disposal bag (11), wherein the rope or band (14) is attached to at least one layer, or more layers, or all layers of the sanitary article body (10).

6.

The sanitary article according to claim 4 or 5, wherein the rope or band (14) is
15 releasable attached to an inside side surface of the disposable bag (11) stretching
in a line from the bottom section (12) to the opening (16) of the disposal bag
(11).

7.

20 The sanitary article according to any claim 1 to 6, wherein the rope or band (14) is arranged with a ring (15) attached to the end of the rope or band (14) protruding outside the opening (16) of the disposal bag (11).

8.

25 The sanitary article according to claim 1, wherein the rope or band (14) is omitted while a section of an opening (16) of the disposal bag (11) is arranged to be engaged by a hand of a user.

9.

30 A method of disposal of a soiled sanitary article body (10) by a user comprising at least an active absorbent layer on one side, and an inactive protective layer on the other side, being in use and located inside an undergarment of the user, comprising an integrated disposal bag (11) folded on top of an outside surface of the inactive layer in a forward section of the sanitary article body (10), wherein 35 the disposal bag (11) is arranged with an attached integral rope or band (14)

serving as a release string unfolding the folded disposal bag (11) when pulled, the rope or band (14) is protruding out of an opening (16) of the disposal bag (11) when folded, wherein the user perform the method comprising steps of:

- grabbing an end of the rope or band (14) protruding out of the opening
   (16) of the folded disposal bag (11) with a first-hand,
- pulling the rope or band (14) such that the disposal bag (11) is stretched out completely,
- continuing pulling the rope or band (14) such that the soiled sanitary article body (10) is pulled away from the undergarment the soiled sanitary article have been located inside during use,
- when the sanitary article body (10) is completely released from the undergarment, wrapping the disposal bag inside out over the used sanitary article body (10) by grabbing somewhere around the opening (16) of the disposal bag 11 and pulling downwards the disposal bag (11) over the soiled sanitary article body (10) with a second hand while holding back the sanitary article body (11) and the disposal bag (11) with the rope or band (14) with the first hand.

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20 The method according to claim 9, wherein the rope or band (14) being exposed outside the disposal bag (11) when the disposal bag (11) have been wrapped inside out over the soiled sanitary article body (10), is used to tie together the disposal bag (11) with the soiled sanitary article (10) being inside the disposal bag (11) before throwing the disposal bag (11) in a waste bin.

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11.

The method according to claim 9, wherein the step of holding back the stretched out disposal bag (11) in the rope or band (14) by the first hand is replaced by inserting the first hand inside the opening (16) of the stretched out disposal bag (11), and then grabbing around the end section of the sanitary article body (10) the disposal bag (11) is attached to with the first hand, and then wrapping the disposal bag (11) inside out over the soiled sanitary article body (10) with the second hand.

The method according to claim 9, wherein the step of grabbing an end of the rope or band (14) with the first hand when stretching out the disposal bag (11) is replaced by engaging the first hand somewhere around the opening (16) of the disposal bag (11) and then stretch out the disposal bag (11) from the folded position with an outward bound movement of the engaged hand.

13.

The method according to claim 9 or 11, wherein the user is performing a step of post assemble of the disposal bag (11) onto the outer surface of the inactive layer before removing the soiled sanitary article (10).

#### **PATENTKRAV**

1.

- 5 Hygieneartikkel-legeme (10) omfattende i det minste et aktivt absorberende lag på én side, og et inaktivt beskyttende lag på en andre side, k a r a k t e r i s e r t v e d å omfatte en integrert avfallspose (11) som har en bundel (12) som er festet til en utvendig overflate av det inaktivt beskyttende laget på en forovervendt del av hygieneartikkel-legemet (10), der avfallsposen (11), når den er strukket ut, har en lengde som er minst lik eller større enn lengden av den totale lengden av hygieneartikkel-legemet (10), der avfallsposen (11) er anordnet med et rep eller et bånd (14) som er fast forbundet til et sentralt plassert festepunkt (13) på en flate i bundelen (12) av avfallsposen (11).
- 15 2.
  Hygieneartikkel-legeme (10) ifølge krav 1, hvor avfallsposen (11) og tauet eller båndet (14) er brettet sammen lagvis oppå hverandre på en mindre overflate av den inaktive siden av hygieneartikkel-legemet (10) slik at en ende av tauet eller båndet (14) i motsatt ende av den enden som er fast festet til det sentrale
  20 festepunkt (13) stikker ut utenfor en åpning (16) av avfallsposen (11) etter foldingen.
- Hygieneartikkel-legeme (10) ifølge krav 2, hvor de foldede lagene av avfallsposen
   (11) og tauet eller båndet (14) holdes foldet og stabilt på den inaktive overflaten av hygieneartikkel-legemet (10) av et frigjør-bart klebemiddelmateriale, eller av et tynt lag med en avrivbar tynn plastfolie som dekker den foldede avfallsposen (11) når den er sammenfoldet.
- 4.
  Hygieneartikkel-legeme (10) ifølge et av kravene 1 til 3, hvor tauet eller båndet
  (14) er plassert på innsiden av avfallsposen (11), og det sentrale festepunkt (13)

av tauet eller båndet (14) er plassert på en innvendig overflate av bundelen (12) av avfallsposen (11).

5 5.

Hygieneartikkel-legeme ifølge krav 1, hvor tauet eller båndet (14) er ført gjennom et forseglet hull i bundelen (12) av avfallsposen (11), der tauet eller båndet (14) er festet til minst ett lag, eller flere lag, eller alle lag av hygieneartikkel-legemet (10).

10 6.

