

Title (en)

Doctoring device for an apparatus for applying a fluid or pasty material on a moving substrate

Title (de)

Rakeleinrichtung für eine Vorrichtung zum Auftragen eines flüssigen bis pastösen Mediums auf einen sich vorbeibewegenden Untergrund

Title (fr)

Dispositif de râclage pour un appareil d'application de produits fluides à pâteux sur un substrat défilant

Publication

EP 0906788 A3 20001108 (DE)

Application

EP 98114278 A 19980730

Priority

DE 19743520 A 19971001

Abstract (en)

[origin: EP0906788A2] In the doctor blade assembly, at a web coating applicator, the support (24) has a pressure elasticity which is adjustable in two independent support directions (44, 46). At least one of the adjustment directions (44, 46) is across the width of the surface (12) of the moving applicator roller (14) across the direction of movement (30). The pressure elasticity is set so that the pressure contact of the doctor (20, 22) follows the surface of the roller surface (12), or at a tangent to the roller surface, or it forms an acute angle with the roller surface. The two adjustable support directions are at right angles to each other. The support is connected to a pressure supply (36, 38, 40), especially a pneumatic pressure, by a hose (26, 28) system with at least one support hose. The support hose has at least one inner hose chamber (32) where a given pneumatic pressure is maintained. A support hose is aligned for each support direction (44, 46), with independent pressure settings, and the inner hose chambers extend over the width of the roller surface across the direction of movement. The support hose across the roller surface can be divided into a number of chambers, with separate pressure settings in each chamber. A mechanical system (52) sets the lateral profile of the spread coating medium on the applicator roller surface, by acting on the doctor unit (20, 22) and/or the doctor holder (16). The doctor unit has a doctor bed (20) with a rotating doctor rod (22). The doctor holder has a longitudinal beam, which holds the doctor bed especially through a leaf spring (18) assembly.

IPC 1-7

B05C 11/02; **D21H 25/08**

IPC 8 full level

B05C 11/02 (2006.01); **D21H 25/08** (2006.01); **B05C 11/04** (2006.01)

CPC (source: EP US)

B05C 11/025 (2013.01 - EP US); **D21H 25/08** (2013.01 - EP US); **B05C 11/041** (2013.01 - EP US)

Citation (search report)

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- [XA] US 5599392 A 19970204 - LIANG SHIHUA [US], et al
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Designated contracting state (EPC)

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