

Title (en)

Method and device for producing a web

Title (de)

Verfahren und Vorrichtung zur Herstellung einer Materialbahn

Title (fr)

Procédé et dispositif pour la production d'une bande

Publication

EP 1028191 A2 20000816 (DE)

Application

EP 99123538 A 19991126

Priority

DE 19906062 A 19990212

Abstract (en)

The stock inlet (10), at a papermaking or cardboard production machine, is given an additional dosed material flow by sections, to set the composition of the pulp by at least one of the pulp suspension components, with an adjustable volume flow. The various section flows (Q_s), in sections across the machine width, are set by mixing a suspension of a higher density and a suspension flow of a lower density in an adjustable ratio, and the sectional dosing flows are mixed with the section flows (Q_s). In at least one section, a flow of a high density is added to the low density flow at successive points to be mixed in at least one dosing flow. The additional dosing can be of a suspension with a high density together with a low density suspension, to be mixed with the low density suspension flow. The added low density suspension can be mixed in a cascade action with at least two dosing flows, and in a cascade action at the low density flow at two successive mixing points. The section dosing flows are adjusted or reset to control at least one lateral profile characteristic of the fiber web (12), in an automatic action. The characteristic is measured at the web (12), and the measured value is compared with a guide value, and the dosing flows are set or reset to bring the measured values towards the guide values. The guide value is based on the concentration of water from the fourdrinier stage by sections, and the like. The lateral web profile characteristic is set by a control algorithm, where the volume flow from each dosing flow is taken according to the product of the characteristic value and a factor, set according to the retention. Where a multi-layer stock inlet is used, or a single stock inlet with a number of different layers, the sections for the web composition are also affected through the web thickness. An Independent claim is included for a stock inlet with at least one dosing channel for section dosing flows of at least one suspension component, with a controlled volume flow, to set the web composition across the machine width. Preferred Features: The stock inlet has a system to give a controlled mixing of a suspension with a high density with a low density suspension, in a variety of ratios and by sections, and at one or more mixing points. Control valves set the dosing flows. The lateral profile characteristics of the web (12) are measured (24,26), for comparison with guide values, for the valves to be set according to a control algorithm.

Abstract (de)

Bei einem Verfahren sowie einer Vorrichtung zur Herstellung einer Materialbahn wie insbesondere einer Papier- oder Kartonbahn wird eine zur Erzeugung der Materialbahn verwendete Stoffsuspension mittels eines Stoffauflaufs über die Maschinenbreite verteilt einer wenigstens ein Siebband umfassenden Bahnbildungszone zugeführt. Zur Beeinflussung der Bahnzusammensetzung über die Maschinenbreite wird dem Stoffauflauf zusätzlich sektionsweise jeweils wenigstens ein zumindest eine Komponente der Stoffsuspension enthaltender Dosierstoffstrom zugeführt, dessen Volumenstrom entsprechend einstellbar ist. <IMAGE>

IPC 1-7

D21F 1/02; D21F 1/06; D21F 1/08

IPC 8 full level

D21F 1/02 (2006.01); **D21F 1/06** (2006.01); **D21F 1/08** (2006.01)

CPC (source: EP)

D21F 1/02 (2013.01); **D21F 1/06** (2013.01); **D21F 1/08** (2013.01)

Cited by

EP1780333A3; US7763148B2

Designated contracting state (EPC)

AT DE FI SE

DOCDB simple family (publication)

EP 1028191 A2 20000816; EP 1028191 A3 20001122; DE 19906062 A1 20000817

DOCDB simple family (application)

EP 99123538 A 19991126; DE 19906062 A 19990212