

Title (en)

Method for producing a coated length of fibre sheet, in particular paper or cardboard

Title (de)

Verfahren zur Herstellung einer beschichteten Faserstoffbahn, insbesondere aus Papier oder Karton

Title (fr)

Procédé de fabrication d'une bande de matière fibreuse revêtue, en particulier de papier ou de carton

Publication

EP 1964971 A2 20080903 (DE)

Application

EP 07150128 A 20071219

Priority

DE 102007009702 A 20070228

Abstract (en)

The method for producing a special fibrous web such as a coated paper or paperboard, comprises forming web from a fibrous material mixture with a headbox (2) and a wire section (3), dewatering the web in a pressing section (4), pre-drying the formed fibrous web (7) to obtain a residual moisture content, coating both web sides (7a, 7b) of the fibrous web, and redrying and rolling the fibrous web. In an on-line process, the web side is provided triply with coating section (11, 17, 18). The two last coating sections are applied directly with a 1:1-coating unit without intermediate drying. The method for producing a special fibrous web such as a coated paper or paperboard, comprises forming web from a fibrous material mixture with a headbox (2) and a wire section (3), dewatering the web in a pressing section (4), pre-drying the formed fibrous web (7) to obtain a residual moisture content, coating both web sides (7a, 7b) of the fibrous web, and redrying and rolling the fibrous web. In an on-line process, the web side is provided triply with coating section (11, 17, 18). The two last coating sections are applied directly with a 1:1-coating unit without intermediate drying, i.e. wet on wet manner. The first coating layer and/or a further and/or second coating section are applied indirectly with a film spreading unit and/or directly with a blade coater. The first coating layer and/or the further and/or second coating layer are applied directly with a 1:1-coating unit. The first coating layer, a pigment containing pre-coating, a middle coating layer, a function layer and the last coating layer represent a covering and/or a protective layer. The first and second web sides are coated in multilayer manner. The coating layer has a coat weight of 70-120 g/m² of total or per web side. A curtain-coat coating unit or spray coating unit is used as 1:1-coating unit. Calendaring of the fibrous material web is carried out before the pre-coating and/or the first coating layer and/or after the pre-coating and/or the first coating layer and/or before rolling. Independent claims are included for: (1) a machine for the production of a coated fibrous web; and (2) a special paper.

Abstract (de)

Die Erfindung betrifft ein Verfahren zur Herstellung einer beschichteten Faserstoffbahn (7), insbesondere aus Papier oder Karton in einer Bahn-Herstellungsmaschine (1) aufweisend folgende Schritte: - Bahnbildung aus einem Faserstoffgemisch mit einem Stoffauflauf (2) und einer Siebpartie (3); - Entwässerung in einer Pressenpartie (4); - Vortrocknung (6), um die gebildete Faserstoffbahn (7) zumindest bis auf einen Restfeuchtegehalt zu trocknen; - Beschichtung wenigstens einer Seite (7a, 7b) der Faserstoffbahn (7); - Nachtrocknung (8) und - Aufrollung (9) der Faserstoffbahn (7). Erfindungsgemäß ist vorgesehen, dass in einem online-Prozess wenigstens eine Bahnseite (7a, 7b) der Faserstoffbahn (7) mindestens dreifach mit Auftragsschichten (11, 17, 18) versehen wird, wobei zumindest die beiden letzten Auftragsschichten (17, 18) mit einem 1:1-Auftragswerk (15) in direkter Weise und ohne Zwischentrocknung, d.h. nass in nass aufgebracht werden.

IPC 8 full level

D21H 19/82 (2006.01); **D21H 23/34** (2006.01); **D21H 23/48** (2006.01); **D21H 23/56** (2006.01)

CPC (source: EP)

D21H 19/82 (2013.01); **D21H 23/34** (2013.01); **D21H 23/48** (2013.01); **D21H 23/56** (2013.01)

Citation (applicant)

- US 5603767 A 19970218 - DAMRAU WAYNE A [US]
- WO 9848112 A1 19981029 - BASF AG [DE], et al
- DE 4230276 A1 19940317 - VOITH GMBH J M [DE]

Cited by

US11220788B2; CN105842191A; AT14123U1; EP2157240A3; CN103025958A; CN114667377A; CN105133428A; CN103088696A; AT507747B1; WO2011151238A1; WO2011157639A1; WO2012013384A1; WO2021175480A1; WO2009040471A3; WO2010069803A1; WO2016170229A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1964971 A2 20080903; **EP 1964971 A3 20120118**; DE 102007009702 A1 20080904

DOCDB simple family (application)

EP 07150128 A 20071219; DE 102007009702 A 20070228