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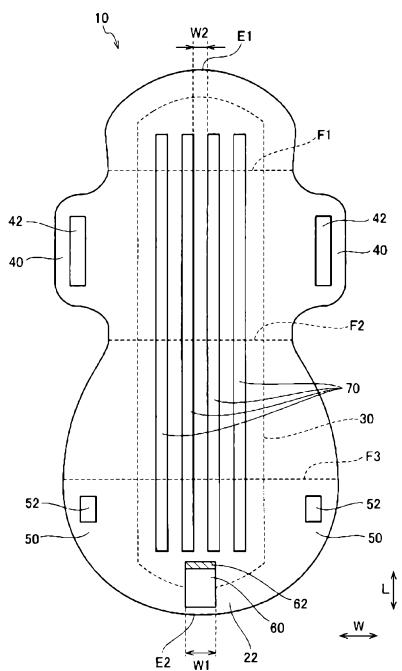
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(54) Title: ABSORBENT ARTICLE

(54) 発明の名称: 吸收性物品



(57) Abstract: Provided is an absorbent article comprising an adhesive part on a non-skin-facing side, the article being capable of being kept in a rolled-up state after use, and of reducing uncomfortable or unpleasant sensations during use. An absorbent article (10) comprises a front-back direction (L), a widthwise direction (W) orthogonal to the front-back direction (L), a rear surface sheet (22) facing a side opposite a wearer's skin, and an adhesive part (70) provided on a non-skin-facing side of the rear surface sheet (22). The absorbent article (10) further comprises a tape member (60) disposed on the non-skin-facing side of the rear surface sheet (22) and to the inside of the outer edge of the absorbent article (10). The tape member (60) is configured so as to be capable of extending beyond the outer edge of the absorbent article (10).

(57) 要約: 非肌面側に粘着部を有する吸收性物品であって、使用後に丸めた状態で維持することができ、かつ使用中の違和感や不快感を低減することができる吸收性物品を提供する。吸收性物品(10)は、前後方向(L)と、前後方向(L)に直交する幅方向(W)と、着用者の肌とは反対側に向けられる裏面シート(22)と、裏面シート(22)の非肌面側に設けられた粘着部(70)と、を有する。吸收性物品(10)は、裏面シート(22)の非肌面側に、吸收性物品(10)の外縁よりも内側に配置されたテープ部材(60)をさらに有する。テープ部材(60)は、吸收性物品(10)の外縁よりも外側に延出可能に構成されている。



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DESCRIPTION

[Title of Invention]: ABSORBENT ARTICLE

[TECHNICAL FIELD]

[0001]

The present invention relates to an absorbent article, such as a sanitary napkin, a panty liner, a breast milk pad, an adult incontinence pad, a fecal pad, or a sweat release sheet, which includes an adhesive portion on a backsheet side to be fixed on a garment.

[BACKGROUND ART]

[0002]

An absorbent article such as a sanitary napkin or a panty liner is attached to the inner side of a wearing article worn by the wearer during use. A typical absorbent article attached to the inner side of a wearing article includes an adhesive portion for preventing deviation of the absorbent article with respect to the wearing article. This adhesive portion is provided on the surface opposite to the skin surface side (which faces the skin of the wearer) of the absorbent article. In such an absorbent article, when the worn article removed from the worn article after use is rolled up in a longitudinal direction, the adhesive portion hits the skin surface of the absorbent article. However, a body fluid adheres to the skin surface (surface sheet) of the absorbent article after use and the body fluid disturbs bonding between the adhesive portion and the surface sheet and prevents compactly rolling up of the absorbent article.

[0003]

Patent Literature 1 discloses a sanitary napkin with a tape portion for post-treatment. The sanitary napkin includes a napkin absorbent surface facing the skin of the wearer during use and a napkin guard surface facing the undergarment at the time of use. An adhesive tape for bonding the sanitary napkin to the undergarment is provided on the napkin guard surface. Further, the post-treatment tape portion is provided in a portion projecting outward from the napkin absorbent surface in the longitudinal direction of the napkin. In addition, the tape portion for post-treatment is directed in the same direction as that of the napkin absorbent surface, that is, in the direction of the skin of a wearer.

[CITATION LIST]

[PATENT LITERATURE]

[0004]

Patent Literature 1: Japanese Unexamined Utility Model Publication No. H04-35422

[SUMMARY OF INVENTION]

[0005]

In the sanitary napkin described in Patent Literature 1, the tape portion for post-treatment is directed in the same direction as the direction of the napkin absorbent surface. The tape portion for post-treatment comes into contact with the skin of the wearer during use of the sanitary napkin. Therefore, the wearer is given discomfort or uncomfortable feeling.

[0006]

Therefore, it is desired to provide an absorbent article that includes an adhesive portion on the non-skin surface side. The absorbent article can be maintained in a rounded state after use and reduce discomfort or uncomfortable feeling during use.

[0007]

An absorbent article according to an embodiment includes front-back direction, a width direction orthogonal to the front-back direction, a backsheet facing a side opposite to skin of a wearer, and an adhesive portion provided on a non-skin surface side of the backsheet, in which the absorbent article further includes a tape member disposed inside an outer edge of the absorbent article on the non-skin surface side of the backsheet, and the tape member is configured to be extendable to the outside of the outer edge of the absorbent article.

[BRIEF DESCRIPTION OF DRAWINGS]

[0008]

Fig. 1 is a plan view of an absorbent article according to a first embodiment when seen from the skin surface side.

Fig. 2 is a plan view of the absorbent article according to the first embodiment when seen from the non-skin surface side.

Fig. 3 is a perspective view of the absorbent article according to the first embodiment when rolled up in a front-back direction.

Fig. 4 is a plan view of an absorbent article according to a second embodiment when seen from the non-skin surface side.

Fig. 5 is a plan view of an absorbent article according to a third embodiment when seen from the non-skin surface side.

Fig. 6 is a perspective view of the absorbent article according to the third embodiment when rolled up in a front-back direction.

Fig. 7 illustrates the absorbent article according to the third embodiment when taped with a tape member.

[DESCRIPTION OF EMBODIMENTS]

[0009]

According to the present specification and the accompanying drawings, at least the

following matters will be disclosed.

[0010]

An absorbent article according to an embodiment includes front-back direction, a width direction orthogonal to the front-back direction, a backsheet facing a side opposite to skin of a wearer, and an adhesive portion provided on a non-skin surface side of the backsheet, in which the absorbent article further includes a tape member disposed inside an outer edge of the absorbent article on the non-skin surface side of the backsheet, and the tape member is configured to be extendable to the outside of the outer edge of the absorbent article.

[0011]

In this aspect, the user can extend the tape member to the outside of the outer edge of the absorbent article after rolling up the absorbent article in the front-back direction after use. In use, the body fluid such as menstrual blood does not adhere to the tape member, because the tape member is disposed inside of the outer edge of the absorbent article on the non-skin surface side of the backsheet. After the use of the absorbent article, the user can maintain the absorbent article in a rounded state by attaching the tape member extending outward to the adhesive portion provided in another portion of the backsheet. Since the body fluid such as menstrual blood does not adhere to the tape member, a bonding force between the tape member and the adhesive portion is prevented and, accordingly, the absorbent article can be maintained in a small rounded state be able to.

[0012]

The absorbent article is rolled up with the surface to which the body fluid, such as menstrual blood, is adhered facing inside, so that the body fluid does not adhere to the surface of the rolled-up absorbent article. Thus, the user can handle the absorbent article cleanly after use.

[0013]

Also, the user can temporality put the absorbent article on a nearest small space after use in a small rounded state. Therefore, the user can attach a new absorbent article to the wearing article such as the underwear, discard the used absorbent article into the garbage bin or the like after wearing underwear and clothes. On the other hand, in a case where there is no garbage bin near the absorbent article, the user can put the small rounded absorbent article in a bag and bring it back.

