

Title (en)

Device for a fully non-contact direction change of a moving web

Title (de)

Vorrichtung zur berührungslosen Richtungsänderung einer laufenden Materialbahn

Title (fr)

Dispositif pour changer la direction d'une bande en mouvement complètement sans contact

Publication

EP 0711723 A3 19961211 (DE)

Application

EP 95116726 A 19951024

Priority

DE 4439639 A 19941107

Abstract (en)

[origin: EP0711723A2] The inner side of the web (3), in the deflection area, has an inner compartment connected to the atmosphere and separated from an outer compartment connected to a vacuum. A gap is formed between the deflection surface and the edge of the web, caused by the effect of the pressure difference between the two compartments. A flow duct (23) guiding the web and connecting areas of different pressure is positioned at the inlet and or outlet (9, 10) of the deflector surfaces' deflection area. The duct walls are formed by guide pieces (12, 13), the side walls (14) of the chamber (15) forming the outer compartment, and the moving web. The deflection surfaces have a convex cylindrical body (21) with disc shaped end edge surfaces (28) with larger radius than the cylindrical body.

IPC 1-7

B65H 23/32

IPC 8 full level

B65H 20/14 (2006.01); **B65H 23/035** (2006.01); **B65H 23/24** (2006.01); **B65H 23/32** (2006.01)

CPC (source: EP)

B65H 23/035 (2013.01); **B65H 23/24** (2013.01); **B65H 23/32** (2013.01); **B65H 2301/517** (2013.01); **B65H 2406/111** (2013.01)

Citation (search report)

- [DA] DE 3512316 C1 19861023 - DU PONT DEUTSCHLAND
- [A] EP 0431447 A2 19910612 - EASTMAN KODAK CO [US]

Cited by

US5922407A; DE19732138A1

Designated contracting state (EPC)

AT CH FR GB LI NL

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EP 0711723 A2 19960515; **EP 0711723 A3 19961211**; **EP 0711723 B1 19990811**; AT E183168 T1 19990815; DE 4439639 C1 19960502; JP H08208086 A 19960813

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