Title (en)

Apparatus and process for coating a fibrous web

Title (de)

Vorrichtung und Verfahren zum Beschichten einer Faserstoffbahn

Title (fr)

Appareil et methode pour endiure une bande fibreuse

Publication

EP 1760195 B1 20130410 (DE)

Application

EP 06114817 A 20060601

Priority

DE 102005041372 A 20050901

Abstract (en)

[origin: EP1760195A1] The device for manufacturing and simultaneous coating of paper, cardboard/different fibrous material web (10), comprises web formation device, coating device (2) arranged behind the formation device and exhibits delivery nozzle (3) and heating mechanism (7). The delivery nozzle applies coating paint (11) indirectly over the surface of a transmission roller or directly on one side of the fibrous web in a coating paint curtain (11a) through the force of gravity and/or forces applied on the paint and/or the curtain. The paint is coated on the fibrous material web at 60-100[deg]C. The device for manufacturing and simultaneous coating of paper, cardboard/different fibrous material web (10), comprises web formation device, coating device (2) arranged behind the formation device and exhibits delivery nozzle (3) and heating mechanism (7). The delivery nozzle applies coating paint (11) indirectly over the surface of a transmission roller or directly on one side of the fibrous web in a coating paint curtain (11a) through the force of gravity and/or forces applied on the paint and/or the curtain. The paint is coated on the fibrous material web at 60-100[deg]C. The coating paint exhibits a temperature that lies below the temperature of the fibrous material web by a value of = 30, 20 or 10 K. The temperature of the coating paint lies at 50-70[deg]C. The delivery nozzle is arranged at a distance with respect to the surface of the roller or with respect to one side of the material web and is built for delivering a mono-layered or multi-layered coating paint curtain. The coating paint exhibits a solid content of 65-72%. A vacuum degasser (5) is intended for degassing the coating paint that is led through the degasser, before supplied to the coating device. The coating paint enters into the degasser exhibiting a temperature, which corresponds to or lies above the temperature of the coating paint at the position of its direct application on the fibrous material web with a tolerance +- 10 K. The coating paint exhibits a temperature of 40-60[deg]C and a pressure of 0.02-0.1 bar in the degasser. A stream of gas bubbles is generated in the degasser against the feed direction of the coating paint. A coating paint formation device (6) is arranged upstream to the coating device in the feeding direction of the coating paint that is led free of a forced cooling from the formation device into the coating device and up to the fibrous material web. The heating mechanism is intended for the coating paint in the feeding direction of the coating paint between the coating paint formation device and the degasser and/or before and/or in the coating device. An independent claim is included for a procedure for manufacturing and simultaneous coating of paper, cardboard/different fibrous material web.

IPC 8 full level

D21H 23/46 (2006.01); D21H 19/36 (2006.01); D21H 19/54 (2006.01); D21H 19/82 (2006.01)

CPC (source: EP)

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