[0014]

Furthermore, during use of the absorbent article, the tape member is provided on the non-skin surface side of the backsheet and does not extend outward from the outer edge

of the absorbent article, so that the tape member does not directly hit the skin of the wearer. This reduces discomfort and uncomfortable feeling during use.

[0015]

According to a preferred aspect, the absorbent article includes at least two folding lines extending in the width direction, and the tape member is provided in front of the foremost folding line or behind the rearmost folding line.

[0016]

Some users may start rolling up the absorbent article after use along the folding line in the width direction when rolling up the absorbent article after use. In this case, a region in foremost of the front folding line or behind the rearmost folding line of the at least two folding lines may be exposed on the surface of the rolled-up absorbent article and located on a terminal side of the rolling direction. Thus, the tape member is located at the position exposed on the terminal side in the rolling direction, so that the user can easily recognize the tape member and easily attach the tape member to the adhesive portion in the rounded state of the absorbent article.

[0017]

According to a preferred embodiment, the tape member is disposed within a range of one-third of a length of the absorbent article in the front-back direction from the edge of the absorbent article in the front-back direction.

[0018]

With the intention of concealing the body fluid adhering to the skin surface of the absorbent article, the user may loosely roll up the absorbent article after use such that substantially one-third of the region of the absorbent article is located inside (like tri-fold or quarto). In this case, one-third of the length of the absorbent article in the front-back direction from the edge of the absorbent article in the front-back direction corresponds to the terminal region in the rolling direction in the region exposed on the surface of the rolled-up absorbent article. Since the tape member is disposed at the exposed position on the terminal side in the rolling direction, the user can easily recognize the tape member and easily attach the tape member in the rounded state of absorbent article.

[0019]

According to a preferred embodiment, the tape member is positioned within a range of 15% of the length of the absorbent article in the front-back direction from the edge of the absorbent article in the front-back direction.

[0020]

With the intention of concealing the body fluid adhering to the skin surface of the

absorbent article, the user may tightly roll up the absorbent article after use such that about 10% to 15% of the length of the absorbent article in the front-back direction from the edge of the absorbent article in the front-back direction corresponds to the terminal region in the rolling direction of the region exposed on the surface of the rolled-up absorbent article. Since the tape member is disposed at the exposed position on the terminal side in the rolling direction, the user can easily recognize the tape member and easily attach the tape member in the rounded state of absorbent article.

[0021]

According to a preferred embodiment, the tape member is configured to be extendable to the front of the front edge of the absorbent article or behind the rear edge of the absorbent article.

[0022]

The user usually starts rolling up the absorbent article after use in the front-back direction from the front side or the rear side. Since the tape member is configured to be extendable to the front of the front edge of the absorbent article or behind the rear edge of the absorbent article, the user can extend and attach the tape member in the rolling direction.

[0023]

Approximately 80% of the users start rolling up the absorbent article from the front side after use. Therefore, it is more preferable to configure that the tape member is extendable rearward behind the rear edge of the absorbent article.

[0024]

According to a preferred embodiment, the adhesive portion is provided on an imaginary line extending from the tape member in the front-back direction.

[0025]

When the tape member is extended in front of the front edge of the absorbent article or behind the rear edge of the absorbent article, and the tape member is made to extend straight along the rolled-up absorbent article, the tape member is made to adhere to the adhesive portion. Therefore, the user can easily maintain the absorbent article in the rounded state without pulling the tape member obliquely toward the position of the adhesive portion.

[0026]

According to a preferred aspect, a plurality of adhesive portions are provided at intervals in the width direction, and the width of the tape member in the width direction is larger than each interval between the adhesive portions in the width direction.

[0027]

This eliminates the possibility that no adhesive portion exists in a place where the tape member reaches when the user pulls out the tape member. Therefore, the user can easily attach the tape member to the adhesive portion.

[0028]

According to a preferred embodiment, the absorbent article includes a hip flap that bulges outward in the width direction behind a region facing the excretory opening of the wearer, and the tape member is provided on the hip flap and configured such that the tape member is extendable outward from the outer edge of the hip flap in the width direction.

[0029]

The hip flap is located in the rear portion of the absorbent article. Approximately 80% of the users start rolling up the absorbent article from the front side after use. Therefore, the tape member is exposed on the surface of the rolled-up absorbent article. The user extends the tape member from the hip flap to the outside in the width direction and adheres the tape member to the adhesive portion provided at another position of the backsheet, thereby maintaining the absorbent article in the rounded state.

[0030]

In addition, the hip flap is a portion bulging in the width direction and covers the side surface of the rolled-up absorbent article when attaching the tape member to the adhesive portion. This prevents leakage of the body fluid from the side of the rolled-up absorbent article. Since the hip flap covers the side surface of the rolled-up absorbent article, the body fluid adhered to the skin surface side of the absorbent article is concealed, thus improving cleanliness.

[0031]

According to a preferred aspect, the adhesive portions are provided at intervals in the front-back direction, and a width of the tape member in the front-back direction is larger than an interval between the adhesive portions in the front-back direction.

[0032]

This eliminates the possibility that no adhesive portion exists in a place where the tape member reaches when the user pulls out the tape member. Therefore, the user can easily attach the tape member to the adhesive portion.

[0033]

According to a preferred embodiment, at least a part of the adhesive portion is disposed in front of the tape member.

[0034]

Since the adhesive portion exists in front of the tape member, the user can maintain the absorbent article in the rounded state, when the user attaches the tape member extending from the hip flap outward in the width direction to the adhesive portion that exists at another position of the backsheet.

[0035]

According to a preferred aspect, at least a part of the adhesive portion is provided within the range of two-thirds of the length of the absorbent article in the front-back direction from one edge of both edges of the absorbent article in the front-back direction closer to the tape member.

[0036]

The user may loosely roll up the absorbent article after use such that substantially one-third of the region of the absorbent article is located inside (like tri-fold or quarto). In this case, the range of two-thirds of the length of the absorbent article in the front-back direction from the edge of the absorbent article in the front-back direction is exposed on the surface of the rounded absorbent article. Since the adhesive portion is disposed in this exposed region, the user can easily attach the tape member to the adhesive portion.

[0037]

According to a preferred aspect, at least a part of the adhesive portion is provided within four-fifth of the length of the absorbent article in the front-back direction from one edge of both edges of the absorbent article in the front-back direction closer to the tape member.

[0038]

When the user tightly rolls up the absorbent article after use, about 20% to 30% of the length of the absorbent article in the front-back direction from the edge of the absorbent article in the front-back direction is exposed on the surface of the rounded absorbent article. Since the adhesive portion is disposed in this exposed region, the user can easily attach the tape member to the adhesive portion.

[0039]

According to a preferred embodiment, the tape member includes a fixing portion fixed to the non-skin surface of the absorbent article, and a tip end portion of the tape member is directed a side opposite to the fixed portion.

[0040]

When the tape member is extended to the outside beyond the outer edge of the absorbent article, force is exerted only on the fixed portion of the tape member in the

extending direction. This minimizes the force exerted on the fixed portion to maintain the fixing strength of the tape member.

[0041]

According to a preferred embodiment, at least one of a surface of the tape member touching the backsheet and a surface of the backsheet touching the tape member is subjected to an antistatic treatment.

[0042]

This prevents the tape member from being stuck to the backsheet due to static electricity. Therefore, floating of the tape member from the backsheet when the absorbent article is rolled up, so that the user can manipulate the tape member more easily.

[0043]

According to a preferred embodiment, the absorbent article includes an absorber provided on the skin side rather than the backsheet, and the tape member includes a fixed portion fixed to the non-skin surface side of the absorbent article, in which at least a part of the fixed portion overlaps the absorber in the thickness direction.

