

Title (en)

Device for creating coated paper, cardboard or other strips of fibrous material with at least one thermo-sensitive layer and method for operating such a device

Title (de)

Vorrichtung zur Erzeugung von beschichteten Papier-, Karton- oder anderen Faserstoffbahnen mit zumindest einer thermosensitiven Schicht und Verfahren zum Betreiben einer derartigen Vorrichtung

Title (fr)

Dispositif de production de bandes de matière fibreuse de papier, de carton ou autres revêtues dotées au moins d'une couche thermosensible et procédé de fonctionnement d'un tel dispositif

Publication

EP 2157239 A1 20100224 (DE)

Application

EP 09168040 A 20090818

Priority

DE 102008041419 A 20080821

Abstract (en)

The device comprises coating units, drying systems, a web turning apparatus arranged in connection between two means (7, 8) forming function layers under formation of a first web guiding path, and means (15) for bypassing the web turning apparatus arranged between the means forming the function layers under formation of a second web guiding path. The means for bypassing the web turning apparatus comprises conducting- and/or guiding elements for guiding carrier webs that are arranged and implemented in order to produce a branching (11) in the web guidance behind the first function layer. The device comprises coating units, drying systems, a web turning apparatus arranged in connection between two means (7, 8) forming function layers under formation of a first web guiding path, and means (15) for bypassing the web turning apparatus arranged between the means forming the function layers under formation of a second web guiding path. The means for bypassing the web turning apparatus comprises conducting- and/or guiding elements for guiding carrier webs that are arranged and implemented in order to produce a branching (11) in the web guidance behind the first function layer under formation of a bypass for web turning apparatus and a junction (13) of the both web guidance path before the means forming second function layer. The coating units and the drying systems are formed and arranged in the means forming function layers in such a way that the carrier web is freely implemented by a return of the curve direction in longitudinal direction of the device observed within the means forming function layers. The coating units and the drying systems are arranged in means forming function layers in a horizontal plain or in a vertical plain. The curtain coating tool comprises coating nozzles extending itself in breadth-direction of the carrier web. The coating nozzle is connected over a coating medium supply with a coating medium supply system (16). An individual curtain coating tool is assigned two coating medium supply system for different coating mediums, which are alternatively coupled. The coating medium supply system consists of a thermosensitive coating medium. The drying systems of the means forming function layers comprise a coating unit, which is formed as hot air drying unit. An independent claim is included for a method for the production of coated paper, cardboard or other fiber material web.

Abstract (de)

Die Erfindung betrifft eine Vorrichtung (1) zur Erzeugung von beschichteten Papier-, Karton- oder anderen Faserstoffbahnen (10) mit zumindest einer thermosensitiven Schicht (4, 6) als Funktionsschicht durch Auftrag eines flüssigen oder pastösen thermosensitiven Auftragsmediums auf eine Trägerbahn (T) mittels einer eine Funktionsschicht bildenden Einheit (7, 8), umfassend zumindest eine Auftragsseinrichtung (A1, A2) und eine dieser nachgeordnete Trockenstrecke (TS1, TS2). Die Erfindung ist dadurch gekennzeichnet, dass zwei hintereinander schaltbare, jeweils zumindest eine Funktionsschicht bildende Einheiten (7, 8) vorgesehen sind, wobei im Verbindungsbereich zwischen den beiden Funktionsschichten bildenden Einheiten (7, 8) eine Bahnwendevorrichtung (14) unter Ausbildung eines ersten Bahnführungsweges (I) und Mittel (15) zur Umgehung der Bahnwendevorrichtung (14) unter Ausbildung eines zweiten Bahnführungsweges (II) für die Trägerbahn (T) zwischen beiden Funktionsschichten bildenden Einheiten (7, 8) vorhanden sind. Die Erfindung betrifft ferner ein Verfahren zum Betreiben einer derartigen Vorrichtung (1).

IPC 8 full level

D21H 23/48 (2006.01); **B05C 5/00** (2006.01); **B05D 1/30** (2006.01)

CPC (source: EP US)

B05C 5/005 (2013.01 - EP US); **D21H 23/48** (2013.01 - EP US)

Citation (applicant)

LA PAPETERIE, vol. 275, April 2006 (2006-04-01), pages 6 - 14

Citation (search report)

- [A] EP 1538262 A1 20050608 - VOITH PAPER PATENT GMBH [DE]
- [A] WO 2004001133 A2 20031231 - VOITH PAPER PATENT GMBH [DE], et al
- [A] EP 1593778 A1 20051109 - VOITH PAPER PATENT GMBH [DE]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2157239 A1 20100224; **EP 2157239 B1 20110817**; AT E520825 T1 20110915; DE 102008041419 A1 20100225; ES 2369174 T3 20111128; US 2010051223 A1 20100304; US 8066850 B2 20111129

DOCDB simple family (application)

EP 09168040 A 20090818; AT 09168040 T 20090818; DE 102008041419 A 20080821; ES 09168040 T 20090818; US 54291909 A 20090818