{0008}

This invention further includes the following features:

the chassis includes an inner sheet lying on the skin-facing side, an outer sheet lying on the non-skin-facing side, and the waist elastics attached between the inner and outer sheets;

the absorbent structure extends across the crotch region into the front and rear waist regions;

the leg-cuffs respectively include lateral proximal portions bonded to the chassis, lateral distal portions opposed to the lateral proximal portions and adapted to be spaced upward from the chassis, and cuff elastics contractibly attached under tension to the lateral distal portions;

at least one of the front and rear waist elastics include first waist elastics lying on the chassis outboard of the absorbent structure as viewed in the longitudinal direction, a plurality of second waist elastics extending in the transverse direction and spaced apart from each other in the longitudinal direction wherein central portions of the second waist elastics in the transverse direction overlaps with the absorbent structure, and a plurality of third waist elastics attached so as to extend along at least portions of the leg-opening and so as to extend at least partially in the transverse direction wherein distances between each of the third waist elastics in the longitudinal

direction are smaller than distances between each of the second waist elastics in the longitudinal direction; and

at least one of the front and rear waist regions includes a first sub-region provided with the first waist elastics, a third sub-region provided with portions of the third waist elastics extending in the transverse direction, and a second sub-region lying between the first and third sub-regions and provided with the second waist elastics, wherein

each of ~~a~~ tensile stresses in the first and third sub-regions is higher than that in the second sub-region, ~~and~~

the cuff elastics extend

at least to ~~the second sub-region~~ the first sub-region, and end edges of the lateral distal portions are attached to the inner sheet.

{0009}

~~According to an embodiment of this invention, the front and rear waist elastics include the second waist elastics attached to the second sub-region.~~ This invention further includes the following features:

the chassis includes an inner sheet lying on the skin-facing side, an outer sheet lying on the side opposite to the skin-facing side and the waist elastics attached between the inner and outer sheets;

the absorbent structure extends across the crotch region into the front and rear waist regions;

the leg-cuffs respectively include lateral proximal portions bonded to the chassis, lateral distal portions opposed to the lateral proximal portions and adapted to be spaced upward from the chassis and cuff elastics contractibly attached under tension to the lateral distal portions;

at least one of the front and rear waist elastics include first waist elastics lying on the chassis outboard of the absorbent structure as viewed in the longitudinal direction and third waist elastics attached so as to extend along at least portions of

the leg-opening and so as to extend at least partially in the transverse direction; and

at least one of the front and rear waist regions includes a first sub-region provided with the first waist elastics, a third sub-region provided with portions of the third waist elastics extending in the transverse direction and a second sub-region lying between the first and third sub-regions, formed to be larger in the longitudinal direction than the third sub-region and provided with no waist elastic extending in the transverse direction, wherein

each of tensile stresses in the first and third sub-regions is higher than that in the second sub-region,

the cuff elastics extend at least to the first sub-region, and

the lateral distal portions are attached to the inner sheet in positions overlapping with the first sub-region.

{0010}

According to another embodiment of this invention, the respective lateral distal portions in the leg-cuffs are bonded to the side of the chassis in regions overlapping the first sub-region.

{0011}

According to even another embodiment of this invention, a

tensile stress in the first sub-region and the third sub-region is in a range of 0.5 to 3.0 N and a tensile stress in the second sub-region is in a range of 0.1 to 1.5 N.

{0012}

According to still another embodiment of this invention, a stiffness value in the first through third sub-regions inclusive of the absorbent structure is in a range of 0.05 to 1.00 N*cm.

{0013}

According to yet another embodiment of this invention, the absorbent structure includes a liquid-absorbent core and is formed at least in regions overlapping the third sub-region with

{Claims}

{Claim 1}

A disposable wearing article having a longitudinal direction and a transverse direction, the article comprising:

a skin-facing side;

a non-skin-facing side;

a chassis including a front waist region, a rear waist region and a crotch region extending between the front and rear waist regions;

a waist-opening defined by front and rear ends of the chassis;

a pair of leg-openings defined by opposite lateral edges of the chassis;

an absorbent structure lying at least in the crotch region; and

a pair of leg-cuffs lying on the skin-facing side of the chassis, extending across the crotch region into the front and rear waist regions and spaced apart from each other in the transverse direction, wherein

a plurality of front and rear waist elastics arranged to extend in the transverse direction and to be spaced apart from each other in the longitudinal direction ~~are~~ is contractibly attached under tension to the front and rear waist regions, wherein:

the chassis includes an inner sheet lying on the skin-facing side, an outer sheet lying on the side opposite to the skin-facing side and the waist elastics attached between the inner and outer sheets;

