

Title (en)  
Filament nonwoven fabrics and method of fabricating the same

Title (de)  
Vliesstoffe von Filamentfäden und Verfahren zur Herstellung

Title (fr)  
Etoffes non tissées de filaments et méthode de fabrication

Publication  
**EP 0949371 A2 19991013 (EN)**

Application  
**EP 99108935 A 19960916**

Priority  
• EP 96114791 A 19960916  
• JP 25167995 A 19950929  
• JP 25607995 A 19951003  
• JP 25608095 A 19951003  
• JP 25608395 A 19951003

Abstract (en)  
The nonwoven fabric is made up of filaments comprised of a biodegradable polymer composed principally of a thermoplastic aliphatic polyester, wherein the filaments have a crystallization degree of 7 to 40 % and a supercool index of 0,4 or more. A method of fabricating the nonwoven fabric comprises the steps of melting the biodegradable polymer, said biodegradable polymer having a melt flow rate of 10 to 100 g/10 minutes as measured at 190 DEG C according to ASTM-D-1238 (E), in a temperature range of from (T<sub>m</sub> + 20) DEG C to (T<sub>m</sub> + 80) DEG C, where T<sub>m</sub> DEG C is the melting point of the biodegradable polymer; extruding the melt through a spinneret into filaments; drafting the extruded filaments by means of a suction device disposed below the spinneret under a quenching air blow of not more than 20 DEG C generated through a conventional device and at a drafting speed of from 1,000 to 5,000 m/minute, thereby fining them down into finer filaments; then depositing such filaments, as they are spread open each other, and are laid up on a travelling collector surface to form a web; and heat-treating the web thereby to obtain the nonwoven fabric.

IPC 1-7  
**D04H 1/42**; **D04H 1/54**; **D04H 1/48**; **D04H 3/14**; **D04H 3/10**

IPC 8 full level  
**D04H 1/42** (2012.01); **D04H 1/48** (2012.01); **D04H 1/54** (2012.01); **D04H 3/00** (2012.01); **D04H 3/14** (2012.01); **D04H 3/16** (2006.01)

CPC (source: EP KR US)  
**D01D 5/30** (2013.01 - EP); **D01F 6/625** (2013.01 - EP); **D01F 6/84** (2013.01 - EP); **D01F 8/14** (2013.01 - EP); **D04H 1/435** (2013.01 - EP); **D04H 1/43828** (2020.05 - EP US); **D04H 1/43912** (2020.05 - EP US); **D04H 1/43914** (2020.05 - EP US); **D04H 1/48** (2013.01 - EP); **D04H 1/5412** (2020.05 - EP US); **D04H 1/55** (2013.01 - EP); **D04H 3/00** (2013.01 - EP); **D04H 3/011** (2013.01 - KR); **D04H 3/018** (2013.01 - KR); **D04H 3/14** (2013.01 - EP); **D04H 3/147** (2013.01 - KR); **D04H 3/16** (2013.01 - EP)

Cited by  
US7824725B2; US7994078B2; WO2004059058A1; EP1612314B2

Designated contracting state (EPC)  
FR GB NL SE

DOCDB simple family (publication)  
**EP 0765959 A1 19970402**; **EP 0765959 B1 20000119**; EP 0949371 A2 19991013; EP 0949371 A3 20040512; EP 0949371 B1 20081105; EP 1612314 A2 20060104; EP 1612314 A3 20061122; EP 1612314 B1 20090909; EP 1612314 B2 20140108; KR 100406244 B1 20040330; KR 970021415 A 19970528

DOCDB simple family (application)  
**EP 96114791 A 19960916**; EP 05022050 A 19960916; EP 99108935 A 19960916; KR 19960042661 A 19960925