

ABSORBENT ARTICLE

[TECHNICAL FIELD]

[0001]

The present invention relates to an absorbent article such as a sanitary napkin, and particularly relates to an absorbent article that can prevent flap portions, which extend outward of an absorber in the width direction in a rear portion of the absorbent article, from being twisted or wrinkled.

[BACKGROUND ART]

[0002]

Patent Literature 1 describes a sanitary napkin as an absorbent article that has rear flaps extending outward of an absorber in the width direction at the rear portion of the absorbent article and in which the rear flaps are formed with a concavo-convex portion by means of embossing. The rear flaps of the sanitary napkin in Patent Literature 1 have increased stiffness due to the embossing. By adding stiffness to the rear flaps, the rear flaps can be prevented from being twisted or wrinkled in a state of wearing.

[CITATION LIST]

[PATENT LITERATURE]

[0003]

Patent Literature 1: Japanese Patent Application Publication No. 2003-339765 (Fig. 1, [0016] etc.)

[SUMMARY OF INVENTION]

[0004]

However, the aforementioned sanitary napkin had the following problems.

[0005]

Since the sanitary napkin described in Patent Literature 1 has a relatively high stiffness at the rear flaps, the rear flaps may not be appropriately arranged along the curve of a body. As a result, the sanitary napkin may not fit the body, thus causing leakage of a body fluid and deteriorating a comfortable feeling of wearing. Additionally, the rear flap portions are hard, so that when, for example, the wrinkles or folding lines are formed, hard wrinkles or folding lines touch a wearer and it may deteriorate a comfortable feeling of wearing.

[0006]

The present invention has been achieved in consideration of the problems mentioned above, and has an object to provide an absorbent article that can suppress an uncomfortable feeling of wearing, by suppressing

wrinkles or twists at flap portions and arranging the flap portions along the body of a wearer in a state of wearing.

[0007]

To solve the above problem, an absorbent article according to the present invention is summarized as the absorbent article having a front-rear direction (longitudinal direction L) and a width direction (width direction W) orthogonal to the front-rear direction, the absorbent article comprising: a main body (main body 2) having an absorber (absorber 30); wing portions (wing portions 43) extending outward of the main body in the width direction and folded back to a non-skin contact surface side of underwear of a wearer; and flap portions (flap portions 60) extending outward of the main body in the width direction at rear side compared to the wing portions; wherein the flap portions comprise: constricted portions (first constricted portions 61) having a width in the width direction of the flap portions narrower than a width in the width direction in front-rear regions of the constricted portions; first flap portions (first flap portions 63) positioned in front of the constricted portions and extending outward of the constricted portions in the width direction; and second flap portions (second flap portions 64) positioned at rear side compared to the constricted portions and extending outward of the constricted portions in the width direction; and wherein the flap portions are formed with recessed portions (recessed portions 70) indented in a thickness direction of the flap portions; and the recessed portions extend from inside to outside in the width direction as going to the rear side.

[BRIEF DESCRIPTION OF DRAWINGS]

[0008]

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

[Fig. 2] Fig. 2 is a reverse view of the absorbent article shown in Fig. 1.

[Fig. 3] Fig. 3 is a schematic sectional view taken along the line A-A' of Fig. 1.

[Fig. 4] Fig. 4 is a schematic view when the absorbent article shown in Fig. 1 is attached to underwear.

[Fig. 5] Fig. 5 is a schematic sectional view taken along the line B-B' of Fig. 4.

[Fig. 6] Fig. 6 is a plan view as seen from a skin contact surface side of an absorbent article according to a second embodiment.

[Fig. 7] Fig. 7 is a plan view as seen from a skin contact surface side of an absorbent article according to a third embodiment.

[DESCRIPTION OF EMBODIMENTS]

[0009]

(First embodiment)

By referring to Fig. 1 to Fig. 3, an absorbent article 1 according to a first embodiment will be explained. Fig. 1 is a plan view of the absorbent article, and Fig. 2 is a reverse view of the absorbent article. Fig. 3 is a sectional view taken along the line A-A' shown in Fig. 1. The absorbent article 1 according to the present embodiment is a sanitary napkin, for example.

