

Title (en)

METHOD AND DEVICE FOR PRODUCING A NON-WOVEN FABRIC FROM FIBRES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINES VLIESTOFFES AUS FASERN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FABRICATION D'UN NON TISSÉ À PARTIR DES FIBRES

Publication

**EP 4123073 B1 20240228 (DE)**

Application

**EP 21186978 A 20210721**

Priority

EP 21186978 A 20210721

Abstract (en)

[origin: CN117677739A] The invention relates to a method for producing a nonwoven fabric from fibers. The continuous filaments are produced from the thermoplastic by means of at least one melt-blown spinneret. Pulp staple fibers are also produced by at least one fibrillation device. According to the invention, at least one staple fiber air flow is generated from the pulp staple fibers in the fiber-breaking device, which is guided through and discharged from the outlet channel and flows in the direction of the air-permeable laying screen belt at an initial volume flow V1 and a flow direction S1. The continuous filaments from the at least one meltblown spinneret flow as a filament air flow in the direction of the staple fiber air flow at an initial volumetric flow rate V2. The filament air flow and the staple fiber air flow converge in a contact zone above the laying screen belt and are laid as a continuous filament-staple fiber mixture in a laying area on the laying screen belt to form a non-woven fabric or a non-woven fiber web. In the placement region of the fibre or continuous filament-staple fibre mixture, air or process air is sucked from below through the placement screen at a volumetric flow rate V4. The volumetric flow rate V4 is greater than the sum of the volumetric flow rates V1 and V2.

IPC 8 full level

**D04H 1/425** (2012.01); **D01D 5/098** (2006.01); **D04H 1/4291** (2012.01); **D04H 1/70** (2012.01); **D04H 3/007** (2012.01); **D04H 3/02** (2006.01)

CPC (source: EP)

**D01D 5/0985** (2013.01); **D04H 1/425** (2013.01); **D04H 1/4291** (2013.01); **D04H 1/70** (2013.01); **D04H 3/007** (2013.01); **D04H 3/02** (2013.01); **D04H 5/08** (2013.01)

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)

**EP 4123073 A1 20230125**; **EP 4123073 B1 20240228**; **EP 4123073 C0 20240228**; CN 117677739 A 20240308

DOCDB simple family (application)

**EP 21186978 A 20210721**; CN 202280050996 A 20220719