

Title (en)

Device and method for guiding and depositing synthetic filaments onto a non-woven fabric

Title (de)

Vorrichtung und Verfahren zum Führen und Ablegen von synthetischen Filamenten zu einem Vlies

Title (fr)

Dispositif et procédé de guidage et de dépôt de filaments synthétiques dans une étoffe

Publication

EP 2584076 B1 20170111 (DE)

Application

EP 12187743 A 20121009

Priority

- DE 102011116739 A 20111022
- DE 102011119112 A 20111122

Abstract (en)

[origin: EP2584076A1] Apparatus comprises a discharge device (1); a depositing belt arranged below the discharge device; and many guiding devices arranged between the discharge device and the deposit belt. The guiding devices form many inter-connected guiding lines in a pair-wise manner, to guide a filament curtain formed by the filaments. The guiding devices comprise many air inlet slots arranged below the discharge device, to supply a secondary air. At least one of the air inlet slots is associated with many air guiding elements arranged on one of the guiding devices. An independent claim is also included for guiding and depositing the synthetic filaments to form the fleece, comprising: cooling many extruded filaments, stripping and stretching the extruded filaments as a filament curtain by a generated primary air flow; directing the filament curtain with the primary air stream as a fiber stream in the direction of the depositing belt by a guiding path; and supplying many partial streams of secondary air to the fiber stream for influencing a fiber formation in the fleece. At least one of the partial streams of the secondary air is supplied to the side adjacent to the filament curtain at an inflow angle of the fiber stream across the depositing belt.

IPC 8 full level

D01D 5/098 (2006.01); **D04H 3/03** (2012.01); **D04H 3/16** (2006.01)

CPC (source: EP KR US)

D01D 5/0985 (2013.01 - EP US); **D04H 1/724** (2013.01 - KR); **D04H 1/732** (2013.01 - KR); **D04H 1/736** (2013.01 - KR); **D04H 3/03** (2013.01 - EP US); **D04H 3/16** (2013.01 - EP US)

Cited by

EP3382081A1; RU2704908C2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 12187743 A 20121009; CN 201210403061 A 20121022; DE 502012009274 A 20121009; JP 2012232774 A 20121022; KR 20120116637 A 20121019; US 201213656835 A 20121022