

Title (en)
Coating device

Title (de)
Auftragsvorrichtung

Title (fr)
Dispositif d'enduction

Publication
EP 1118709 A3 20020807 (DE)

Application
EP 01100243 A 20010103

Priority
DE 10001392 A 20000114

Abstract (en)
[origin: EP1118709A2] The applicator (10a), to coat the surface (U) of a running web of paper or cardboard with a coating medium (12a), either directly or through a transfer roller, has at least one jet lip (32a) which is formed by a blade component (30a). A mechanism (50a,54a) sets the width of the applicator jet gap (58a), by adjusting the blade (30a) in a bending or a swing movement. The width of the applicator jet gap (58a) is increased by the action of the setting mechanism (50a,54a) on the blade (30a). The blade (30a) is held at the applicator by its longitudinal edges (34a), with support at a point (42a) between the side edges. The setting unit (50a) acts on the blade (30a) between the support point (42a) and the side edges (34a). The width of the applicator jet gap can be decreased by the action of the setting mechanism. The blade can be held in a swing mounting. The setting mechanism can have two setting units, acting on the blade in different directions. A limit stop defines the max. blade bending or swing movement. A lock acts on the blade, to ensure that it is held securely at the blade holder. The setting unit has at least one tilting lever assembly (50a), where the free end of the lever acts on the blade (30a) and the other lever end is linked to the adjustment unit (54a) for its movement. The lever swing mounting (52a) is at the applicator distribution tube or an attachment (28a) fitted to it. The adjustment unit (54a) is at the distribution tube (14a) or a component secured to it. The blade can be fixed to a holder, which is shifted by the setting mechanism, as a cylindrical segment joint body, in a joint socket at the distribution tube. The setting mechanism for the jet gap opening can act on only one jet lip, while the other lip remains static. The adjustable jet lip is secured to the joint body by a holder, or it is in one piece with the joint body. The joint body has a droplet shape, in cross section, and the setting unit acts on at least one of its longitudinal ends. A setting mechanism can be fitted for each of the two jet lips. The applicator can have at least two shell sections which, together, act as the limit walls to define a delivery jet for the coating medium from the distribution channel, and also define an equalizing chamber between the distribution channel and the applicator jet. At least one of the shell sections has a holder for a jet lip and its mounting. An insert can be in the transit zone between the distribution channel and the equalizing chamber, with a number of passage openings for the coating medium flow between them. The distribution tube (14a) is a separate unit from its support body, with a thermal insulation between them.

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IPC 8 full level
B05C 5/02 (2006.01); **D21H 23/36** (2006.01)

CPC (source: EP US)
B05C 5/0262 (2013.01 - EP US); **B05C 5/0283** (2013.01 - EP US); **D21H 23/36** (2013.01 - EP US)

Citation (search report)
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CN102905797A; TWI506150B

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