

Title (en)  
LATERAL GUIDE USED FOR CURTAIN COATING

Title (de)  
SEITENFÜHRUNG FÜR EINE VORHANGBESCHICHTUNG

Title (fr)  
GUIDAGE LATERAL POUR APPLICATION AU RIDEAU

Publication  
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Application  
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Abstract (en)  
[origin: WO2006056385A1] The invention relates to a lateral guiding mechanism (608) for stabilizing the edges of a liquid coating curtain (618). Said lateral guiding mechanism (608) comprises a lateral guiding element (110) with a guiding surface (126) and a lateral guiding groove (122) that is recessed in the guiding surface. An auxiliary liquid which is partially mixed with the coating liquid of the coating curtain (618) and thereby stabilizes said coating curtain (618) at the edges can be conducted through said lateral guiding groove (122). The lateral guiding groove (122) is provided with at least two, advantageously even at least three separate sections (136, 138, 140), i.e. a steadying section (136) within which turbulences of the auxiliary liquid and velocity components of the auxiliary liquid perpendicular to the guiding surface (126) are leveled, a forced mixing section (138), and a guiding section (140). The auxiliary liquid is mixed by force with the coating liquid in the forced mixing section (138) before the coating liquid can be discharged from the curtain generator (610). The coating liquid is then actually guided in the guiding section (140). The lateral guiding element (110) also encompasses an auxiliary liquid inlet (124) for feeding an auxiliary liquid into the lateral guiding groove (122) as well as at least one liquid outlet (142) for accepting auxiliary liquid after the same penetrates the guiding section (122). The disclosed arrangement substantially increases the stability of the process as well as the coating quality while augmenting the maximum coating rate.

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