[0044]

The region where the absorber is present becomes a region having particularly high rigidity in the absorbent article. Since the fixed portion of the tape member overlaps the absorber in the thickness direction, the fixing portion of the tape member located in the region having a high rigidity curls tightly together with the absorbent article when the absorbent article is wound. Thus, the fixed portion of the tape member is firmly curved, so that the free end of the tape member is more likely to float from the backsheet. Therefore, the user can pinch and operate the tape member more easily.

[0045]

According to a preferred aspect, the absorbent article includes an absorber provided on the skin surface side of the backsheet, and the tape member overlaps, in the thickness direction, an embossment formed on the absorber or a low basis weight region provided in the absorber.

[0046]

When the tape member overlaps, in the thickness direction, the embossment formed on the absorber or the low basis weight region provided on the absorber, a gap is easily formed between the tape member and the backsheet (absorber). Therefore, floating of the tape member from the backsheet when the absorbent article is rolled up, so that the user can manipulate the tape member more easily.

[0047]

According to a preferred embodiment, the tape member includes a fixed portion fixed to the non-skin surface of the absorbent article, and at least a region of the tape member excluding the fixed portion is disposed at a position not overlapping the adhesive portion.

[0048]

Thus, the tape member can float easily from the backsheet when the absorbent article is rolled up. Therefore, the user can pinch and operate the non-fixed portion of the tape member more easily.

[0049]

An absorbent article according to an embodiment will be described below by referring to the accompanying drawings. The absorbent article may be an absorbent article such as a sanitary napkin, a panty liner, a breast milk pad, an adult incontinence pad, a fecal pad, or a sweat release sheet. In particular, the absorbent article may be an article attached to the inside of a wearing article such as an underwear of the user.

[0050]

In the drawings, the same or similar parts are indicated by the same or similar reference signs. It should be noted that the drawings are illustrated schematically, and dimensional ratio and other variables differ from those of actual measurements. The actual measurements or the like, therefore, should be determined by referring to the following description. The drawings may include different relationships or ratios of measurements.

[0051]

(1) First Embodiment

Fig. 1 is a plan view of an absorbent article according to a first embodiment when seen from the skin surface side. Fig. 2 is a plan view of the absorbent article according to the first embodiment when seen from the non-skin surface side. As used herein, "skin surface side" corresponds to the side facing the skin of a wearer during use. Meanwhile, "non-skin surface side" corresponds to the side opposite to the skin of the wearer during use.

[0052]

The absorbent article includes a front-back direction L and a width direction W. The front-back direction L is a direction extending from the front side (ventral side) toward the rear side (dorsal side) of the wearer, or from the rear side toward the front side of the wearer. The width direction W is a direction orthogonal to the front-back direction L.

[0053]

The absorbent article 10 includes a surface sheet 20, a backsheet 22, and an absorber 30 between the surface sheet 20 and the backsheet 22. The surface sheet 20 faces toward the skin of the wearer during use. The backsheet 22 faces a side opposite to the side of the skin of the wearer during use. An absorber 30 extends in the front-back direction L of the absorbent article.

[0054]

The absorbent article 10 may include wings 40 and a hip flap 50. The wings 40 are folded toward the non-skin surface side of a crotch portion of the undergarment during use. The hip flap 50 is a portion bulging in the width direction W behind the wings 40. The hip flap 50 is a portion bulging outward beyond the outer edge of the absorber 30 in the width direction W.

[0055]

The absorbent article 10 includes an excretory opening (e.g., vaginal opening) facing region S1 facing the excretory opening (e.g. vaginal opening) during use. The excretory opening facing region S1 is a region disposed under the crotch of the wearer, that is, between the feet of the wearer, and corresponds to the region where the absorber 30 is present. In the absorbent article 10 including the wings 40, the excretory opening facing region S1 corresponds to the region between the wings 40 and in which the absorber 30 is present.

[0056]

As illustrated in Fig. 2, the absorbent article 10 includes adhesive portions 42, 52, and 70 provided on the non-skin surface side of the backsheet 22. The adhesive portions 42, 52, and 70 are regions provided with adhesives for fixing the absorbent article 10 to the article to be worn. The adhesive portions include main body adhesive portion 70, a wing adhesive portion 42, and a flap adhesive portion 52.

[0057]

The main body adhesive portion 70 is provided in a region overlapping the absorber 30 in the thickness direction of the absorbent article. Preferably, the main body adhesive portion 70 extends continuously or intermittently from the excretory opening facing region S1 to the rear side of the absorbent article 10. A plurality of the main body adhesive portions 70 is provided and extends in the front-back direction L, and the main body adhesive portions 70 may be provided at intervals in the width direction W.

[0058]

The wing adhesive portion 42 is provided on both wings 40. The wings 40 are folded back to a wearing article of the wearer during use and attached to the non-skin surface side of the wearing article by the wing adhesive portions 42. The hip flap adhesive

portions 52 are provided on the hip flap 50.

[0059]

The absorbent article 10 may include at least two folding lines extending along the width direction W. In the example illustrated in Figs. 1 and 2, the absorbent article 10 include three folding lines F1 to F3. The folding lines F1 to F3 are lines for folding the absorbent article at the time of packaging the absorbent article.

[0060]

The absorbent article 10 further includes a tape member 60 disposed on the non-skin surface side of the backsheet 22 and on the inside of the outer edge of the absorbent article 10. Therefore, the tape member 60 is in a state hidden by the absorbent article 10 when seen from the skin surface side.

[0061]

The tape member 60 is configured to be extendable to the outside of the outer edge of the absorbent article 10. In one example, the tape member 60 may be made of a stretchable sheet. In this case, as the wearer pulls the tape member 60, the tape member 60 extends outward beyond the outer edge of the absorbent article 10.

[0062]

In another example, the tape member 60 may be made of a sheet folded into Z-shape. In this case, when the wearer pulls the tip of the tape member 60, the folded tape member 60 is unfolded, and the tape member 60 extends outward beyond the outer edge of the absorbent article 10.

[0063]

The tape member 60 is a tape for post-treatment and may at least be extendable to such a degree that the absorbent article 10 is attached to the main body adhesive portions 70 in a rounded state. In addition, the tape member 60 may be made of any material as long as it can be attached to the main body adhesive portions 70. Preferably, the tape member 60 is made of a material which is more easily adhered to the main body adhesive portion 70 than the surface sheet 20. Note that the tape member 60 may not include an adhesive.

[0064]

The tape member 60 includes a fixed portion 62 fixed to the non-skin surface of the absorbent article 10, and the tip portion of the tape member 60 in the extending direction is directed to the side opposite to the fixed portion 62. In this case, when the tape member 60 is extended to the outside of the outer edge of the absorbent article 10, a force is exerted only on the fixed portion 62 of the tape member 60 in the extending direction. Accordingly, the force exerted on the fixed portion 62 can be reduced as

much as possible, so that a fixing strength of the tape member 60 can be maintained.

[0065]

After rolling up the absorbent article 10 in the front-back direction L after using the absorbent article 10, the user can extend the tape member 60 to the outside of the outer edge of the absorbent article 10 (see Fig. 3). During use, the tape member 60 is disposed inside of the outer edge of the absorbent article 10 on the non-skin surface side of the backsheet 22, a body fluid such as menstrual blood does not adhere to the tape member 60. After the use of the absorbent article 10, the user attaches the tape member 60, which is extended outwardly, to the adhesive portion 70 provided in another portion of the backsheet 22, whereby the absorbent article 10 is maintained in a rounded state. Since the body fluid such as menstrual blood does not adhere to the tape member 60, the decrease in the bonding force between the tape member 60 and the adhesive portion 70 is prevented, whereby the absorbent article 10 is more easily maintained in the small rounded state.

[0066]

Since the absorbent article 10 is rolled up with the surface to which the body fluid such as menstrual blood adheres being set inside, the body fluid does not adhere to the surface of the rolled-up absorbent article 10. Thus, the user can cleanly treat the absorbent article 10 after use.

