

Title (en)

Method for producing micro fibre fleeces from thermoplastic polymers.

Title (de)

Verfahren zur Herstellung von Feinstfaservliesen aus thermoplastischen Polymeren.

Title (fr)

Procédé de fabrication de nappes de fibres très fines de polymères thermoplastiques.

Publication

**EP 0453819 B1 19941019 (DE)**

Application

**EP 91105117 A 19910330**

Priority

DE 4011883 A 19900412

Abstract (en)

[origin: EP0453819A1] The method for producing microfine polymer fibre fleeces is based on the fact that the melted polymer is thrown out of a plurality of outlet orifices (27) radially under initial pressure in a rotating nozzle head (6), with fibres being formed, and the fibres not yet completely solidified are deflected axially at a radial distance of 10 mm to 200 mm from the outlet orifices (27) by means of an external gas stream (8) and are subsequently precipitated as a fleece (15) on a rotating air-permeable carrier (12). In addition to the external gas stream (8), an internal gas stream (24) of lower velocity issues from a plurality of axial bores (23) at the nozzle head (6) at a smaller radial distance than the outlet orifices (27). As a result of the centrifugal drag forces occurring at the rotating nozzle head (6), a rotationally symmetrical flow field having a predominantly radial velocity component then forms, the temperature of the gas being equal to or higher than the nozzle-head temperature. <IMAGE>

IPC 1-7

**D01D 5/18; D04H 1/56**

IPC 8 full level

**D01D 5/18** (2006.01); **D04H 1/56** (2006.01); **D04H 1/72** (2006.01); **D04H 3/03** (2006.01); **D04H 3/16** (2006.01)

CPC (source: EP US)

**D01D 5/18** (2013.01 - EP US); **D04H 1/56** (2013.01 - EP US)

Cited by

EP0565392A1; US8323730B2; WO2007036338A3

Designated contracting state (EPC)

BE DE FR GB NL SE

DOCDB simple family (publication)

**EP 0453819 A1 19911030; EP 0453819 B1 19941019**; DE 4011883 A1 19911017; DE 59103258 D1 19941124; JP H04228667 A 19920818; US 5114631 A 19920519

DOCDB simple family (application)

**EP 91105117 A 19910330**; DE 4011883 A 19900412; DE 59103258 T 19910330; JP 13174891 A 19910406; US 67678291 A 19910328