

Title (en)

ABSORBENT STRUCTURES HAVING FLUID DISTRIBUTION AND STORAGE LAYERS

Title (de)

ABSORBIERENDE STRUKTUREN MIT FLÜSSIGKEITSVERTEILUNGSSCHICHTEN UND FLÜSSIGKEITSSPEICHERSCHICHTEN

Title (fr)

STRUCTURES ABSORBANTES A COUCHES DE DISTRIBUTION ET DE STOCKAGE DE FLUIDE

Publication

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Application

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Abstract (en)

[origin: CA2334351A1] Disclosed is an absorbent structure including a liquid acquisition layer and a fibrous liquid storage layer in liquid communication with the acquisition layer. The storage layer includes SAP particles. The acquisition layer includes synthetic fibers and the fibers are latex bonded. A fluid acquisition and/or distribution layer (ADL) containing at least two layers, a top layer of latex bonded synthetic fibers and a bottom layer of latex and/or thermal bonded cellulose fibers and method for preparation thereof are disclosed. The synthetic fiber layer is highly porous and provides rapid fluid acquisition under load. The cellulose layer provides z-direction capillary force to pull fluid into the absorbent product, to provide temporary fluid immobilization, and to act as a conduit for fluid to be pulled into unsaturated portion of the permanent fluid storage layer. The ADL of the invention provides increased protection against leakage relative to single-layer ADLS.

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