[0067]

Also, the user can temporarily put the absorbent article 10 on a small space nearby after use in a small rounded state. Therefore, the user can attach the new absorbent article 10 to a wearing article such as underwear and, after wearing the underwear and clothes, discard the used absorbent article 10 into a garbage bin or the like. If there is no garbage bin nearby to which the absorbent article 10 is discarded, the user can put the absorbent article 10, which is put into the small rounded absorbent article 10, with his bag and bring it back.

[0068]

Further, during use of the absorbent article 10, since the tape member 60 is provided on the non-skin surface side of the backsheet 22 and does not extend outwardly from the outer edge of the absorbent article 10, the tape member 60 is attached to the wearer does not hit the skin directly. This reduces discomfort and uncomfortable feeling during use.

[0069]

Preferably, the tape member 60 is configured to be extendable rearward beyond the rear edge of the absorbent article 10. Approximately 80% of users start rolling up the

absorbent article 10 after user from the front side. Since the tape member 60 is configured to extend rearward beyond the rear edge of the absorbent article 10, many users can extend the tape member 60 in the rolling direction to attach the tape member 60 to the main body adhesive portion 70.

[0070]

Preferably, the tape member 60 is provided behind the rearmost folding line F3 among the folding lines F1 to F3. Some users may start rolling up the absorbent article 10 after use along the folding lines F1 to F3 in the width direction W. In this case, the region behind the rearmost folding line F3 of at least three folding lines is exposed on the surface of the rolled-up absorbent article 10 and is located on the terminal side in the rolling direction. Since the tape member 60 is disposed at a position exposed on the terminal side in the rolling direction, the user can easily recognize the tape member 60, and can easily attach the tape member 60 in the rounded state of the absorbent article to the main body adhesive portion 70.

[0071]

Preferably, the tape member 60 is provided within one-third of the length of the absorbent article in the front-back direction L from the rear edge E2 of the absorbent article in the front-back direction L. From the viewpoint that the user does not want to touch the body fluid attached to the surface sheet 20 of the absorbent article, the user may loosely roll up the absorbent article 10 after use. With the intention of concealing the body fluid adhering to the skin surface of the absorbent article 10, the user may loosely roll up the absorbent article 10 after use such that approximately one-third of the region of the absorbent article 10 is located inside (like tri-fold). In this case, one-third of the length of the absorbent article 10 in the front-back direction L from the rear edge E2 of the absorbent article 10 corresponds to the terminal side region in the rolling direction in the region exposed on the surface of the rounded absorbent article 10. Since the tape member 60 is disposed at a position exposed on the terminal side in the rolling direction, the user can easily recognize the tape member 60 and attach the tape member 60 to the main body adhesive portion 70 in the rounded state of the absorbent article 10.

[0072]

The tape member 60 is positioned preferably within a range of 15%, and more preferably 10%, of the length of the absorbent article in the front-back direction L from the rear edge of the absorbent article 10 in the front-back direction L. With the intention of concealing the body fluid adhering to the skin surface of the absorbent article 10, the user may tightly roll up the absorbent article 10 after use such that about

10% to 15% of the length of the absorbent article 10 in the front-back direction L from the rear edge E2 of the absorbent article 10 in the front-back direction L corresponds to the terminal region in the rolling direction of the region exposed on the surface of the rounded absorbent article 10. Since the tape member 60 is disposed at a position exposed on the terminal side in the rolling direction, the user can easily recognize the tape member 60 and attach the tape member 60 to the main body adhesive portion 70 in the rounded state of the absorbent article 10.

[0073]

The main body adhesive portion 70 is preferably provided on an imaginary line extending from the tape member 60 in the front-back direction L. As a result, when the tape member 60 is extended rearward beyond the rear edge E2 of the absorbent article to put the tape member 60 linearly along the rolled absorbent article 10, the main body adhesive portions 70 are attached to the tape member 60. Therefore, the user can easily maintain the absorbent article 10 in a rounded state without pulling the tape member 60 obliquely toward the position of the main body adhesive portion 70.

[0074]

A plurality of main body adhesive portions 70 may be provided at intervals in the width direction W. In this case, a width W1 of the tape member 60 in the width direction W is preferably larger than an interval W2 between the main body adhesive portions 70 in the width direction W. This eliminates the possibility that no main body adhesive portion 70 exists in a place where the tape member 60 reaches when the user pulls out the tape member 60. Therefore, the user can easily attach the tape member 60 to the adhesive portions 70.

[0075]

In the case where three or more main body adhesive portions 70 are provided in the width direction W, the width W1 of the tape member 60 in the width direction W is set at least to be larger than the interval of the plurality of intervals between the main body adhesive portions 70 located on the imaginary line extending from the tape member 60 or closest to the imaginary line. Alternatively, the width W1 of the tape member 60 in the width direction W may be larger than the maximum interval among the intervals of the main body adhesive portions 70.

[0076]

At least part of the main body adhesive portions 70 is preferably provided within the range of two-thirds of the length of the absorbent article 10 in the front-back direction L from the edge closer to the tape member 60 of both edges of the absorbent article 10 in the front-back direction L, that is, from the rear edge E2 in the present embodiment.

When the absorbent article 10 after use is loosely rolled up, the user may roll up the absorbent article such that approximately one-third of the region of the absorbent article 10 is located inside (like tri-fold or quarto). In this case, a range of 2/3 of the length of the absorbent article in the front-back direction L from the rear edge of the absorbent article 10 in the front-back direction L is exposed on the surface of the rounded absorbent article 10. Since the main body adhesive portion 70 is disposed in this exposed region, the user can easily attach the tape member 60 to the main body adhesive portion 70.

[0077]

More preferably, at least part of the main body adhesive portions 70 is provided within the range of four-fifths of the length of the absorbent article 10 in the front-back direction L from the edge of both two edges of the absorbent article 10 in the front-back direction L closer to the tape member 60, that is, the rear edge E2 in the present embodiment. In the case of tightly rolling up the absorbent article after use, about 20% to 30% of the length of the absorbent article in the front-back direction L from the edge of the absorbent article 10 in the front-back direction L, that is, the rear edge E2 in the present embodiment, is exposed on the surface of the rounded absorbent article 10. Since the main body adhesive portion 70 is disposed in this exposed region, the user can easily attach the tape member 60 to the main body adhesive portion 70.

[0078]

Both the backsheet 22 and the tape member 60 may be made of a film, e.g., a synthetic resin film. Preferably, at least one of the surface of the tape member 60 that touches the backsheet 22 and the surface of the backsheet 22 that touches the tape member 60 is subjected to an antistatic treatment. The antistatic treatment may be, for example, a surface treatment, such as corona treatment or embossing, for example. Due to static electricity, the tape member 60 may, in some cases, stick to the backsheet 22. By the antistatic treatment, the tape member 60 can be prevented from sticking to the backsheet 22. Therefore, when the absorbent article 10 is rolled up, the tape member 60 is more likely to float from the backsheet 22, so that the user can pinch and operate the tape member 60 more easily.

[0079]

Preferably, at least a part of the fixed portion 62 of the tape member 60 overlaps the absorber 30 in the thickness direction. The region where the absorber 30 is present becomes a region having a particularly high rigidity in the absorbent article 10. Since the fixed portion 62 of the tape member 60 overlaps the absorber 30 in the thickness direction, when the absorbent article 10 is rolled up, the fixed portion 62 of the tape

member 60 positioned in the region having a high rigidity firmly curves with the absorbent article 10. Thus, the fixed portion 62 of the tape member 60 firmly curves, so that the free end of the tape member 60 floats more easily from the backsheet 22. Therefore, the user can pinch and operate the tape member 60 more easily.

[0080]

Preferably, at least the region of the tape member 60 excluding the fixed portion 62 is provided at a position not overlapping the adhesive portions 42, 52, and 70. As a result, the tape member 60 comes to easily float from the backsheet 22 when the absorbent article 10 is rolled up. Therefore, the user can pinch and operate the tape member 60 more easily.

