

Title (en)

Process and device for making a nonwoven web by depositing synthetic fibers

Title (de)

Verfahren und Vorrichtung zum Ablegen synthetischer Fasern zu einem Vlies

Title (fr)

Procédé et dispositif de fabrication d'un tissu non tissé par déposition de fibres synthétiques

Publication

EP 1712668 A1 20061018 (DE)

Application

EP 06004961 A 20060310

Priority

DE 102005011472 A 20050312

Abstract (en)

Deposition of synthetic filaments on advancing deposit belt (8) to form non-woven web by melt spinning downwardly advancing filaments; drawing off filaments in row shaped arrangement utilizing a fluid feed and accelerating the filaments into guide channel so that fluid feed and filaments leave the guide channel as filament stream; collecting filament stream on advancing deposit belt; and unilaterally deflecting filament stream in advancing direction of deposit belt immediately before the filament stream impacts upon the deposit belt in such a manner that filaments impact at less than 90[deg]. An independent claim is also included for an apparatus for depositing synthetic filaments on advancing deposit belt to form non-woven web (12), comprising: (1) a drawing unit (1) arranged below a filament spinneret and comprising a guide channel (2) having a slot-shaped filament inlet (3) and a slot-shaped filament outlet (4); (2) fluid inlets communicating with the guide channel and which are connected to a fluid source; (3) a deposit belt; and (4) a deflecting unit (13) for deflecting the filament stream leaving the filament outlet unilaterally in the advancing direction of the deposit belt.

IPC 8 full level

D04H 3/03 (2012.01); **D04H 3/16** (2006.01)

CPC (source: EP US)

D04H 3/03 (2013.01 - EP US); **D04H 3/16** (2013.01 - EP US)

Citation (applicant)

- US 6183684 B1 20010206 - LU FUMIN [US]
- US 2002158362 A1 20021031 - KUROIWA YUKI [JP], et al
- DE 3740893 A1 19881110 - REIFENHAEUSER MASCH [DE]
- US 6183684 B1 20010206 - LU FUMIN [US]

Citation (search report)

- [X] JP S52118069 A 19771004 - ASAHI CHEMICAL IND & DATABASE WPI Section Ch Week 198451, Derwent World Patents Index; Class F04, AN 1984-316729, XP002393362
- [XY] EP 0843036 A1 19980520 - NIPPON PETROCHEMICALS CO LTD [JP], et al
- [X] JP H07207564 A 19950808 - NEW OJI PAPER CO LTD & PATENT ABSTRACTS OF JAPAN vol. 1995, no. 11 26 December 1995 (1995-12-26)
- [AY] EP 0564784 A1 19931013 - KIMBERLY CLARK CO [US]
- [A] EP 1081262 A1 20010307 - NIPPON PETROCHEMICALS CO LTD [JP], et al
- [A] FR 2217459 A1 19740906 - VVB TECH TEXTILIEN KARL [DD]

Cited by

EP2699720A4; EP1837429B1

Designated contracting state (EPC)

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

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1712668 A1 20061018; CN 1831229 A 20060913; US 2006202383 A1 20060914; US 7798795 B2 20100921

DOCDB simple family (application)

EP 06004961 A 20060310; CN 200610058501 A 20060310; US 37130106 A 20060308