

What is claimed is:

1. An absorbent article comprising:
 - a backsheet;
 - a wetness indicator composition comprising a stabilizer, a colorant, and a matrix;
 - an absorbent core comprising a nonwoven layer and a complex of absorbent polymer material and thermoplastic adhesive material;
 - wherein the wetness indicator composition is in direct contact with an inner surface of the backsheet and an outer surface of the nonwoven layer;
 - wherein the complex of absorbent polymer material and thermoplastic adhesive material is in direct contact with an inner surface of the nonwoven; and
 - wherein the absorbent core is substantially cellulose free.
2. The absorbent article of Claim 1, wherein the wetness indicator composition comprises materials selected from the group consisting of quaternary ammonium salt compounds, ethoxylated quaternary ammonium salt compounds, propoxylated quaternary ammonium salts, alkyl diammonium pentamethyl chlorides, quaternized silicone compounds, cationic guar, cationic exchange resins, cationic clay materials, amines, ethoxylated amines, propoxylated amines, polyamines, amine oxides, amides, polyethyleneimines, anionic exchange resins, polyacrylic acid polymers, organic acids, rosins, rosin esters, pentaerythritol rosin esters, polymerized rosins, dyes, pigments, an HLB modifier, a surfactant, an anti-oxidant, viscosity modifiers, hardening agents, and combinations thereof.
3. The absorbent article according to any of the preceding claims, wherein the wetness indicator composition comprises straight chain alkyl moieties having a chain length from about C12 to about C300.
4. The absorbent article according to any of the preceding claims, wherein the colorant is a pH indicator.

5. The absorbent article of according to any of the preceding claims, wherein the colorant is selected from the group consisting of bromocresol green, bromocresol purple, bromophenol blue, m-cresol purple, cresol red, chlorophenol red, bromothymol blue, bromopyrogallol red, bromoxylenol blue, acridine, acridine orange, oil soluble dyes, pigments, and combinations thereof.
6. The absorbent article according to any of the preceding claims, wherein the backsheet comprises polypropylene, polyethylene, or combinations thereof.
7. The absorbent article of according to any of the preceding claims, wherein the backsheet has a water vapor transmission rate greater than about 100 g/m²/24hrs.
8. The absorbent article of Claim 1, wherein the backsheet has a basis weight greater than about 5 g/m².
9. The absorbent article according to any of the preceding claims, wherein the wetness indicator composition is affixed to the backsheet.
10. The absorbent article according to any of the preceding claims, wherein the wetness indicator composition is affixed to the nonwoven layer of the absorbent core.

CLAIMS

1. An absorbent article comprising:
 - a backsheet;
 - a wetness indicator composition comprising a stabilizer, a colorant, and a matrix;
 - an absorbent core comprising a nonwoven layer and a complex of absorbent polymer material and thermoplastic adhesive material;
 - wherein the wetness indicator composition is in direct contact with an inner surface of the backsheet and an outer surface of the nonwoven layer;
 - wherein the complex of absorbent polymer material and thermoplastic adhesive material is in direct contact with an inner surface of the nonwoven layer;
 - wherein the absorbent core comprises less than 10% by weight cellulosic fibers;
 - wherein the colorant has a pH lower than a pH of the complex of absorbent polymer material and thermoplastic adhesive material;
 - wherein the stabilizer has a pH lower than the pH of the colorant; and
 - wherein the stabilizer has a weight percent concentration greater than a weight percent concentration of the colorant.
2. The absorbent article of Claim 1, wherein the wetness indicator composition comprises materials selected from the group consisting of quaternary ammonium salt compounds, ethoxylated quaternary ammonium salt compounds, propoxylated quaternary ammonium salts, alkyl diammonium pentamethyl chlorides, quarternized silicone compounds, cationic guar, cationic exchange resins, cationic clay materials, amines, ethoxylated amines, propoxylated amines, polyamines, amine oxides, amides, polyethyleneimines, anionic exchange resins, polyacrylic acid polymers, organic acids, rosins, rosin esters, pentaerythritol rosin esters, polymerized rosins, dyes, pigments, an HLB modifier, a surfactant, an anti-oxidant, viscosity modifiers, hardening agents, and combinations thereof.

3. The absorbent article of Claim 1, wherein the wetness indicator composition comprises straight chain alkyl moieties having a chain length from about C₁₂ to about C₃₀₀.
4. The absorbent article of Claim 1, wherein the colorant is a pH indicator.
5. The absorbent article of Claim 1, wherein the colorant is selected from the group consisting of bromocresol green, bromocresol purple, bromophenol blue, m-cresol purple, cresol red, chlorophenol red, bromothymol blue, bromopyrogallol red, bromoxylene blue, acridine, acridine orange, oil soluble dyes, pigments, and combinations thereof.
6. The absorbent article of Claim 1, wherein the backsheet comprises polypropylene, polyethylene, or combinations thereof.
7. The absorbent article of Claim 1, wherein the backsheet has a water vapor transmission rate greater than about 100 g/m²/24hrs.
8. The absorbent article of Claim 1, wherein the backsheet has a basis weight greater than about 5 g/m².
9. The absorbent article of Claim 1, wherein the wetness indicator composition is affixed to the backsheet.
10. The absorbent article of Claim 1, wherein the wetness indicator composition is affixed to the nonwoven layer of the absorbent core.
11. The absorbent article of Claim 1, wherein the wetness indicator is affixed to the backsheet in one or more patterns selected from the group consisting of stripes, dots, geometric shapes, irregular shapes, alphanumeric characters, anthropomorphic images, pictorial representation of animals, pictorial representation of inanimate objects, cartoon characters, logos, trademarks and combinations thereof.

12. The absorbent article of Claim 1, wherein the nonwoven layer is a dusting layer.
13. The absorbent article of Claim 1, wherein the nonwoven layer is surfactant free.
14. The absorbent article of Claim 1, wherein the dusting layer has a mean flow pore size greater than about 1 micron.
15. The absorbent article of Claim 1, wherein the dusting layer has a basis weight greater than about 3 g/m².
16. The absorbent article of Claim 1, wherein the dusting layer has a hydrohead greater than about 1 mm of water.
17. The absorbent article of Claim 1, wherein the dusting layer has a fiber diameter greater than about 10 nanometers.
18. The absorbent article of Claim 1, wherein the dusting layer comprises fibers having a non-round cross-section.
19. The absorbent article of Claim 1, wherein the colorant has an initial color state, the initial color state being associated with a first state of the wetness indicator composition and a final color state, the final color state being associated with a second state of the wetness indicator composition.
20. The absorbent article of Claim 19, wherein the matrix comprises a mixture of a first binding agent and a second binding agent, wherein the first binding agent immobilizes the colorant when it is in its initial color state and the second binding agent immobilizes said colorant when it is in its final color state.

21. An absorbent article comprising:

a backsheet;

a wetness indicator composition comprising a stabilizer, a colorant, and a matrix;

an absorbent core comprising absorbent polymer material and thermoplastic adhesive material;

a nonwoven layer between the absorbent core and the backsheet;

wherein the wetness indicator composition is in direct contact with an inner surface of the backsheet and an outer surface of the nonwoven layer;

wherein the complex of absorbent polymer material and thermoplastic adhesive material is in direct contact with an inner surface of the nonwoven layer;

wherein the absorbent core comprises less than 10% by weight cellulosic fibers;

wherein the colorant has a pH lower than a pH of the complex of absorbent polymer material and thermoplastic adhesive material;

wherein the stabilizer has a pH lower than the pH of the colorant; and

wherein the stabilizer has a weight percent concentration greater than a weight percent concentration of the colorant.