[0081]

An embossment (compression portion) of a predetermined pattern may be formed on the absorber 30. In addition, the absorber 30 may have a low basis weight region having a basis weight lower than the basis weight of the surrounding absorber 30. In this case, it is preferable that the tape member 60 overlaps the low basis weight region provided in the embossment or the absorber 30 formed in the absorber 30 in the thickness direction. In the case where the tape member 60 overlaps the embossment formed in the absorber 30 or the low basis weight region provided in the absorber 30 in the thickness direction, a gap is easily formed between the tape member 60 and the backsheet 22 (the absorber 30). Therefore, when the absorbent article 10 is rolled up, the tape member 60 is more likely to float from the backsheet 22, so that the user can pinch and operate the tape member 60 more easily.

[0082]

(2) Second Embodiment

An absorbent article according to a second embodiment will be described by referring to Fig. 4. Fig. 4 is a plan view of the absorbent article according to the second embodiment when seen from the non-skin surface side.

[0083]

Note that the same reference numerals are given to the constituent components similar to those of the first embodiment, and the description thereof may be omitted. In the following, the structure different from that of the first embodiment will be described in detail. In the second embodiment, the position of the tape member 60 is different from that of the first embodiment. In the second embodiment, the tape member 60 is provided in front of the absorbent article 10. The tape member 60 is configured to be extendable to the front beyond the front edge E1 of the absorbent article.

[0084]

Preferably, the tape member 60 is provided in front of the foremost folding line of the folding lines F1 to F3. Approximately 30% of users start rolling up the absorbent article 10 from the front side of the absorbent article 10 after use. Some users start rolling up the absorbent article 10 after use along the folding lines F1 to F3 in the width direction W in rolling up the absorbent article 10. In this case, the region in front of the foremost folding line F1 may be exposed on the surface of the rolled absorbent article 10 and located on the terminal side in the rolling direction. Since the tape member 60 is disposed at a position exposed on the terminal side in the rolling direction, the user can easily recognize the tape member 60 and attach the tape member 60 to the main body adhesive portion 70 in the rounded state of the absorbent article 10.

[0085]

With the intention of rolling up the absorbent article 10 from the front side, as described above, the position of the tape member 60 and the positional relationship between the position of the tape member 60 and the main body adhesive portions 70 are preferably configured such that the front and rear of the first embodiment are reversed.

[0086]

Specifically, the tape member 60 is preferably provided within one-third of the length of the absorbent article 10 in the front-back direction L from the front edge of the absorbent article 10 in the front-back direction L. Preferably, the tape member 60 is positioned within the range of 15%, and more preferably 10%, of the length of the absorbent article 10 in the front-back direction L from the front edge E1 of the absorbent article 10 in the front-back direction L.

[0087]

At least part of the main body adhesive portions 70 is positioned within the range of two-thirds of the length of the absorbent article 10 in the front-back direction L from the front edge E1 of the absorbent article 10 in the front-back direction L. Preferably, at least part of the main body adhesive portions 70 is provided within the range of four-fifths of the length of the absorbent article 10 in the front-back direction L from the front edge E1 of the absorbent article 10.

[0088]

(3) Third Embodiment

An absorbent article according to a third embodiment will be described by referring to Figs. 5 to 7. Fig. 5 is a plan view of the absorbent article according to the third embodiment when seen from the non-skin surface side. Fig. 6 is a perspective view of the absorbent article according to the third embodiment when rolled up in the front-back direction. Fig. 7 illustrates the absorbent article according to the third

embodiment when taped with a tape member.

[0089]

Note that the same reference numerals are given to the constituent components similar to those of the first embodiment, and the description thereof may be omitted. In the following, the structure different from that of the first embodiment will be described in detail.

[0090]

In the third embodiment, the tape member 60 is disposed at a position different from the position in the first embodiment. In the third embodiment, the tape member 60 is provided on the hip flap 50. The tape member 60 is configured to be extendable outwardly from the outer edge of the hip flap 50 in the width direction W.

[0091]

The hip flap 50 is located in the rear portion of the absorbent article 10. Approximately 80% of users start rolling up the absorbent article 10 after use from the front side. Therefore, the tape member 60 is exposed on the surface of the rounded absorbent article 10. In Fig. 6, the tape member 60 is illustrated in a stretched state. The user extends the tape member 60 from the hip flap 50 to the outside in the width direction W (see Fig. 6) and adheres the tape member 60 to the adhesive portion provided at another position of the backsheet 22, whereby the rounded state of the absorbent article can be maintained (see Fig. 7).

[0092]

In addition, the hip flap 50 is a portion bulging in the width direction W and covers the side of the rolled-up absorbent article 10 when attaching the tape member 60 to the adhesive portion (see Fig. 7). This prevents leakage of the body fluid from the side surface of the rolled-up absorbent article 10. Since the hip flap 50 covers the side surface of the rolled-up absorbent article 10, the body fluid adhered to the skin surface side of the absorbent article 10 is concealed, so that cleanliness is improved.

[0093]

In the third embodiment, the main body adhesive portions 70 may be provided at intervals in the front-back direction L. Preferably, in this case, the width W1 of the tape member 60 in the front-back direction L is larger than an interval W3 between the main body adhesive portions 70 in the front-back direction L. This eliminates the possibility that no main body adhesive portion 70 exists in a place where the tape member 60 reaches when the user pulls out the tape member 60. Therefore, the user can easily attach the tape member 60 to the main body adhesive portions 70.

[0094]

Preferably, if there are more than one intervals in the main body adhesive portions 70 in the front-back direction L, the width W1 of the tape member 60 is larger than the maximum interval among the plurality of intervals in the front-back direction L.

[0095]

Preferably, at least part of the main body adhesive portions 70 is provided in front of the tape member 60. Since the main body adhesive portions 70 exist in front of the tape member 60, the user can maintain the absorbent article 10 in the rounded state when the tape member 60, which extends outward in the width direction W from the hip flap 50, is attached to the main body adhesive portions 70 which exist at a position (another position in the front-back direction L) of the backsheet 22.

[0096]

The embodiments of the present invention have been described above in detail, it is apparent for persons who have ordinary skill in the art that the embodiments described in this specification do not limit the scope of the present invention. Changes and modifications may apply to the embodiments of the present invention without departing from the spirit and scope of the present invention that are defined by the description of the appended claims. The description of the present specification, therefore, has been understood to be illustrative and is in no way intended to limit the scope of the invention.

[0097]

For example, it should be noted that the structure and features described in the above embodiments can be combined and/or replaced as much as possible.

[0098]

In the above embodiments, the tape member 60 is attached to the main body adhesive portions 70 after the use of the absorbent article 10. However, the tape member 60 is not limited to this, and may be attached to a wing adhesive portion 42 or the flap adhesive portion 52 as long as the absorbent article 10 can be maintained in the rounded state. It should be noted that the absorbent article 10 is a relatively soft article, so that, even when the adhesive portions 42, 52, and 70 are not necessarily located at positions to which the tape member 60 is extended linearly, the tape member 60 can be attached to the adhesive portions 42, 52, and 70.

[0099]

The entire contents of Japanese Patent Application No. 2016-126082 (filed on June 24, 2016) have been incorporated herein by reference.

[INDUSTRIAL APPLICABILITY]

[0100]

The absorbent article according to the above aspects are maintained in the rounded state after use, while reducing discomfort or uncomfortable feeling during use.

