

Title (en)
Method and apparatus for curtain coating

Title (de)
Verfahren und Vorrichtung zum Vorhang- Beschichten

Title (fr)
Méthode et appareil pour revêtement au rideau

Publication
EP 1428582 A1 20040616 (EN)

Application
EP 02027834 A 20021212

Priority
EP 02027834 A 20021212

Abstract (en)
In a method and apparatus for curtain coating of a paper or board web a web substrate is moved below a hopper means providing a single or multilayer liquid coating in the form of a freefalling curtain impinging the substrate at a dynamic wetting line. An air shield is located upstream of the dynamic wetting line with respect to the moving direction of the web. The dynamic wetting line of the coating curtain on the web is oriented generally perpendicular to the moving direction of the web, providing substantially the same air pressure over an essential part of the coating curtain on its front and back side with respect to the moving direction of the web providing a first supply air flow upstream to the wetting line wherein the supply air flows over a substantial length along the freefalling curtain, and evacuationing air from a location further upstream of a supply air flow outlet so that the air near the dynamic wetting line is moved against the moving direction of the web and the boundary air layer entrained to the web. A second supply air is provided in close proximity to the wetting line. The first and second supply air is evacuated by a first air suction and the boundary air is evacuated by a second air suction.

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B05C 5/00

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Citation (applicant)
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