Title (en)

Device and process for applying a fluid or pasty material onto a moving web

Title (de)

Verfahren und Vorrichtung zum Auftragen eines flüssigen oder pastösen Auftragsmediums auf eine laufende Materialbahn

Title (fr)

Dispositif et procédé d'application de materiau fluide ou pâteux sur une bande en mouvement

Publication

EP 1188861 A3 20020807 (DE)

Application

EP 01117338 A 20010718

Priority

DE 10046171 A 20000919

Abstract (en)

[origin: EP1188861A2] To coat a web (12) of paper or cardboard, an applicator (10) applies a liquid or paste coating (24,34,36) to one side of the web while it is still wet. The coating includes at least one organic component (36) which improves the surface quality and the printing properties. The web coating applicator applies the organic component of the coating as a cellulose suspension and/or paper fibers with a higher freeness value of ≥ 50 degrees SR and preferably ≥ 70 degrees SR and especially ≥ 85 degrees SR. The web coating is applied at the web forming stage or the press station. At least one coating color (34) is added to the coating before it is applied to the web. After cladding, at least one coating color can be applied by a second applicator after the main applicator. The time span between the application of the coating and the coating color is 1-100 ms and preferably 20-50 ms. The coating color contains components of offset or gravure printing ink. At least one coating is applied to one or both sides of the web, by a direct or indirect application in a controlled dosage. The coating application can be in sections over the web width. Where a multi-layer web is to be coated, the coating is applied only to at least one outer layer. An Independent claim is included for a web coating station at the web forming or press stages, with a feed (32) to the applicator to deliver the coating medium. Preferred Features: The coating station can have a main applicator, and a second applicator after it, with their coating medium feeds. At least one applicator is divided into sections, where each is controlled individually to apply a separate volume of coating to the web surface. At least one applicator is a spray jet or press roller, with an operating jet pressure of 0.05-0.5 bar and preferably 0.1-0.4 bar. At the web coating applicator station, the web has a solid content of 5-60% and preferably 8-17%. The solid content of at least one coating medium is 5-50% and preferably 10-30%. The total application weight of at least one coating medium on each web surface is 1-10 g/m<2> dry weight. The web forming stage includes the stock inlet, which can be a multi-layer stock inlet fitted with blades.

IPC 1-7

D21H 23/28

IPC 8 full level

D21H 23/28 (2006.01)

CPC (source: EP US)

D21H 23/28 (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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EP 1188861 A2 20020320; **EP 1188861 A3 20020807**; DE 10046171 A1 20020328; US 2002060010 A1 20020523

DOCDB simple family (application)

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