[REFERENCE SIGNS LIST]

[0101]

- 10 Absorbent article
- 20 Surface sheet
- 22 Backsheet
- 30 Absorber
- 40 Wing
- 42 Wing adhesive portion
- 50 Hip flap
- 52 Flap adhesive portion
- 60 Tape member
- 62 Fixed portion
- 70 Main body adhesive portion
- E1 Front edge of absorbent article
- E2 Rear edge of absorbent article
- F1 First folding line
- F2 Second folding line
- F3 Third folding line
- S1 Excretory opening facing region
- L Front-back direction
- W Width direction
- W1 Width of tape member
- W2 Interval between main body adhesive portions in width direction
- W3 Interval between main body adhesive portions in front-back direction

CLAIMS

[Claim 1]

An absorbent article, comprising:
a front-back direction;
a width direction orthogonal to the front-back direction;
a backsheet facing a side opposite to skin of a wearer; and
an adhesive portion provided on a non-skin surface side of the backsheet, wherein
the absorbent article further includes a tape member disposed inside an outer edge of
the absorbent article on the non-skin surface side of the backsheet, and
the tape member is configured to be extendable to an outside of the outer edge of the
absorbent article.

[Claim 2]

The absorbent article according to claim 1, further comprising:
at least two folding lines extending in the width direction, wherein
the tape member is provided in front of the foremost folding line or behind the rearmost
folding line.

[Claim 3]

The absorbent article according to claim 1 or 2, wherein
the tape member is positioned within a range of one-third of a length of the absorbent
article in the front-back direction from an edge of the absorbent article in the front-back
direction.

[Claim 4]

The absorbent article according to claim 3, wherein
the tape member is positioned within a range of 15% of the length of the absorbent
article in the front-back direction from the edge of the absorbent article in the
front-back direction.

[Claim 5]

The absorbent article according to any one of claims 1 to 4, wherein
the tape member is configured to be extendable toward the front of the front edge of the
absorbent article or toward the rear of the rear edge of the absorbent article.

[Claim 6]

The absorbent article according to claim 5, wherein
the adhesive portion is provided on an imaginary line extending from the tape member
in the front-back direction.

[Claim 7]

The absorbent article according to claim 5 or 6, wherein

a plurality of the adhesive portions is provided at intervals in the width direction, a width of the tape member in the width direction is larger than an interval between the adhesive portions in the width direction.

[Claim 8]

The absorbent article according to any one of claims 1 to 4, further comprising:
a hip flap bulging outward in the width direction behind a region facing an excretory opening of the wearer, wherein
the tape member is provided on the hip flap, and
the tape member is configured to be extendable outward from an outer edge of the hip flap in the width direction.

[Claim 9]

The absorbent article according to claim 8, wherein
the adhesive portions are provided at intervals in the front-back direction, and
a width of the tape member in the front-back direction is larger than each interval between the adhesive portions in the front-back direction.

[Claim 10]

The absorbent article according to claim 8 or 9, wherein
at least part of the adhesive portions is provided in front of the tape member.

[Claim 11]

The absorbent article according to any one of claims 1 to 10, wherein
at least part of the adhesive portion is positioned within a range of two-thirds of the length of the absorbent article in the front-back direction from one edge of both edges of the absorbent article in the front-back direction closer to the tape member.

[Claim 12]

The absorbent article according to claim 11, wherein
at least part of the adhesive portions is positioned within a range of four-fifths of the length of the absorbent article in the front-back direction from the one edge of both edges of the absorbent article in the front-back direction closer to the tape member.

[Claim 13]

The absorbent article according to any one of claims 1 to 12, wherein
the tape member includes a fixed portion fixed to a non-skin surface of the absorbent article, and
a tip portion of the tape member in an extending direction faces a side opposite to the fixed portion.

[Claim 14]

The absorbent article according to any one of claims 1 to 13, wherein

at least one of a surface of the tape member touching the backsheet and a surface of the backsheet touching the tape member is subjected to antistatic treatment.

[Claim 15]

The absorbent article according to any one of claims 1 to 14, further comprising:
an absorber provided on a skin surface side of the backsheet, wherein
the tape member includes the fixed portion fixed to the non-skin surface of the absorbent article, and
at least a part of the fixed portion overlaps the absorber in a thickness direction.

[Claim 16]

The absorbent article according to any one of claims 1 to 15, further comprising:
an absorber provided on the skin surface side of the backsheet, wherein
the tape member overlaps, in the thickness direction, an embossment formed in the absorber or a low basis weight region provided in the absorber.

[Claim 17]

The absorbent article according to any one of claims 1 to 16, wherein
the tape member includes the fixed portion fixed to the non-skin surface of the absorbent article, and
a region of the tape member excluding at least the fixed portion is provided at a position not overlapping the adhesive portion.

