Title (en)

A METHOD AND A FIBRE DISTRIBUTOR FOR AIR-LAYING FIBRES

Title (de)

VERFAHREN UND FASERVERTEILER FÜR TROCKENVLIESBILDUNG

Title (fr)

PROCEDE ET DISTRIBUTEUR DE FIBRES PERMETTANT LA PRODUCTION DE FIBRES PAR PROCEDE AIR-LAID

Publication

EP 1633912 A1 20060315 (EN)

Application

EP 04734995 A 20040527

Priority

- DK 2004000370 W 20040527
- DK PA200300805 A 20030528

Abstract (en)

[origin: WO2004106604A1] A fibre distributor is used for air-laying fibres (4;6) on an endless, air pervious forming wire (9) in a plant for producing non-woven webs. The fibre distributor comprises a forming head (2) with a perforated bottom (7) and rows (14) of rotateable wings (15) situated at a distance above the bottom (7) for during production sweeping supplied fibres (4;6) along the rows (14) of wings (15) in an air stream before they successively leave the forming head (2) through the openings (8) of the perforated bottom (7) for being deposited in a layer (16) on the upper part (17) of the forming wire (2). The fibres (4;6) are, while being swept along in this way, inclined to form nits (20;21). The wings (15) are therefore adapted to rotate with an optimal speed of rotation in an interval where the fibre's (4;6) inclination to form nits (20;21) changes from being lesser to being larger when the rotation speed of the wings (15) grows. By means of the method and the fibre distributor according to the invention it is possible to produce non-woven webs with a minimum of fibre loss in form of nits and at the same time also with an extremely high rate of production.

IPC 1-7

D01G 25/00; D04H 5/08; A61F 13/15; B31D 1/04

IPC 8 full level

D04H 1/425 (2012.01); **D04H 1/72** (2012.01); **D04H 1/732** (2012.01)

CPC (source: EP US)

D04H 1/425 (2013.01 - EP US); **D04H 1/72** (2013.01 - EP US); **D04H 1/732** (2013.01 - EP US)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 2004106604 A1 20041209; BR PI0410699 A 20060620; CA 2525289 A1 20041209; CA 2525289 C 20111115; CN 1795296 A 20060628; CN 1795296 B 20100908; DK 1633912 T3 20141006; EP 1633912 A1 20060315; EP 1633912 B1 20140716; JP 2006529006 A 20061228; MX PA05012869 A 20060222; PL 1633912 T3 20141128; US 2006055072 A1 20060316

DOCDB simple family (application)

DK 2004000370 W 20040527; BR PI0410699 A 20040527; CA 2525289 A 20040527; CN 200480014717 A 20040527; DK 04734995 T 20040527; EP 04734995 A 20040527; JP 2006529640 A 20040527; MX PA05012869 A 20040527; PL 04734995 T 20040527; US 26571805 A 20051101