[0010]

The absorbent article 1 has a topsheet 10 in contact with the skin of the wearer, a liquid-impermeable backsheet 20 that does not allow liquid to pass through, and an absorber 30. The absorber 30 is arranged between the topsheet 10 and the backsheet 20. Therefore, the absorber 30 is shown with dashed lines in Fig. 1 and Fig. 2. The absorber 30 is arranged at a central portion in a longitudinal direction L along the front-rear direction and a width direction W of the absorbent article 1.

[0011]

The absorbent article 1 includes a main body 2 having the absorber 30, wing portions 43 arranged at outside of the main body 2 in the width direction, and flap portions 60 arranged at outside of the main body 2 in the width direction at rear side compared to the wing portions 43. The wing portions 43 are configured to be folded back to a non-skin contact surface side of underwear of a wearer.

[0012]

Fig. 1 shows a region RA of the wing portions in the longitudinal direction and a region RB of the flap portions in the longitudinal direction. The flap portions in the present embodiment are a region extending outward of the main body 2 in the width direction and extending rear side from rear ends of the wing portions. The rear ends of the wing portions that are front side ends of the flap portions 60 are positioned at the innermost side in the width direction between the wing portions 43 and the flap portions 60. The rear ends of the flap portions 60 are the portions that are constricted more inward than front and rear regions near the rear ends of the absorbent article. The rear ends of the flap portions in the present embodiment match the rear ends of first recessed portions 71 which will be described below. Moreover, the rear ends of the flap portions 60 may match the rear ends of the absorbent article or may not match the rear ends of the absorbent article.

[0013]

Furthermore, the absorbent article 1 has sidesheets 41 that are arranged outside of the absorber 30 in the width direction W. The main body 2 is a region where the absorber 30 is arranged in a plan view and where the topsheet 10, the backsheet 20, and the absorber 30 are laminated.

[0014]

The topsheet 10 is a liquid-permeable sheet that allows liquids such as bodily fluid to pass through. The topsheet 10 covers at least the surface of the absorber 30. The topsheet 10 is not particularly limited as long as the topsheet 10 is a sheet-like material having a structure that allows the liquids to pass through, such as a nonwoven fabric, a woven fabric, a perforated plastic sheet, and a mesh sheet. Natural fibers or chemical fibers can be used as a woven and nonwoven fabric.

[0015]

The backsheet 20 has substantially the same length as the length of the topsheet 10. As for the backsheet 20, a polyethylene sheet, a laminated nonwoven fabric with polypropylene, for example, as the main constituent, an air-permeable resin film, or a sheet in which an air-permeable resin film is joined with a nonwoven fabric such as spun bond or spun lace can be used. The backsheet 20 is desired to be of a material having flexibility to an extent such that an uncomfortable feeling is not felt at the time of wearing. The backsheet 20 is desired to have liquid impermeability and moisture permeability, and for example, can be configured from a microporous sheet obtained by melt-mixing inorganic filler in an olefin resin such as polyethylene and polypropylene, and then performing stretch processing.

[0016]

The absorber 30 includes hydrophilic fibers and pulp. The absorber 30 is formed from a material that can absorb bodily fluid such as menstrual blood. The absorber 30 may be formed by layering a hydrophilic fiber or powder with an air-laid method, or the absorber 30 may be an air-laid sheet in which a hydrophilic fiber or powder is shaped into a sheet with an air-laid method, or the absorber may be formed by arranging a ground pulp mixed with a highly absorbent polymer on a tissue (for example, 15 g/m² basis weight), and then wrapping it up with the tissue.

[0017]

The absorber 30 according to the present embodiment is configured by wrapping the pulp, which is formed by layering cotton-like pulp and synthetic pulp at a basis weight of approximately 100 to 300 g/m², with a protective sheet (not shown in the figure). Note that the absorber 30 may have a substantially uniform thickness on the entire surface, or may have a non-uniform thickness. The protective sheet is used to retain the shape of the pulp, and for example, a crepe paper and tissue paper can be used.

