

Title (en)
Fabric for the wet end of a papermaking machine

Title (de)
Papiermaschinensieb für die Nasspartie einer Papiermaschine

Title (fr)
Tissu pour la partie humide d' une machine à papier

Publication
EP 1013822 B1 20050302 (DE)

Application
EP 99124253 A 19991204

Priority
DE 19859583 A 19981222

Abstract (en)
[origin: EP1013822A2] The fourdrinier, for the wet section of a papermaking machine, is a textile or non-textile and especially a woven material (16), with a nonwoven layer (20) which at least partially covers the side (18) towards the paper. The nonwoven layer is compressed less strongly in some zones than in other zones. The nonwoven layer (20) is less compressed at zones where the fourdrinier surface (18) towards the paper has raised sections. The nonwoven layer has a thickness of 0.1-1.0 mm, with a consistent permeability. The outer surface (21) of the nonwoven layer (20) can have a durable structure with profiles such as in circles, triangles, rectangles or similar recessed profiles. The surface (21) of the nonwoven layer (20) is treated physically/chemically to give qualities such as hydrophobic, hydrophilic, antistatic or dirt resistant. The nonwoven layer (20) has pores through it which pref. taper or expand downwards towards the fourdrinier material (16). The surface (18) of the fourdrinier material (16) towards the paper has fibers or filaments which give a durable bond with the nonwoven layer (20). The nonwoven layer contains a bonding agent pref. as a fusible adhesive for bonding to the fourdrinier, to be activated by a linear pressure of 10-50 N/mm and heat at a temp. of 170-270 degrees C. Or the nonwoven (20) is durably bonded to the fourdrinier (16) by ultrasonics with a welding frequency of 15-72 MHz and pref. 15-35MHz. The nonwoven layer (20) covers $\geq 40\%$ of the surface (18) of the fourdrinier (16) towards the paper.

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D21F 1/00

IPC 8 full level
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CPC (source: EP US)
D21F 1/0036 (2013.01 - EP US); **D21F 7/083** (2013.01 - EP US); **Y10T 442/3724** (2015.04 - EP US)

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