

Title (en)  
Coating apparatus

Title (de)  
Auftragsvorrichtung

Title (fr)  
Dispositif d'enduction

Publication  
**EP 1676957 A3 20061213 (DE)**

Application  
**EP 05110624 A 20051111**

Priority  
DE 102004063696 A 20041228

Abstract (en)  
[origin: EP1676957A2] A curtain coater for applying liquid to paste-like media (especially aqueous pigment suspensions) to a running sheet of paper, cardboard etc. has, in addition to an air boundary layer-abatement device on the coating side, another such device on the other side of the sheet near the point of impact of the curtain. A device for applying a liquid to paste-like medium, especially an aqueous pigment suspension (I), to one side of a running sheet of paper, cardboard or other fibrous material during its production and/or finishing. This comprises a curtain applicator (5) by means of which (I) is delivered directly onto the coating side (1a) of the sheet (1) in a free-falling, closed curtain (6) under the action of gravity, with the curtain impinging at a point (P) on an open section of sheet or on a part supporting the other side (1b) of the sheet, and with a device (2) for weakening or removing the air boundary layer, which is dedicated to the coating side (1a) and installed in the running direction (L) in front of the curtain (6). The system also has another air boundary layer abatement device (10) for air boundary layers (LG) flowing with the fibrous sheet (1), which is located on the other side (1b) of the sheet near the impact position (P) of the curtain (6).

IPC 8 full level  
**D21H 23/48** (2006.01)

CPC (source: EP)  
**D21H 23/48** (2013.01); **B05C 5/005** (2013.01)

Citation (search report)

- [XY] DE 19823686 A1 19990107 - MITSUBISHI PAPER MILLS LTD [JP]
- [Y] EP 1367174 A1 20031203 - VOITH PAPER PATENT GMBH [DE]
- [Y] US 3345972 A 19671010 - MASULIS LEONARD J
- [Y] DE 10057731 A1 20020606 - VOITH PAPER PATENT GMBH [DE]
- [Y] DE 20320514 U1 20041028 - VOITH PAPER PATENT GMBH [DE]

Cited by  
EP2161363A1; EP1841917A4; AT509037A3; AT509037B1; US11407001B2

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1676957 A2 20060705; EP 1676957 A3 20061213; EP 1676957 B1 20100113**; AT E455209 T1 20100115; DE 102004063696 A1 20060706; DE 502005008864 D1 20100304; JP 2006214075 A 20060817; JP 4732890 B2 20110727

DOCDB simple family (application)  
**EP 05110624 A 20051111**; AT 05110624 T 20051111; DE 102004063696 A 20041228; DE 502005008864 T 20051111; JP 2005368974 A 20051222