

Title (en)
Method and apparatus for coating a web

Title (de)
Verfahren und Vorrichtung zum Beschichten einer Materialbahn

Title (fr)
Procede et dispositif d'enduction de materiau en bande

Publication
EP 1447475 A3 20041117 (DE)

Application
EP 03104816 A 20031219

Priority
DE 10260593 A 20021223

Abstract (en)
[origin: DE10260593A1] The coating medium (23) is supplied by a line (38) directly to the distribution chamber (20), where the internal pressure is adjusted. The method is a falling-liquid-curtain coating process. The medium leaves the distribution chamber through an outlet opening (20c) as a curtain or mist under gravity, and is coated onto the web. The pressure in the distribution chamber is set to a given value by a controller (48). The quantity coated is measured, and controlled in coating rate, from the results. The medium is de-aerated and filtered before entering the distribution chamber. The quantity pumped to the distribution chamber per unit time is varied as the control magnitude. Pump power is varied to alter the pressure, and/or the cross section available for flow is varied in a throttling valve (51). Flow leaving the chamber through the drain line (60) is controlled for the same purpose. A pressure sensor (44) in the chamber, measures the internal pressure, well away from the inlet. The medium coated per unit time is measured precisely. The controller (48) alters a rheological parameter of the medium, especially viscosity by dilution, as a control magnitude. Its temperature is altered. The web is deflected, preferably without contact and after coating, so that its path descends and then rises, during travel along the machine. An Independent claim is included for the corresponding equipment.

IPC 1-7
D21H 23/22

IPC 8 full level
D21H 23/22 (2006.01)

CPC (source: EP)
D21H 23/22 (2013.01)

Citation (search report)

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CN102639254A

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DE 10260593 A1 20040701; DE 20221974 U1 20091231; EP 1447475 A2 20040818; EP 1447475 A3 20041117

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