[0018]

The absorber 30 has a shape extending in the front-rear direction and is smaller by substantially one size than the backsheet 20. The length of the absorber 30 in the width direction W corresponds to the crotch gap of an adult

female, and is generally between 50 and 80 mm. The absorber 30 is bonded to the backsheet 20 by an adhesive such as a hot-melt adhesive. In the present embodiment, the absorber 30 and the topsheet 10 are bonded by the hot-melt adhesive.

[0019]

The absorber 30 is provided so as to include the center of an excretion portion contact region where at least an excretion portion of a wearer is in contact. The center of the excretion portion contact region is the center of the longitudinal direction and the width direction of a region where the excretion portion of a wearer is in contact. For example, in an absorbent article having wing portions, the center of the wing portions in the longitudinal direction is the center of the excretion portion contact region in the longitudinal direction. Furthermore, in an absorbent article that does not have wing portions, the position where the width length dimension of the absorber is the shortest is the center of the excretion portion contact region in the longitudinal direction. Additionally, the excretion portion contact region is included in a region which is in contact with a crotch portion of a wearer and is positioned between both legs of the wearer.

[0020]

The sidesheets 41 are arranged on both sides of the topsheet 10. Similar to the topsheet, the sidesheets 41 are arranged closer to a skin contact surface side than the absorber 30, and configure a portion of the topsheet in the present invention. The sidesheets 41 may be selected from the same materials as those of the topsheet 10. In order to prevent menstrual blood from flowing across the sidesheets 41 to the outside of the absorbent article 1, it is preferable that the sidesheets have hydrophobicity or water repellency. The sidesheets 41 cover a portion of the side edges of the absorber 30, the wing portions 43, and the flap portions 60.

[0021]

The sidesheets 41 according to the present embodiment are configured by an air-through nonwoven cloth. The air-through nonwoven cloth has a tenderness and fine texture. As the texture of the flap portions is improved with arranging the flap portions along a body, comfortable feeling of wearing may be improved.

[0022]

Intermediate sheets 35 are provided between the sidesheets 41 and the backsheet 20 at the wing portions 43, and the flap portions 60 (see Fig. 3). The intermediate sheet 35 is configured by an air-through nonwoven cloth. The air-through nonwoven cloth regains its volume as hot air is blown on the nonwoven cloth and the blown hot air passes therethrough, and thus has a soft

and fine texture. When the flap portions are arranged along a body, the comfortable feeling of wearing may be improved.

[0023]

By arranging the intermediate sheets 35, a difference in thicknesses and stiffness is formed at a boundary between a region where the intermediate sheets are arranged and a region where the intermediate sheets are not arranged. For example, the flap portions 60 can be easily deformed at ends of the intermediate sheets as the base points.

[0024]

The intermediate sheets 35 are intermittently joined to at least the sidesheets 41 by an adhesive. The intermediate sheets according to the present embodiment are bonded to the topsheet 10 and the backsheet 20 by the hot-melt adhesive arranged in a spiral pattern. As the intermediate sheets 35 and the topsheet 10, for example, are intermittently joined together, the intermediate sheets 35 can be partially shifted relative to the topsheet, and the soft texture of the material can be maintained.

[0025]

For the absorbent article 1, the absorber 30 is enclosed as the topsheet 10, the sidesheets 41, and the backsheet 20 are joined at their fringes. As for the method of joining the topsheet 10 and the backsheet 20, any one of heat embossing, supersonic waves, or a hot-melt adhesive, or a combination of a plurality of methods can be used.

[0026]

At the backsheet 20, an adhesive portion where an adhesive is coated in a plurality of regions is provided at a surface which is in contact with underwear (see Fig. 2). The adhesive portion is provided on the back surface of the main body, and includes a central adhesive portion 51 so as to fix the absorbent article 1 to a crotch portion of underwear, wing adhesive portions 52 that are provided on the back surface of the wing portions 43 and are wrapped around the crotch portion so as to fix the wing portions 43, and flap adhesive portions 53 that are provided on the back surface of the flap portions 60 so as to fix the flap portions in the open state to the rear side of underwear.

