Claims

1. A disposable absorbent article comprising a front waistline region, a rear waistline region and a crotch region between the front waistline region and the rear waistline region, two sides of the front waistline region being respectively connected to two sides of the rear waistline region to form a waistline opening, and two sides of the crotch region respectively extending to the front waistline region and the rear waistline region to form a pair of thigh openings;

wherein the front waistline region and/or the rear waistline region are provided with at least one extensible region comprising a first nonwoven fabric layer, a second nonwoven fabric layer and an elastic mesh fabric compounded between the first nonwoven fabric layer and the second nonwoven fabric layer; and

wherein the first nonwoven fabric layer, the second nonwoven fabric layer and the elastic mesh fabric are compounded by ultrasonic welding, and a plurality of air-through holes passing through the nonwoven fabric layer and the elastic mesh fabric are formed in at least part of ultrasonic welding points.

2. A disposable absorbent article according to claim 1, wherein the extensible region is disposed across the whole of the front waistline region and the rear waistline region along a lateral direction.

3. A disposable absorbent article according to claim 2, wherein the elastic mesh fabric does not extend to the ends of the front waistline region and the rear waistline region, and the ends of the front waistline region and the rear waistline region comprise at least one elastomer compounded between the first nonwoven fabric layer and the second nonwoven fabric layer and extending along the lateral direction.

4. A disposable absorbent article according to claim 3, wherein the first nonwoven fabric layer extends over the front waistline region, the rear waistline region and the crotch region, while the elastic mesh fabric and the second nonwoven fabric layer extend over the front waistline region and the rear waistline region.

5. A disposable absorbent article according to claim 4, wherein the first nonwoven fabric layer extends beyond the elastic mesh fabric and the second nonwoven fabric layer, and is folded inwards at the ends of the waistline opening to cover the second nonwoven fabric layer.

6. A disposable absorbent article according to claim 4, wherein the second nonwoven fabric layer extends from the rear waistline region to a portion of the crotch region, and at least one elastomer extending curvedly in the lateral direction is compounded between the first nonwoven fabric layer and the second nonwoven fabric layer at a position without elastic mesh fabric.

7. A disposable absorbent article according to claim 1 or 2 wherein the extensible region is configured with an extension ratio increasing continuously from the crotch region to the waistline opening.

8. A disposable absorbent article according to claim 1 or 2, wherein the extensible region is configured with an extension ratio of 1.2 to 8.

9. A disposable absorbent article according to claim 1 or 2, wherein the extensible region is configured with an elastomer content of 5% to 100%, a fineness of 20 to 1240 dtex and a basic weight of 20 to 200 gsm.

10. A disposable absorbent article according to claim 1 or 2, wherein the elastic mesh fabric is compounded with at least one nonwoven fabric layer continuously or discontinuously.

11. A disposable absorbent article according to claim 1 or 2, wherein further comprising an absorbent body extending from the crotch region to the front waistline region and the rear waistline region; and wherein two sides of the absorbent body are provided with a protective enclosure, and two sides of the protective enclosure are folded inwards to cover at least one elastomer extending in a longitudinal direction to form a three-dimensional protective enclosure.

12. A disposable absorbent article according to claim 11, wherein two ends of the absorbent body in the longitudinal direction are covered with a protective sheet respectively.