CLAIMS

We claim:

1. An elastic absorbent assembly for use in manufacturing disposable absorbent garments, the elastic absorbent assembly comprising:

an absorbent core comprising:

a base layer having a pair of side edges and a longitudinal centerline spaced inwardly from the side edges;

an elastic construction supported by the base layer, the elastic construction including a plurality of spaced apart elastic elements forming a plurality of channels and a plurality of cells; and

superabsorbent polymer particles coupled to cells created by the elastic elements.

2. The elastic absorbent assembly of claim 1, further comprising:

a top layer extending over the elastic construction.

3. The elastic absorbent assembly of claim 2, wherein the superabsorbent polymer particles are located in at least some of the plurality of channels and the top layer is configured to seal the superabsorbent polymer particles in the channels.

4. The elastic absorbent assembly of claim 1, wherein the superabsorbent polymer particles are located in at least some of the plurality of cells.

5. The elastic absorbent assembly of claim 1, wherein the superabsorbent polymer particles are adhered to the cells created by the elastic elements.

6. The elastic absorbent assembly of claim 1, wherein the superabsorbent polymer particles are bonded to the cells created by the elastic elements.

7. The elastic absorbent assembly of claim 1, further comprising an acquisition layer adjacent to the absorbent core.

8. The elastic absorbent assembly of claim 7, further comprising a distribution layer between acquisition layer and the absorbent core.

9. The elastic absorbent assembly of claim 1, further comprising a first wide region, a narrow region, and a second wide region.

10. An elastic absorbent core assembly for incorporation into a disposable absorbent core, said elastic absorbent core assembly comprising:

an elastic panel comprising a first material layer, a top material layer, and an elastic construction supported therebetween including a plurality of spaced apart elastic elements;

wherein the top material layer extends over the elastic construction and the elastic elements are adhered such that the elastic panel forms a plurality of elastic bands and a plurality of channels are formed above the top layer and between the elastic bands; and

wherein superabsorbent polymers particles are located within the channels.

11. The elastic absorbent core assembly , wherein the first layer is a nonwoven material, and wherein the top layer extends over the elastic bands, the elastic elements being adhered to at least the top layer.

12. The elastic absorbent core assembly of claim 10, further comprising:

a cap layer coupled to the elastic bands and the channels with superabsorbent polymer particles located therein.

13. The elastic absorbent core assembly of claim 12, wherein said cap layer is positioned to seal said channels.

14. The elastic absorbent core assembly of claim 10, wherein said elastic elements is adhered to the first layer and the top layer.

15. The elastic absorbent core assembly of claim 10, wherein the superabsorbent polymer particles are adhered within the channels.

16. The elastic absorbent core assembly of claim 10, wherein the superabsorbent polymer particles are secured within the channels.

17. The elastic absorbent core assembly of claim 10, wherein the superabsorbent polymer particles are bonded to the channels.

18. The elastic absorbent core assembly of claim 10, wherein cells are formed beneath the top layer and wherein superabsorbent polymer particles are secured within the channels.

19. The elastic absorbent core assembly of claim 10, further comprising:

a backsheet positioned beneath said elastic panel; and

a topsheet extending over the elastic panel; and

wherein the elastic elements are mutually parallel.

20. The elastic absorbent core assembly of claim 19, wherein said top sheet extends over the elastic panel to seal said channels and superabsorbent polymer particles are secured within the channels.

CLAIMS

1. An elastic absorbent assembly for use in manufacturing disposable absorbent garments, the elastic absorbent assembly comprising:

an absorbent core comprising:

a top nonwoven layer;

a base nonwoven layer having a pair of side edges and a longitudinal centerline spaced inwardly from the side edges;

an elastic construction disposed therebetween and supported by the base layer, the elastic construction including a plurality of spaced apart elastic elements bonding with the top layer and the base layer, thereby forming with the top and base layers a plurality of spaced apart channels and a plurality of spaced apart cells, the cells being formed between the top layer and the base layer and the channels being formed above the top layer; and

wherein superabsorbent polymer particles are located in at least some of the plurality of channels.

