

Title (en)

METHOD AND DEVICE FOR STABILIZING HIGH-SPEED UNWINDING OF A STRIP PRODUCT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STABILISIERUNG EINES MIT GROSSER GESCHWINDIGKEIT LAUFENDEN BANDFÖRMIGEN PRODUKTES

Title (fr)

PROCEDE ET DISPOSITIF DE STABILISATION DU DEFILEMENT A GRANDE VITESSE D'UN PRODUIT EN BANDE

Publication

EP 1448322 B1 20080312 (FR)

Application

EP 02790556 A 20021112

Priority

- FR 0203869 W 20021112
- FR 0114619 A 20011112

Abstract (en)

[origin: US7300018B2] The invention relates to a method and a device for stabilizing high speed running along a longitudinal direction, of a band (4) applied on a rotary surface (3) and along which a portion of the surrounding air forms a boundary layer (43) trapped with the band (4). According to the invention, a deflecting member (5) is placed in the dihedral (G) between the band (4) and the rotary surface (3). Said deflecting member (5) has a face (50) directed toward the band which is tilted with respect thereto and is fitted with at least one orifice (55) emerging into an inner space (51) provided inside said deflecting member (5) and connected to an outer zone. Thus, said tilted face (50) forms, with the inner face (41) of the band (4), a convergent (C₁) wherein the pressure increases with respect to the pressure in the inner space (51) and the differential pressure determines the exhaust of a certain air flow rate through the orifice (55) and the separation of the remaining portion of the air mass trapped in the boundary layer (43).

IPC 8 full level

B21B 41/00 (2006.01); **B21B 38/02** (2006.01); **B21C 47/06** (2006.01); **B21C 47/34** (2006.01); **B65H 18/08** (2006.01); **B65H 18/26** (2006.01); **B65H 23/26** (2006.01); **B21B 1/40** (2006.01); **B21B 3/00** (2006.01); **B21B 15/00** (2006.01); **B21B 41/08** (2006.01)

CPC (source: EP US)

B21B 38/02 (2013.01 - EP US); **B21B 41/00** (2013.01 - EP US); **B21C 47/06** (2013.01 - EP US); **B21C 47/34** (2013.01 - EP US); **B65H 18/08** (2013.01 - EP US); **B21B 1/40** (2013.01 - EP US); **B21B 41/08** (2013.01 - EP US); **B21B 2003/001** (2013.01 - EP US); **B21B 2015/0064** (2013.01 - EP US); **B65H 2406/351** (2013.01 - EP US); **B65H 2601/211** (2013.01 - EP US); **B65H 2701/173** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03041885 A1 20030522; AT E388771 T1 20080315; CN 1296151 C 20070124; CN 1607982 A 20050420; DE 60225588 D1 20080424; DE 60225588 T2 20080925; EP 1448322 A1 20040825; EP 1448322 B1 20080312; ES 2300496 T3 20080616; FR 2832084 A1 20030516; FR 2832084 B1 20040514; US 2004245367 A1 20041209; US 7300018 B2 20071127

DOCDB simple family (application)

FR 0203869 W 20021112; AT 02790556 T 20021112; CN 02826066 A 20021112; DE 60225588 T 20021112; EP 02790556 A 20021112; ES 02790556 T 20021112; FR 0114619 A 20011112; US 49435804 A 20040511