[0027]

Before use, an adhesive is in contact with a release sheet not shown in the figures. The release sheet prevents the adhesive from deteriorating before use. At the time of use, the release sheet is peeled off by a wearer.

[0028]

As for an absorbent article having no release sheet, the absorbent article may be configured to prevent an adhesive from deteriorating before use by a wrapping sheet that is to wrap an individual absorbent article. When the

adhesive is in contact with a wrapping sheet, it is desirable to treat the surface of the wrapping sheet so as to make the adhesive releasable without reducing the adhesive strength of the adhesive.

[0029]

The absorbent article 1 is formed with compressed portions 80 where the topsheet 10 and the absorber 30 are compressed in the thickness direction. Note that as long as the compressed portions are formed by compressing at least the topsheet 10 and the absorber 30 in thickness direction T, various configurations can be adopted. For example, the compressed portions may be formed by pressing and embossing, and the shape may be a lattice network and a honeycomb shape.

[0030]

The flap portions 60 are formed with a plurality of constricted portions that are narrower in length in the width direction than that in the front and rear regions. The constricted portion has a first constricted portion 61 positioned in the front side and a second constricted portion 62 positioned in the rear side.

[0031]

The flap portion 60 have a first flap portion 63 positioned in the front side the first constricted portion 61, a second flap portions 64 positioned at a rear side compared to the first constricted portion 61 and in front of the second constricted portion 62, and a third flap portion 65 positioned at rear side compared to the second constricted portion 62.

[0032]

The first flap portions 63 are, within inside ends of the wing portions 43 in the width direction, regions from rear inside ends 43RI positioned in the rear side to the first constricted portions 61, extending further outward in the width direction from the rear inside ends 43RI towards the rear side. First maximum width positions (outside ends) 63WM positioned at the outermost position in the width direction in the first flap portions 63 are positioned outside in the width direction from the first constricted portions 61. The first maximum width positions 63WM are positioned at rear side compared to the center of the first flap portions 63 in the front-rear direction.

[0033]

The second flap portions 64 are regions from the first constricted portions 61 as the rear ends of the first flap portions 63 up to the second constricted portions 62, extending outward of the first constricted portions 61 in the width direction as going to the rear side. Second maximum width positions (outside ends) 64WM positioned at the outermost position in the width direction in the second flap portions 64 are positioned outside in the

width direction from the second constricted portions 62. The second maximum width positions 64WM are positioned at rear side compared to the center of the second flap portions 64 in the front-rear direction.

[0034]

The third flap portions 65 are regions from the second constricted portions 62 as the rear ends of the second flap portions 64 up to the rear ends 60RI of the flap portions, extending outward of the second constricted portions 62 in the width direction as going rear side. Third maximum width positions (outside ends) 65WM positioned at the outermost position in the width direction in the third flap portions 65 are positioned outside in the width direction from the second constricted portions 62. The third maximum width positions 65WM are positioned at rear side compared to the center of the third flap portions 65 in the front-rear direction.

[0035]

Fig. 4 is a schematic view showing the state when the absorbent article 1 is attached to underwear. Fig. 5 is a sectional view taken along the line B-B' shown in Fig. 4. External force from outside to inside in the width direction due to the motions or the like of a wearer acts upon a region sandwiched with the wing portions 43 that are arranged near the crotch portion.

[0036]

The wing portions 43 are the portions where force is applied from outside to inside in the width direction when a wearer closes her legs, for example. The flap portions 60 are arranged at rear side compared to the wing portions 43. When force is applied from outside to inside in the width direction, force is applied from the front side to the rear side of the wing portions 43.

[0037]

Since the flap portions 60 are formed with the first constricted portions 61 and the second constricted portions 62, the flap portions 60 deform at the first constricted portions 61 and the second constricted portions 62 as base points and absorb force from the front. For example, the force applied from the wing portions 43 is absorbed by the first constricted portions 61, thus reducing the force that propagates further rear side of the first constricted portions 61. Accordingly, the force from the front is prevented from propagating to the entire flap portions, thereby preventing wrinkles and twists from forming at the entire flap portions.

