

Title (en)  
SPINNING METHOD

Title (de)  
SPINNVERFAHREN

Title (fr)  
PROCÉDÉ DE FILAGE

Publication  
**EP 2171138 B1 20130515 (DE)**

Application  
**EP 08784791 A 20080716**

Priority  

- EP 2008005783 W 20080716
- EP 07014367 A 20070721
- EP 08784791 A 20080716

Abstract (en)  
[origin: WO2009012916A2] A method is proposed for spinning a multifilament yarn from a thermoplastic material comprising the following steps, in which the melted material is extruded through a spinneret to form a filament bundle having a large amount of filaments and is wound up as a multifilament yarn after solidifying, wherein the spinneret has a multiplicity of nozzle holes, and the ends of the holes, at which the filaments emerge, form a nozzle-hole outlet plane, and wherein the filament bundle is cooled below the spinneret in a first cooling zone, first of all by means of at least one transverse blowing operation with a gaseous cooling medium and by means of an extraction means for the gaseous cooling medium which lies opposite said transverse blowing means, and subsequently the filament bundle is cooled further in a second cooling zone below the first cooling zone by automatic suction of gaseous cooling medium which is situated in the vicinity of the filament bundle, characterized in that, in the first cooling zone, the at least one transverse blowing operation of the gaseous cooling medium over a blowing section AC of length L is effected, wherein the blowing section AC has an upper start A which faces the nozzle holes and a lower end C which faces away from the nozzle holes, and a section BD is arranged opposite the blowing section AC, which section BD has a start B which faces the nozzle holes and an end D which faces away from the nozzle holes, and the imaginary section AB between A and B extends parallel to the nozzle-hole outlet plane, wherein the section BD is of length L, and wherein the section BD is divided into an open extraction section BX of length LBX, over which the gaseous cooling medium is extracted, and into a closed section XD of length LXD, wherein the ratio LBX : LXD lies in the range from 0.15 : 1 to 0.5 : 1.

IPC 8 full level  
**D01D 5/092** (2006.01); **D01F 6/62** (2006.01)

CPC (source: EP US)  
**D01D 5/092** (2013.01 - EP US); **D01F 6/62** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2009012916 A2 20090129; WO 2009012916 A3 20090618; WO 2009012916 A4 20090806;** BR PI0814657 A2 20150218;  
CA 2694041 A1 20090129; CN 101981239 A 20110223; CN 101981239 B 20130306; EP 2171138 A2 20100407; EP 2171138 B1 20130515;  
JP 2010534283 A 20101104; JP 5455902 B2 20140326; KR 20100040731 A 20100420; RU 2010106200 A 20110827; RU 2459892 C2 20120827;  
US 2010186364 A1 20100729; US 2010269478 A1 20101028; US 7842208 B2 20101130; ZA 201000399 B 20101027

DOCDB simple family (application)  
**EP 2008005783 W 20080716;** BR PI0814657 A 20080716; CA 2694041 A 20080716; CN 200880107714 A 20080716; EP 08784791 A 20080716;  
JP 2010517297 A 20080716; KR 20107001503 A 20080716; RU 2010106200 A 20080716; US 45266608 A 20080716;  
US 80504310 A 20100708; ZA 201000399 A 20100119