

Title (en)  
DEVICE FOR COATING A CONTINUALLY MOVING SHEET OR STRIP

Publication  
**EP 0117212 B1 19860730 (FR)**

Application  
**EP 84420010 A 19840126**

Priority  
FR 8301991 A 19830204

Abstract (en)  
[origin: EP0117212A1] 1. Device for coating a continuously moving sheet or strip of paper (17) by means of a pressurized composition, which is liquid or in the form of foam, of the type constituted by : a tank (17) feeding the pressurized composition, placed transversally with respect to the advance direction of the sheet (17) and partially covered by said sheet, said tank (14) having a rectilinear and longitudinal slot (18) -shaped opening placed close to the area where the moving sheet (17) is applied on said tank (14) and through which the coating composition issues ; means adapted to evacuate the limit layer of air driven by said moving uncoated sheet (17), said means being placed just upstream of the area where said sheet (17) contacts with said tank (14) ; and means (33) parallel to said slot (18), placed just downstream of said slot (8) and against which the coated sheet (40) rests, for simultaneously proportioning and equalizing the composition supplied through the slot (18) ; characterized : in that the periphery of the tank (14) which is turned towards the moving sheet (17) has a cross-section shaped as an arc of circle, the convexity of which is turned towards the moving sheet (17), the rectilinear slot-shaped opening (18) of the tank (14) being made in that section part shaped as an arc of circle ; and in that means for evacuating the limit layer of air driven by the moving sheet (17) are constituted by longitudinal grooves (22, 23, 24) provided in the periphery (20) of the tank (14) having a cross-section shaped as an arc of circle, just upstream (20) of the rectilinear slot-shaped opening (18), said grooves (22, 23, 24) having a length greater than the width of the sheet (17) and being interconnected.

IPC 1-7  
**B05C 5/02**; D21H 5/00; B01F 7/12

IPC 8 full level  
**B01F 27/74** (2022.01); **B05C 3/18** (2006.01); **B05C 5/02** (2006.01); **B05C 11/10** (2006.01); **B05C 11/04** (2006.01)

CPC (source: EP)  
**B05C 3/18** (2013.01); **D21H 5/0042** (2013.01); **D21H 23/46** (2013.01); **B05C 11/04** (2013.01)

Cited by  
GB2158740A; EP0369441A3; EP0196576A1; DE3723149A1; DE3723149C2; EP0196029A3; DE3446757A1; DE3446757C2; GB2227959A; GB2227959B; AU635914B2; AT394668B; US6730171B2; US6406752B1; WO0160584A1; WO03040473A3

Designated contracting state (EPC)  
AT CH DE GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0117212 A1 19840829**; **EP 0117212 B1 19860730**; AT E21053 T1 19860815; DE 3460364 D1 19860904; FI 840452 A0 19840203; FI 840452 A 19840805; FR 2540406 A1 19840810; FR 2540406 B1 19861031

DOCDB simple family (application)  
**EP 84420010 A 19840126**; AT 84420010 T 19840126; DE 3460364 T 19840126; FI 840452 A 19840203; FR 8301991 A 19830204