Hygieneartikkel-legeme ifølge krav 4 eller 5, hvor tauet eller båndet (14) er avtakbart festet til en indre sideflate av avfallsposen (11) langs en linje som strekker seg fra bunnseksjonen (12) til åpningen (16) av avfallsposen (11).

**15** 7.

Hygieneartikkel-legeme ifølge et av kravene 1 til 6, hvor tauet eller båndet (14) er anordnet med en ring (15) festet til enden av tauet eller båndet (14) som rager utenfor åpningen (16) av avfallsposen (11).

20 8.

Hygieneartikkel-legeme ifølge krav 1, hvor tauet eller båndet (14) er utelatt, mens en del av en åpning (16) av avfallsposen (11) er innrettet til å gripes av en hånd til en bruker.

25 9.

Fremgangsmåte for håndtering av et brukt hygieneartikkel-legeme (10) omfattende minst et aktiv absorberende lag på én side, og et inaktivt beskyttende lag på en andre side, som er i bruk av en bruker, og som er plassert inne i brukerens undertøy, som omfatter en integrert avfallspose (11) som er brettet lagvis på toppen av en utvendig overflate av det inaktive laget i en fremre del av hygieneartikkel-legemet (10), hvor avfallsposen (11) er anordnet med et tilkoblet integrert tau eller bånd (14) som tjener som en frigjøringsstreng som bretter ut den

brettede avfallsposen (11) når den blir trukket i, tauet eller båndet (14) stikker ut av en åpning (16) av avfallsposen (11) når den er brettet, k a r a k t e r i s e r t v e d at fremgangsmåten omfatter trinnene:

- å gripe om en ende av tauet eller båndet (14) som rager ut av åpningen (16) av
  5 den brettede avfallsposen (11) med en første hånd,
  - å trekke i tauet eller båndet (14) slik at avfallsposen (11) blir strukket helt ut,
  - å fortsette å trekke i tauet eller båndet (14) slik at det brukte hygieneartikkellegemet (10) blir trukket bort fra undertøyet det brukte hygieneartikkel-legemet (10) er plassert inne i under bruk,
- når hygieneartikkel-legemet (10) er helt frigjort fra undertøyet, å brette avfallsposen fra innsiden og ut over det brukte hygieneartikkel-legemet (10) ved å gripe et sted rundt åpningen (16) av avfallsposen 11 og å trekke nedover til avfallsposen (11) er trukket over det brukte hygieneartikkel-legemet (10) med en andre hånd, mens den første hånden holder tilbake hygieneartikkel-legemet (10)
   og avfallsposen (11) med tauet eller båndet (14).

10.

Fremgangsmåten ifølge krav 9, hvor tauet eller båndet (14) som er synlig utenfor avfallsposen (11) når avfallsposen (11) er brettet over det brukte hygieneartikkel-legemet (10), blir brukt til å knyte sammen avfallsposen (11) med det brukte hygieneartikkel-legemet (10) som er inne i avfallsposen (11), før avfallsposen (11) blir kastet i en søppelbøtte.

11.

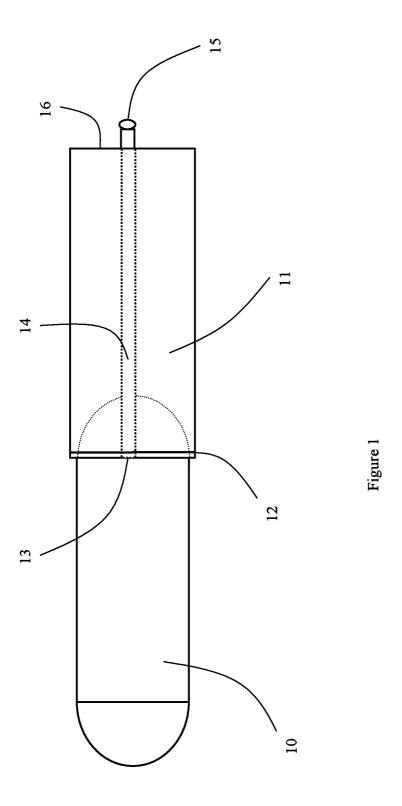
25 Fremgangsmåten ifølge krav 9, hvor trinnet med å holde tilbake den utstrukkede avfallsposen (11) med tauet eller båndet (14) med den første hånden, er erstattet med at den første hånden stikkes inn i åpningen (16) av den utstrukkede avfallsposen (11), og som deretter griper rundt endedelen av hygieneartikkellegemet (10) som avfallsposen (11) er festet til, og deretter å brette avfallsposen (11) ut over det brukte hygieneartikkel-legemet (10) med den andre hånden.

12.

Fremgangsmåten ifølge krav 9, hvor trinnet med å gripe en ende av tauet eller båndet (14) med den første hånden for å strekke ut avfallsposen (11) er erstattet ved å gripe med den første hånden sted rundt åpningen (16) av avfallsposen (11), og deretter strekke ut avfallsposen (11) fra den foldede posisjonen med en utover rettet bevegelse av den gripende hånden.

13.

10 Fremgangsmåten ifølge krav 9 eller 11, hvor brukeren utfører et trinn med ettermontering av avfallsposen (11) på den ytre overflaten av det inaktive laget før fjerning av det brukte hygieneartikkel-legemet (10).



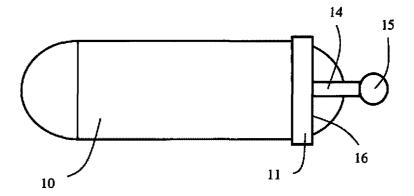


Figure 2A

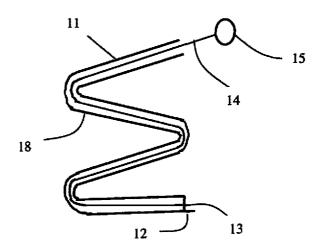


Figure 2B