

Title (en)

Web guiding and/or sealing device

Title (de)

Bahnführungs- und/oder Dichtungseinrichtung

Title (fr)

Dispositif de guidage de bande et/ou dispositif d'étanchéité

Publication

EP 1479821 A2 20041124 (DE)

Application

EP 04101895 A 20040504

Priority

DE 10322521 A 20030519

Abstract (en)

A papermaking assembly has an airtight guide rod (10) also operating as a seal. The rod emits compressed air through its porous surface to form an air cushion between the rod and a wet moving paper or carton web. The airtight rod guide is located after a machine press, press arrangement or press section, and/or prior to an air drier e.g. an impingement drier. The rod-shaped guide has an outer air-porous surface (12) supported by an air-porous tubular supporting rod (24) with an internal feed of compressed air. Separation between the web and rod is maintained by an air cushion. The air pressure is maintained above 1 bar in the pressure chamber. The specific volume flow in the porous material is in the range 10 to 5000 Nm³/h m. The intervals between adjacent pores is less than 1 mm. The average pore diameter is less than 0.1 mm. The drop in pressure between the pressure chamber and pore outer surface is greater than 0.8 bar. The air cushion between the pore outer surface and moving web is less than 3 mm. The rod rotates about its longitudinal axis. The rod diameter is 500 to 1500 mm.

Abstract (de)

Eine Bahnführungs- und/oder Dichtungseinrichtung umfasst wenigstens ein Leit- und/oder Dichtelement (10) zur berührungslosen Bahnführung bzw. zur seitlichen oder ein- und/oder auslaufseitigen Abdichtung einer Befeuchtungs- und/oder Auftragszone (46) in einer der Herstellung und/oder Behandlung einer Materialbahn (28), insbesondere Papier- oder Kartonbahn, dienenden Maschine. Dabei besteht die bahnseitige Fläche (12) des Leit- bzw. Dichtelements (10) zumindest teilweise aus luftdurchlässigem porösen Material (14), das mit Druckluft beaufschlagbar ist, um über die durch dieses poröse Material (14) hindurchströmende Luft (16) zwischen der bahnseitigen Fläche (12) und der bewegten Materialbahn (28) ein Luftpolster (18) zu bilden. <IMAGE>

IPC 1-7

D21F 5/18; B65H 23/32; D21F 1/36

IPC 8 full level

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CPC (source: EP)

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Cited by

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