2. The elastic absorbent assembly of claim 1, further comprising:

a top layer extending over the elastic construction.

3. The elastic absorbent assembly of claim 2, wherein the top layer is configured to seal the superabsorbent polymer particles in the channels.

4. The elastic absorbent assembly of claim 1, wherein superabsorbent polymer particles are located in at least some of the plurality of cells.

5. The elastic absorbent assembly of claim 4, wherein the superabsorbent polymer particles are adhered to the cells created by the elastic elements.

6. The elastic absorbent assembly of claim 4, wherein the superabsorbent polymer particles are bonded to the cells created by the elastic elements.

7. The elastic absorbent assembly of claim 1, further comprising an acquisition layer adjacent to the absorbent core.

8. The elastic absorbent assembly of claim 7, further comprising a distribution layer between acquisition layer and the absorbent core.

9. The elastic absorbent assembly of claim 1, further comprising a first wide region, a narrow region, and a second wide region.

10. An elastic absorbent core assembly for incorporation into a disposable absorbent core, said elastic absorbent core assembly comprising:

an elastic panel comprising a first material layer of nonwoven, a top material layer of nonwoven, and an elastic construction supported therebetween including a plurality of spaced apart elastic elements;

wherein the top material layer extends over the elastic construction and the elastic elements are adhered to said first and top layers such that the elastic panel forms a plurality of elastic bands and a plurality of channels are formed above the top layer and outside of the elastic panel; and

wherein superabsorbent polymers particles are located within the channels above the top layer.

11. The elastic absorbent core assembly of claim 10, wherein a plurality of spaced apart empty cells are formed between the top layer and first layer and in between adjacent pairs of said elastics, wherein superabsorbent particles of the elastic core assembly are located exclusively in channels above the top layer.

12. The elastic absorbent core assembly of claim 10, further comprising:

a cap layer coupled to the elastic bands and the channels with superabsorbent polymer particles located therein.

13. The elastic absorbent core assembly of claim 12, wherein said cap layer is positioned to seal said channels.

14. The elastic absorbent core assembly of claim 10, wherein said elastic elements are adhered to the first layer and the top layer.

15. The elastic absorbent core assembly of claim 10, wherein the superabsorbent polymer particles are adhered within the channels.

16. The elastic absorbent core assembly of claim 10, wherein the superabsorbent polymer particles are secured within the channels.

17. The elastic absorbent core assembly of claim 10, wherein the superabsorbent polymer particles are bonded to the channels.

18. The elastic absorbent core assembly of claim 10, wherein cells are formed beneath the top layer and wherein superabsorbent polymer particles are secured within the channels and within a plurality of said cells.

19. The elastic absorbent core assembly of claim 10, further comprising:

a backsheet positioned beneath said elastic panel; and

a topsheet extending over the elastic panel; and

wherein the elastic elements are mutually parallel.

20. The elastic absorbent core assembly of claim 19, wherein said top sheet extends over the elastic panel to seal said channels and superabsorbent polymer particles are secured within the channels.

21. A disposable absorbent article comprising:

a backsheet;

a topsheet; and

an elastic absorbent core assembly disposed between said topsheet and said backsheet such that a longitudinal centerline of said garment extends through said topsheet, said backsheet, and said absorbent core assembly, wherein said topsheet, said backsheet and said absorbent core provide a central body of said disposable absorbent garment; and

wherein said elastic absorbent core assembly is formed by a top nonwoven layer, a base nonwoven layer having a pair of side edges and a longitudinal centerline spaced inwardly from the side edges, and an elastic construction disposed between the top layer and base layer, the elastic construction including a plurality of spaced apart elastic elements bonding with the top layer and the base layer, thereby forming with the top and base layers a plurality of spaced apart channels and a plurality of spaced apart cells, the cells being formed between the top layer and the base layer and the channels being formed above the top layer; and

wherein superabsorbent polymer particles are located in at least some of the plurality of channels.

22. The disposable absorbent article of claim 21, wherein said cells contain superabsorbent polymer particles.