

Title (en)

DEVICE FOR SUCTIONING AN AIR BOUNDARY LAYER FROM A RUNNING WEB OF MATERIAL AND APPARATUS FOR COATING A RUNNING WEB USING SAID SUCTION DEVICE

Title (de)

VORRICHTUNG ZUM ABSAUGEN EINER LUFTGRENZSCHICHT VON EINER LAUFENDEN MATERIALBAHN UND VORRICHTUNG ZUM BESCHICHTEN EINER LAUFENDEN MATERIALBAHN MIT EINER DERARTIGEN ABSAUGEVORRICHTUNG

Title (fr)

DISPOSITIF POUR ASPIRER UNE COUCHE LIMITE D'AIR D'UNE BANDE DE MATIERE EN MOUVEMENT ET DISPOSITIF DE REVÊTEMENT D'UNE BANDE DE MATIERE EN MOUVEMENT L'UTILISANT.

Publication

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Application

EP 02727525 A 20020405

Priority

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- EP 0203775 W 20020405

Abstract (en)

[origin: DE10117667A1] In order to suction the air boundary layer from a running web of material (1) before coating with a curtain-coater, a suction box (8) is arranged in the area of a roller (4) deflecting the web of material (1), said suction box having the following characteristics: a) the suction box (8) extends in its breadth along the axial length of the deflection roller (4); it is open towards the deflection roller (4) and attached to a suction blower; b) it has a corresponding seal (10, 11) on the inlet and the outlet sides, which form a gap (12, 13) with the web (1) and extend along the axial length of the deflection roller (4), wherein at least the end of the seal (10) on the inlet side and the beginning of the seal (11) on the outlet side are located on the deflection roller (4) in the deflection area of the web (1); c) the suction box (8) has a front-face seal (14) on each of the front faces of the deflection roller (4), which extend outside adjacent to the seal of the front face, parallel thereto and at a close distance thereof; d) the seal (11) on the outlet side forms an outlet gap (13) with the web (1), whose height and length measured in the direction of advancement of the web are substantially constant along the entire width of the suction box (8), wherein the length is longer than 10 mm, preferably longer than 30 mm, especially 50 mm-70 mm, and the height of the gap is selected depending on the speed of the web in such a way that the value of the product web speed (m/min) x gap height (in mm) is less than 1500.

IPC 1-7

B05C 5/00; G03C 1/74; D21H 23/48

IPC 8 full level

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CPC (source: EP US)

B05C 5/005 (2013.01 - EP US); **D21H 23/48** (2013.01 - EP US); **G03C 1/74** (2013.01 - EP US); **Y10S 118/04** (2013.01 - EP US)

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