[0038]

The maximum width positions of the first flap portions 63, the second flap portions 64, and the third flap portions 65 are arranged at rear side compared to the center of each flap portion in the longitudinal direction. For

example, when the maximum width position of each flap portion is positioned at the front, only the front portions of the flap portions are locally folded back and force cannot be absorbed at each entire flap portion.

[0039]

However, as the maximum width position of each flap portion is positioned at rear side compared to the center of each flap portion in the front-rear direction, the force can be absorbed at each entire flap portion, thus preventing wrinkles from being locally formed.

[0040]

Moreover, the second maximum width positions are positioned outside in the width direction from the first maximum width positions, and the third maximum width positions are positioned outside in the width direction from the second maximum width positions. Specifically, the maximum width positions of the flap portions positioned in the rear side are positioned outside in the width direction from the maximum width positions of the flap portions positioned in the front. Thus, the force propagated from the front is absorbed at the front flap portions, and is then absorbed at the rear flap portions. In other words, the force can be absorbed in stages. Also, as the width widens towards the rear side, they can be arranged along underwear.

[0041]

The flap portions 60 are formed with recessed portions 70 that are indented in the thickness direction T. For the recessed portions 70, as shown in Fig. 3, the sidesheets 41 configuring the topsheet, the intermediate sheets 35, and the backsheet 20 are compressed in the thickness direction. The recessed portions 70 have first recessed portions 71 that extend from the rear inside ends 43RI of the wing portions 43 towards the rear side, second recessed portions 72 that are branched off from the first recessed portions 71 and reach the first constricted portions 61, third recessed portions 73 that are branched off from the first recessed portions 71 and reach the second constricted portions 62, and fourth recessed portions 74 that are branched off from the first recessed portions 71 and reach the vicinity of the third maximum width positions 65WM positioned outside of the third flap portions 65 in the width direction.

[0042]

The recessed portions are compressed from the topsheet side towards the backsheet side in the thickness direction. As the recessed portions 70 are formed by compressing from the topsheet side towards the backsheet side, the backsheet made of a film can be prevented from being torn in the process of forming the recessed portions. In the present embodiment, compression is made from the side of the sidesheets 41 configuring the topsheet, towards the backsheet side.

[0043]

The second recessed portions 72, the third recessed portions 73, and the fourth recessed portions 74 are configured to extend from inside to outside in the width direction, as going to the rear side. As the recessed portions are formed so as to extend from inside to outside in the width direction as going to the rear side, the recessed portions are aligned along the direction where force is applied, so that the flap portions are naturally folded up at the recessed portions as starting points for folding. Accordingly, the flap portions 60 can easily fit not only to a body but to underwear. As a result, it is unlikely to form irregular wrinkles at the flap portions, and the article is deformed without uncomfortable feeling and is worn with clear feeling.

[0044]

Furthermore, outside ends of the third recessed portions 73 in the width direction are configured to be positioned at the second constricted portions 62. In this configuration, force propagated through the third recessed portions 73 can easily reach the second constricted portions, and it becomes easier to fold up at the second constricted portions 62 and the third recessed portions as base points.

[0045]

Additionally, the recessed portions 70, as shown in Fig. 2, are arranged so as not to overlap the flap adhesive portions 53 in the thickness direction T. As the recessed portions 70 and the flap adhesive portions 53 are configured not to overlap each other, the flap portions are not folded up due to the bonded sections between underwear and the flap portions, so that the flap portions 60 can be folded up without affecting the adhering positions to underwear. Thus, the flap adhesive portions 53 are prevented from being peeled off from underwear, and it becomes easy to maintain the adhering positions in the entire absorbent article 1.

[0046]

Next, The method of manufacturing the absorbent article 1 according to the first embodiment will be partially explained below. For the methods which will not be explained herein, conventional methods may be applied. In the method of manufacturing an absorbent article, a topsheet forming step is carried out as the first step. Subsequently, a topsheet joining step is carried out as the second step. Specifically, the topsheet 10 and the sidesheets 41 are bonded to each other by, for example, thermal fusion bonding.