FIG. 1

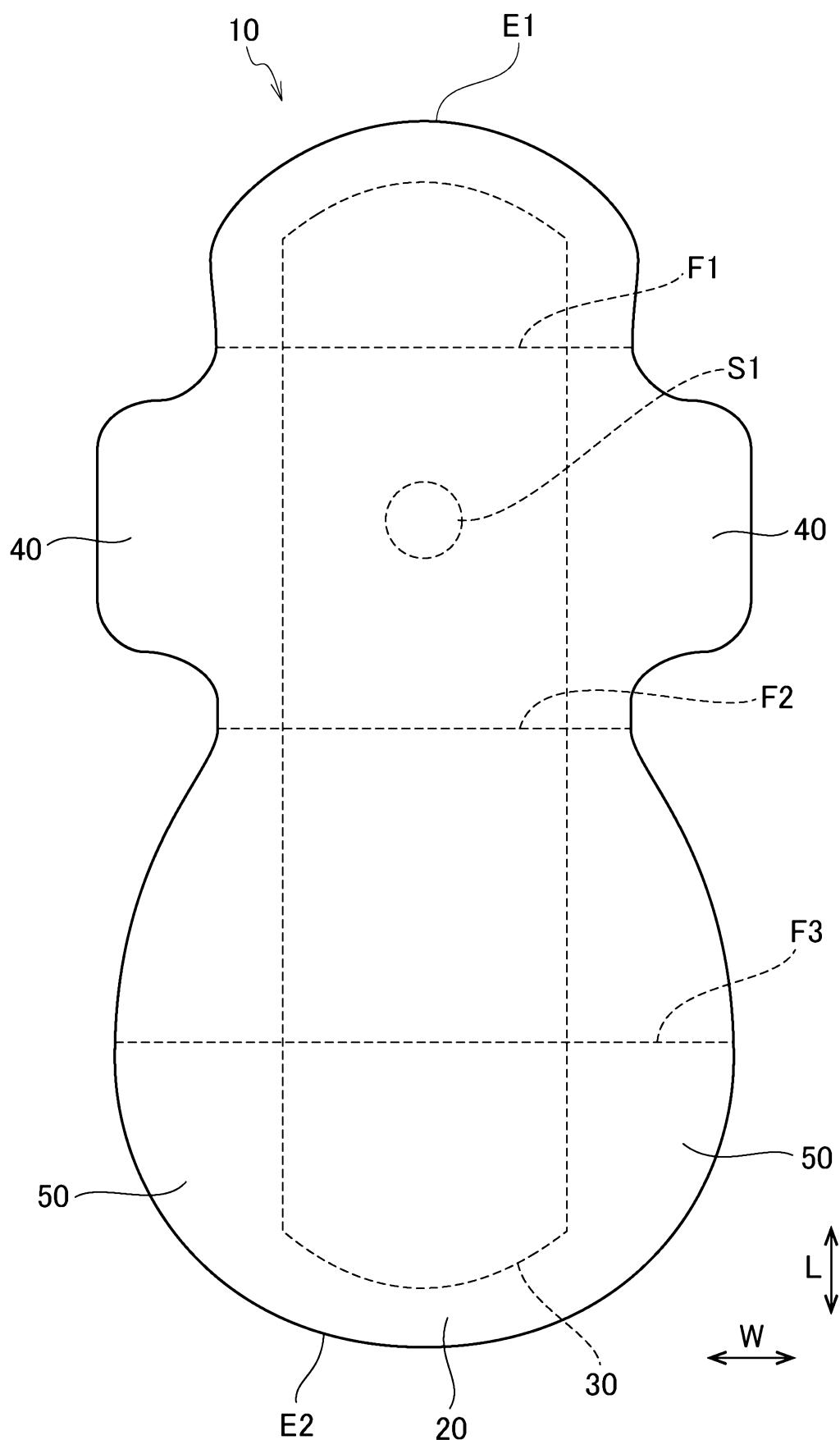


FIG. 2

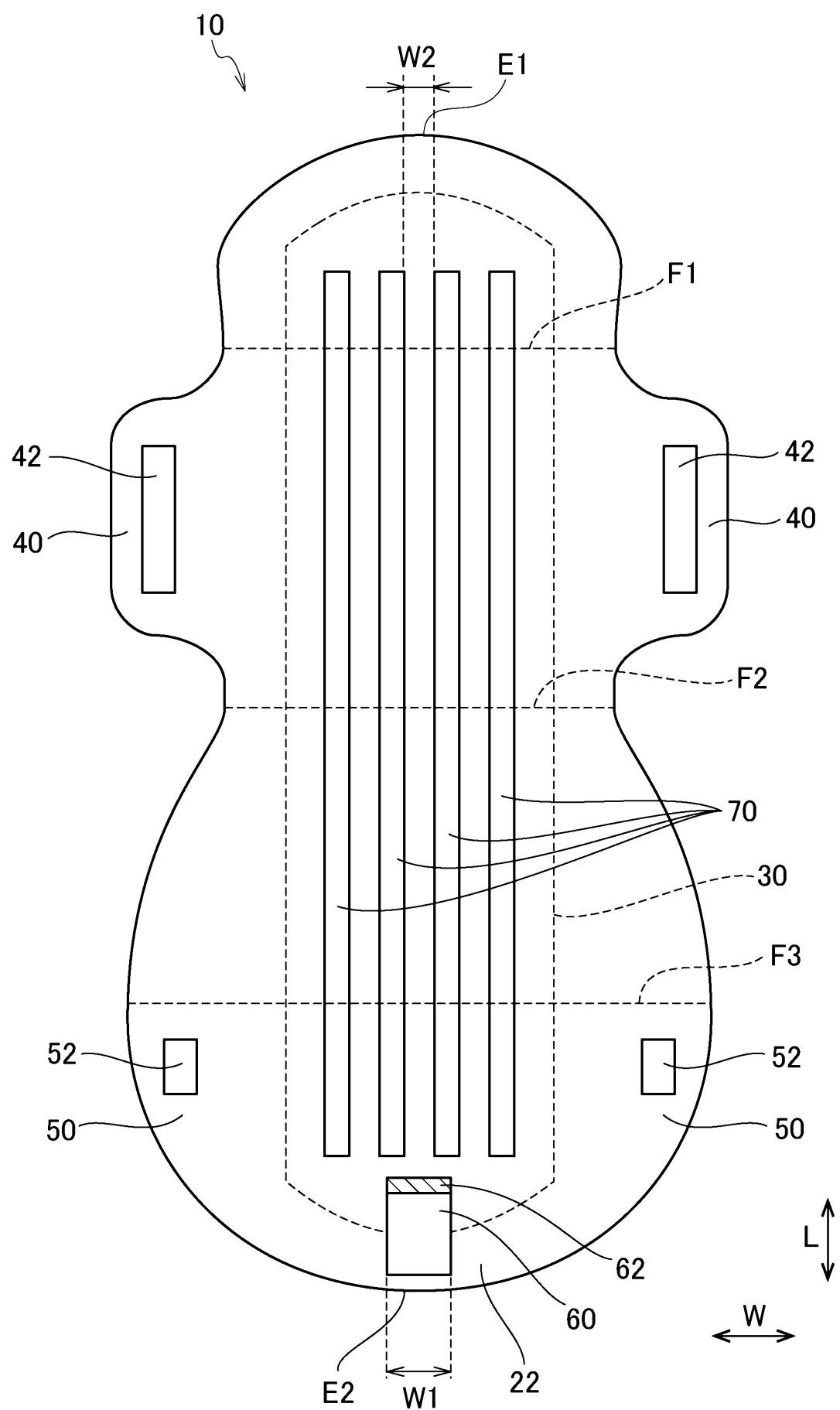


FIG. 3

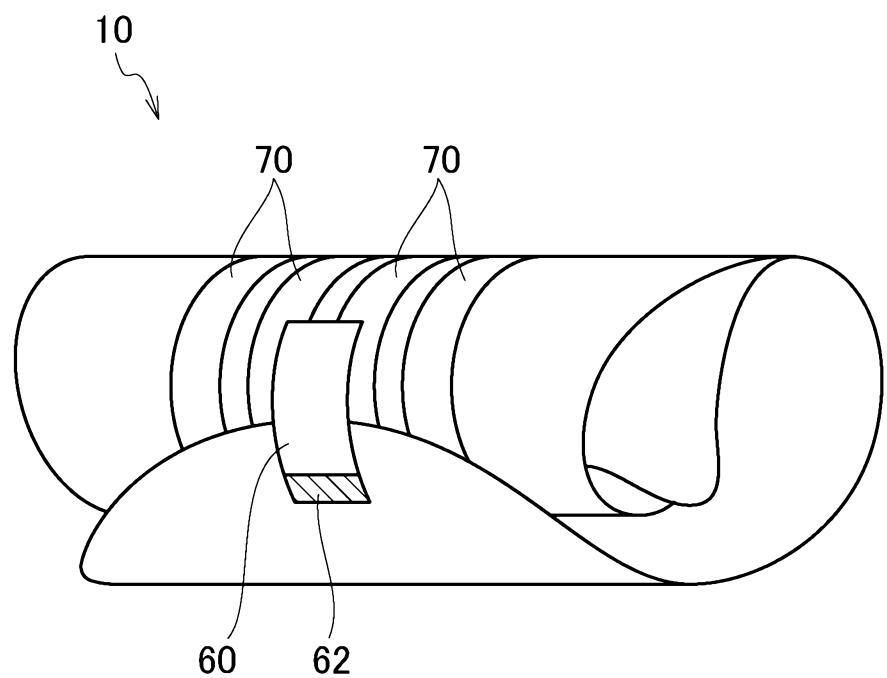