the absorbent structure extends across the crotch region into the front and rear waist regions;

the leg-cuffs respectively include lateral proximal portions bonded to the chassis, lateral distal portions opposed to the lateral proximal portions and adapted to be spaced upward from the chassis and cuff elastics contractibly attached under tension to the lateral distal portions;

at least one of the front and rear waist elastics include first waist elastics lying on the chassis outboard of the absorbent structure as viewed in the longitudinal direction , a plurality of second waist elastics extending in the transverse direction and spaced apart from each other in the longitudinal direction wherein middle portions of the second waist elastics in the transverse direction overlaps with the absorbent structure, and a plurality of third waist elastics attached so as to extend along at least portions of the leg-opening and so as to extend at least partially in the transverse direction wherein distances between each of the third waist elastics in the longitudinal direction are smaller than distances between each of the second

waist elastics in the longitudinal direction; and

at least one of the front and rear waist regions includes a first sub-region provided with the first waist elastics, a third sub-region provided with portions of the third waist elastics extending in the transverse direction and a second sub-region lying between the first and third sub-regions and provided with the second waist elastics, wherein

each of ~~a~~ tensile stresses in the first and third sub-regions is higher than that in the second sub-region, ~~and~~

the cuff elastics extend at least to ~~the second sub-region~~ the first sub-region, and

end edges of the lateral distal portions are attached to the inner sheet.

{Claim 2}

The disposable wearing article ~~according to claim 1, wherein the front and rear waist elastics include the second waist elastics attached to the second sub-region~~ having a longitudinal direction and a transverse direction, the article comprising:

a skin-facing side;

a non-skin-facing side;

a chassis including a front waist region, a rear waist region and a crotch region extending between the front and rear waist regions;

a waist-opening defined by front and rear ends of the chassis;

a pair of leg-openings defined by opposite lateral edges of the chassis;

an absorbent structure lying at least in the crotch region; and

a pair of leg-cuffs lying on the skin-facing side of the chassis, extending across the crotch region into the front and rear waist regions and spaced apart from each other in the transverse direction, wherein

a plurality of front and rear waist elastics arranged to extend in the transverse direction and to be spaced apart from each other in the longitudinal direction is contractibly attached under tension to the front and rear waist regions, wherein:

the chassis includes an inner sheet lying on the skin-facing side, an outer sheet lying on the side opposite to the skin-facing side and the waist elastics attached between the inner and outer sheets;

the absorbent structure extends across the crotch region into the front and rear waist regions;

the leg-cuffs respectively include lateral proximal portions bonded to the chassis, lateral distal portions opposed to the lateral proximal portions and adapted to be spaced upward from the chassis and cuff elastics contractibly attached under tension to the lateral distal portions;

at least one of the front and rear waist elastics include first waist elastics lying on the chassis outboard of the absorbent structure as viewed in the longitudinal direction and third waist elastics attached so as to extend along at least portions of the leg-opening and so as to extend at least partially in the transverse direction; and

at least one of the front and rear waist regions includes a first sub-region provided with the first waist elastics, a third sub-region provided with portions of the third waist elastics extending in the transverse direction and a second sub-region lying between the first and third sub-regions, formed to be larger in the longitudinal direction than the third

sub-region and provided with no waist elastic extending in the transverse direction, wherein

each of tensile stresses in the first and third sub-regions is higher than that in the second sub-region,

the cuff elastics extend at least to the first sub-region, and

the lateral distal portions are attached to the inner sheet in positions overlapping with the first sub-region.

~~{Claim 3}~~

~~The disposable wearing article according to claim 1 or 2, wherein the respective lateral distal portions in the leg-cuffs are bonded to the side of the chassis in regions overlapping the first sub-region.~~

{Claim ~~4~~ 3}

The disposable wearing article according to claim 1 ~~any one of claims 1 through 3~~, wherein each of ~~a~~ tensile stresses in the first sub-region and the third sub-region is in a range of 0.5 to 3.0 N and a tensile stress in the second sub-region is in a range of 0.1 to 1.5 N.

{Claim ~~5~~ 4}

The disposable wearing article according to any one of claims 1 through ~~4~~ 3, wherein each of ~~a~~ stiffness values in the first through third sub-regions inclusive of the absorbent structure is in a range of 0.05 to 1.00 N*cm.

{Claim ~~6~~ 5}

The disposable wearing article according to any one of claims 1 through ~~5~~ 4, wherein the absorbent structure includes a

liquid-absorbent core and is formed at least in regions overlapping the third sub-region with core material lessened areas in which the amount of core material is less than in a remaining area.