[0047]

An absorber molding step is carried out as the third step. Specifically, the absorber 30 is molded by a molding drum, by molding the pulp that is the

raw material of the absorber. The first and the second step of manufacturing a topsheet, and the third step of molding an absorber may be reversed in order.
[0048]

In the fourth step, a joining step is carried out. Specifically, a joining step, in that an absorber molded in the third step is joined to a topsheet and sidesheets that are joined in the second step, is carried out.
[0049]

In the fifth step, a first compressing step is carried out. Specifically, the absorber 30 and the topsheet 10 are compressed in the thickness direction, thus forming the compressed portions 80. In the sixth step, the backsheet joining step is carried out. In other words, the absorber and the topsheet, for example, that are formed with compressed portions, are joined to the backsheet.
[0050]

In the seventh step, a second compressing step is carried out. Specifically, the sidesheets 41, the intermediate sheets 35, and the backsheet 20 are compressed in the thickness direction, thereby forming the recessed portions 70. After the steps mentioned above, an adhesive coating step is provided. The absorbent article according to the present embodiment can thus be manufactured by the aforementioned steps.
[0051]

The wing portions are the portions where force is applied from outside to inside in the width direction when a wearer closes her legs, for example. The flap portions are arranged at rear side of the wing portions, and force is applied from the front side to the rear side of the wing portions when force is applied from outside to inside in the width direction. In this case, as the flap portions deform at the constricted portions as base points, the force from the front can be absorbed.
[0052]

Force that is applied from the side of the wing portions to the flap portions is absorbed by the constricted portions, thus reducing the force that propagates toward the rear side of the constricted portions. Accordingly, the force from the side of the wing portions is prevented from propagating to the entire flap portions, thereby preventing wrinkles and twists from forming at the entire flap portions.
[0053]

Additionally, the recessed portions are formed so as to extend from inside to outside in the width direction as going to the rear side, and the recessed portions are aligned along the direction where force is applied, so that the flap portions are naturally folded up at the recessed portions as the starting

points for folding. Thus, the flap portions can easily fit not only to a body but to underwear. As a result, it is unlikely to form irregular wrinkles at the flap portions, and the article is deformed without uncomfortable feeling and is worn with clear feeling.

[0054]

(Second embodiment)

Subsequently, an absorbent article 1A according to a second embodiment will be explained based on Fig. 6. In the explanation of the following embodiments, only the different configurations from those in the first embodiment will be explained, and the same configurations as those in the first embodiment will be expressed with the same reference numerals and the explanation thereof will be omitted.

[0055]

The absorbent article 1A according to the second embodiment has different shapes of the recessed portions 70 from those of the absorbent article 1 according to the first embodiment. The recessed portions of the absorbent article 1A according to the second embodiment have a plurality of inclined recessed portions 75 inclined and extended from inside to outside in the width direction as going to the rear side from the ends of the absorber in the width direction. The plurality of the inclined recessed portions 75 are arranged in parallel to each other, and are arranged adjacent to each other in a longitudinal direction.

[0056]

(Third embodiment)

Subsequently, an absorbent article 1B according to a third embodiment will be explained based on Fig. 7. The absorbent article 1B according to the third embodiment has different shapes of the flap portions 60 from those of the absorbent article 1 according to the first embodiment. The flap portions 60 of the absorbent article 1B according to the third embodiment are formed only with the first constricted portions 61, out of the first constricted portions 61 and the second constricted portions 62. The flap portions 60 have the first flap portions 63 arranged in front of the first constricted portions 61, and the second flap portions 64 arranged at rear side of the first constricted portions 61. The second maximum width positions 64WM of the second flap portions 64 are arranged in front of the center of the second flap portions in the longitudinal direction.

[0057]

So far, the present invention is disclosed through the above embodiments. However, it should not be interpreted that the statements and drawings constituting a part of the present disclosure limit the present

invention. From this disclosure, a variety of alternate embodiments, examples, and applicable techniques will become apparent to one skilled in the art.

