

Title (en)
Doctoring device

Title (de)
Rakelvorrichtung

Title (fr)
Dispositif à racle

Publication
EP 2103358 B1 20150325 (DE)

Application
EP 09154692 A 20090310

Priority
DE 102008000723 A 20080318

Abstract (en)

[origin: EP2103358A1] The doctor blade device comprises a doctor blade unit (3) comprising a head part, which forms a doctor blade holder for a cylindrical doctor bar (8) accommodated in a groove (9) as dosage and/or equalizing element and a tail part (5), which carries the head part and/or the blade holder. The tail part is present in a support girder (10) by a tubular clamp (6). The head part is pressed with a pressing element with respect to a substrate (2) to be coated. The tubular clamp is an integral component of the tail part. The pressing element is non-integral component of the head part. The doctor blade device comprises a doctor blade unit (3) comprising a head part, which forms a doctor blade holder for a cylindrical doctor bar (8) accommodated in a groove (9) as dosage and/or equalizing element and a tail part (5), which carries the head part and/or the blade holder. The tail part is present in a support girder (10) by a tubular clamp (6). The head part is pressed with a pressing element with respect to a substrate (2) to be coated. The tubular clamp is an integral component of the tail part. The pressing element is non-integral component of the head part and is accommodated in an external pressing device and influences the rear side of the head part and/or the blade holder from outside, where the rear side is opposite to the groove. A sealing tube is intended for the head part and/or the blade holder. The pressing element is a pressing tube. The sealing hose is accommodated in a recess of the blade holder. The sealing tube is arranged above the pressing element at the rear side of the head part and/or the blade holder and is present in the external pressing device, in which the pressing tube is accommodated. The tail part is positioned at a contact surface of the support girder. The head part and the tail part are formed as separate components or formed with one another in a single-piece. The head part and/or blade holder are polygonal shaped and the tail part is ring shaped. The head part and/or blade holder and the tail part are decoupled from each other with respect to their thermal expansion, and are positively connected. The head part and/or blade holder comprise another groove, in which the tail part intervenes with a bulge. The pressing tube, the tubular clamp and the sealing tube is formed as round or profile tube e.g. commercial nose hose. The head part and/or blade holder and the tail part are producible from the same material or different hard and/or different thermal materials. The tail part is suitable to carry the head part and/or blade holder in different sizes and shapes dependent on the size of the selected blade bar. A flexible section is present between the head part and/or blade holder and the tail part. The tail part comprises bending points as flexible section. The bending point is implemented as a notch or as a constriction or in form of a leaf spring. The blade bar is produced with a diameter of 8-40 mm with smooth or corrugated surface. An independent claim is included for a coating machine for applying a fluid or pasty application medium e.g. coating colors, on a substrate.

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Cited by
EP2341185A1; EP2570194A1; WO2011076629A1

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