FIG. 4

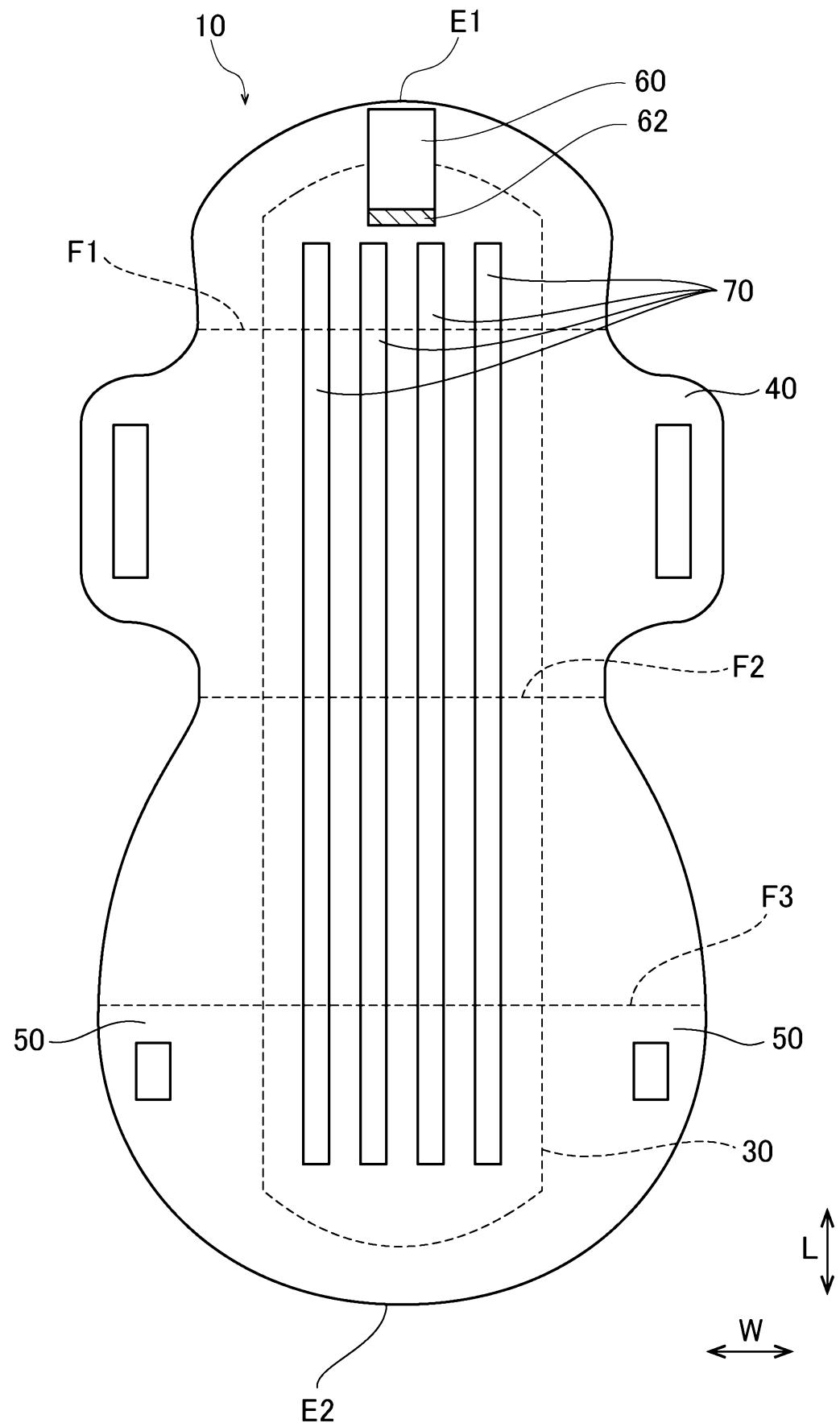


FIG. 5

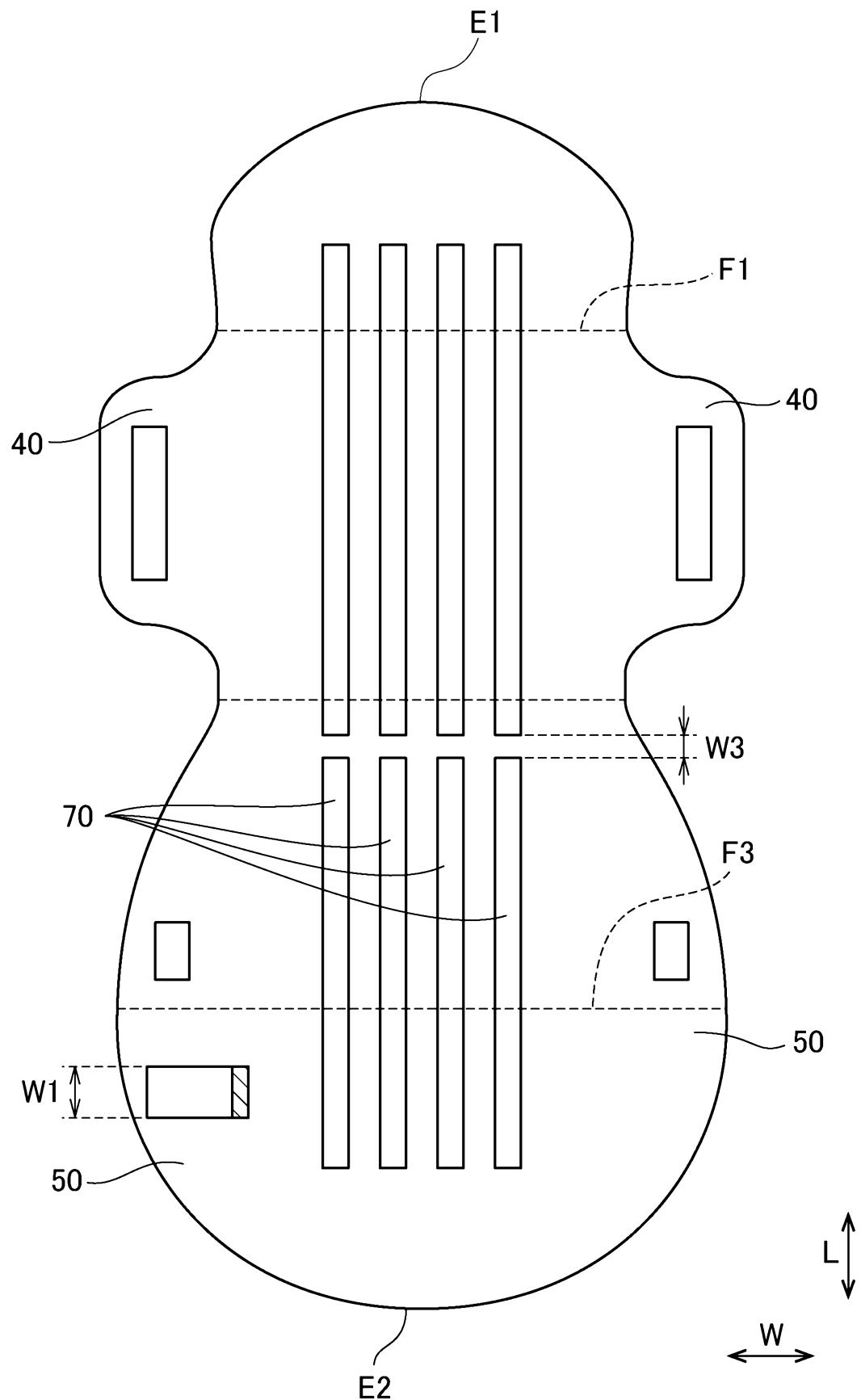


FIG. 6

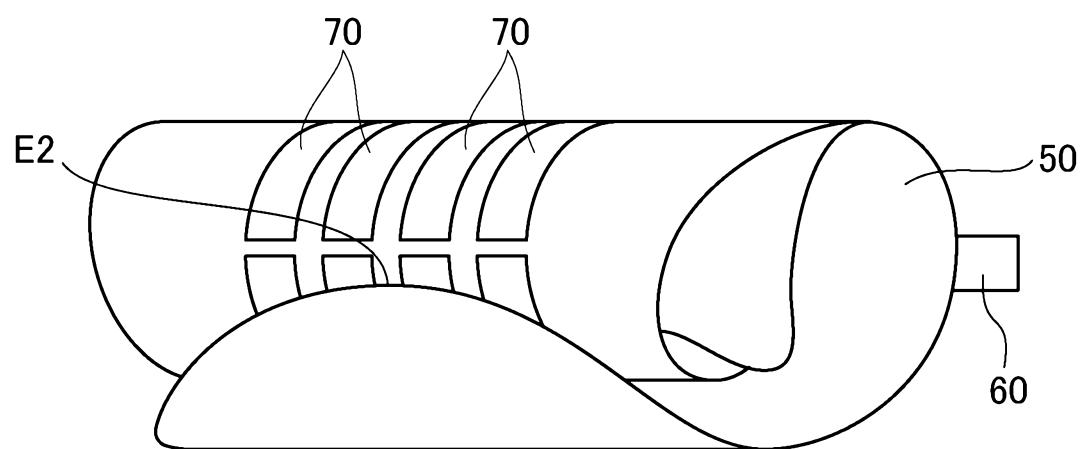


FIG. 7