[0058]

For example, it may not always be necessary to arrange the maximum width position of each flap portion at rear side compared to the center of each flap portion in the longitudinal direction. The flap portions that are positioned in the rear side compared to a plurality of the flap portions may not always be arranged outside of the flap portions, that are positioned in the front side, in the width direction, may be arranged at the same positions in the width direction, or may be arranged inside in the width direction.

[0059]

Furthermore, the rear ends of the recessed portions may not always be positioned at constricted portions and may be arranged deviating from the constricted portions. The recessed portions may not always be arranged deviating from the flap adhesive portions in the thickness direction, and may be arranged so as to partially overlap each other. The skin contact surface of the flap portions to a wearer may not always be configured by an air-through nonwoven cloth. Also, the intermediate sheet may not always be configured by an air-through nonwoven cloth. Furthermore, the intermediate sheet may not always be provided.

[0060]

The recessed portions according to the present embodiments are in a line shape, but may be configured by, for example, an aggregate of a plurality of dots arranged intermittently. Although the recessed portions according to the present embodiments are formed by compressing from the sidesheet side configuring the topsheets toward the backsheet side, the recessed portions may be formed by compressing, for example, from the backsheet side toward the sidesheet side.

[0061]

The entire contents of Japanese Patent Application No. 2011-217829 (filed on September 30, 2011) are incorporated in the present specification by reference.

[Industrial Applicability]

[0062]

An absorbent article can be provided which can suppress uncomfortable feeling of wearing, by suppressing wrinkles and twists of flap portions and arranging the absorbent article along the wearer in the wearing state.

[Explanation of references]

[0063]

L...longitudinal direction, S...underwear, T...thickness direction,
W...width direction, 1,1A,1B...absorbent article, 2...main body, 10...topsheet,
20...backsheet, 30...absorber, 35...intermediate sheet, 41...sidesheet,
43...wing portion, 43RI...rear-inside end, 51...central adhesive portion,
60...flap portion, 61...first constricted portion, 62...second constricted portion,
63...first flap portion, 63WM...first maximum width position, 64...second flap
portion, 64WM...second maximum width position, 65...third flap portion,
65WM...third maximum width position, 70...recessed portion, 71...first
recessed portion, 72...second recessed portion, 73...third recessed portion,
74...fourth recessed portion, 80...compressed portion

CLAIMS

[Claim 1]

An absorbent article having a front-rear direction and a width direction orthogonal to the front-rear direction, the absorbent article comprising:

a main body having an absorber;

wing portions extending outward of the main body in the width direction and folded back to a non-skin contact surface side of underwear of a wearer; and

flap portions extending outward of the main body in the width direction at rear side compared to the wing portions;

wherein the flap portions comprise:

constricted portions having a width in the width direction of the flap portions narrower than a width in the width direction in front-rear regions of the constricted portions;

first flap portions positioned at front side compared to the constricted portions and extending outward in the width direction compared to the constricted portions; and

second flap portions positioned at rear side compared to the constricted portions and extending outward in the width direction compared to the constricted portions; and wherein

the flap portions are formed with recessed portions indented in a thickness direction of the flap portions; and

the recessed portions extend from inside to outside in the width direction as going to the rear side, and reach the constricted portion.

[Claim 2]

The absorbent article according to claim 1, wherein

outside ends of the first flap portions in the width direction are positioned at rear side compared to a center of the first flap portions in the front-rear direction; and

outside ends of the second flap portions in the width direction are positioned at rear side compared to a center of the second flap portions in the front-rear direction.

[Claim 3]

The absorbent article according to claim 2, wherein outside ends of the second flap portions in the width direction are positioned more outside in the width direction compared to outside ends of the first flap portions in the width direction.

[Claim 4]

The absorbent article according to any one of claims 1 to 3, wherein the flap portions have adhesive portions configured to detachably attached to underwear at contact surfaces of flap portions to the underwear; and the recessed portions are provided at positions where the recessed portions do not overlap with the adhesive portions in the thickness direction.

[Claim 5]

The absorbent article according to any one of claims 1 to 4, wherein the flap portions are configured by an air-through nonwoven cloth at contact surfaces of flap portions to a wearer.