

CLAIMS

1. A disposable diaper comprising an absorbent member containing an oblong absorbent core, the diaper having a front portion, a crotch portion, and a rear portion adapted to be worn about the front, the crotch, and the rear, respectively, of a wearer,

the absorbent core having a high basis weight region with a high basis weight of an absorbent core-forming material in a laterally middle part of the crotch portion and a low basis weight region having a lower basis weight of the absorbent core-forming material than the high basis weight region in both lateral sides of the high basis weight region,

the absorbent core having a central bending-inducing region extending in its longitudinal direction in the form of a slit, a groove, or a fiber-free region in the high basis weight region thereof and a side bending-inducing region in the form of a fiber-free region in each of the low basis weight regions thereof,

the central bending-inducing region extending in the longitudinal direction of the absorbent core toward the front end of the absorbent core beyond the front end of each side bending-inducing region,

the side bending-inducing regions extending in the longitudinal direction of the absorbent core toward the rear end of the absorbent core beyond the rear end of the central bending-inducing region,

the absorbent core containing an absorbent polymer, the absorbent member comprising the absorbent core and a core wrap sheet covering the upper and the lower side of the absorbent core,

the part of the core wrap sheet overlying the absorbent core and the part of the core wrap sheet underlying the absorbent core being bonded to each other in each side bending-inducing region, and

the part of the core wrap sheet overlying the absorbent core is not bonded to a member located right thereunder in the central bending-inducing region.

2. The disposable diaper according to claim 1, wherein the high basis weight region has a width increasing from an area where the central bending inducing region and the side bending-inducing regions are in a juxtaposed relation toward the front end of the front portion.

3. The disposable diaper according to claim 1 or 2, wherein the front end of the central bending-inducing region is short of the front portion.
4. The disposable diaper according to any one of claims 1 to 3, wherein the rear end of each side bending-inducing region is beyond the rear end of the central bending-inducing region by a distance L6 of 20 to 120 cm.
5. The disposable diaper according to any one of claims 1 to 4, wherein the rear end of the central bending-inducing region is at or short of the position corresponding to the wearer's exit point of feces, and the rear end of each side bending-inducing region is beyond the position corresponding to the wearer's exit point of feces.
6. The disposable diaper according to any one of claims 1 to 5, wherein the absorbent core comprises an upper absorbent layer and a lower absorbent layer larger than the upper absorbent layer in both the longitudinal and the transverse direction, the high basis weight region is a region where the upper and the lower absorbent layer overlap, the low basis weight regions are each a region where the upper and the lower absorbent layer do not overlap, and the central bending-inducing region is a rectangular through-hole longer in the longitudinal direction of the absorbent core and piercing through the upper and the lower absorbent layer.
7. The disposable diaper according to claim 6, wherein the through-hole is the result of stacking the upper and the lower absorbent layers each having a through-hole with their through-holes aligned with each other.
8. The disposable diaper according to any one of claims 1 to 7, wherein the fiber-free region is a region where any absorbent core-forming material is not present.
9. The disposable diaper according to any one of claims 1 to 7, wherein the fiber-free region is a region where an absorbent core-forming material is present in a total amount of 50 g/m² or less.

10. The disposable diaper according to any one of claims 1 to 9, wherein the absorbent core has, in the crotch portion, a central absorbent portion extending in its longitudinal direction and a pair of side absorbent portions located on both lateral sides of the central absorbent portion, and the central absorbent portion contains the absorbent polymer in a higher basis weight than each side absorbent portion.

11. The disposable diaper according to any one of claims 1 to 10, wherein the central absorbent portion has a multi-layered structure comprising an upper absorbent layer and a lower absorbent layer, and the upper absorbent layer contains the absorbent polymer in a higher basis weight than the lower absorbent layer.

12. The disposable diaper according to any one of claims 1 to 11, being of pull-on type, comprising an absorbent assembly having the absorbent member and an outer cover located on the non-skin-facing side of the absorbent assembly and having the absorbent assembly fixed thereto, the outer cover having its opposite lateral side edges in the front portion joined to those in the rear portion to form a pair of side seals, a waist opening, and a pair of leg openings.

13. The disposable pull-on diaper according to claim 12, being of separate outer cover type wherein the outer cover is separated into a rear side panel adapted to be worn about the rear side of a wearer and a front side panel adapted to be worn about the front side of a wearer, the rear side panel and the front side panel being joined to each other along the pair of side seals to form a cylindrical shape, and the absorbent assembly being fixed to bridge the front side panel and the rear side panel.

14. The disposable diaper according to any one of claims 1 to 11, being of flat type having a fastening tape in the rear portion and a landing tape receiving the fastening tape in the outer side of the front portion.